

# **Supporting Classroom Literacy Instruction for Vulnerable Learners with Reflective Dialogue**

**by**

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## **Abstract**

Vulnerable learners require that teachers know more about how children acquire literacy. This study is about helping teachers reshape the lens through which they see vulnerable literacy learners in order that they can interpret current literacy learning behaviours and scaffold new learning that makes sense to the learner.

To support teachers in refining their instructional practice and the lens through which they see the vulnerable literacy learner, I draw from Donald Schön's conception of coaching for reflective practice to examine the relationship between theory and practice of a small group of primary teachers. The teachers learn by doing while being coached or mentored by myself as a more experienced practitioner. Using an iPad we record lessons that become vehicles for discussion about learning and teaching. We examine the children's repertoire of responses, interpreting their actions in terms of literacy processing theory and designing a teaching response that builds upon what they can already do.

**Keywords:** Reflective practice; on-going professional learning; acquisition stage literacy learning; vulnerable learners; coaching

*To my husband, Craig Worsfold and our two boys,  
Jared and Landon Worsfold.*

*To my mom and dad, Peggy and Walter Samograd.*

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*Literacy*

*is more than simply reading and writing.*

*Literacy is about understanding the world and our place in it,*

*it is about understanding ourselves and others,*

*and it is about communicating our understandings and*

*interpreting the understandings of others*

*in an effective and cogent fashion.*

*Literacy is about negotiating meaning in conversation with others.*

*It is seen as the heart of education but for many children*

*it is an arduous task.*

# Chapter 1.

## **Introduction**

### **1.1. Statement of Problem**

This thesis explores how primary school teachers learn on-the-job about Literacy Processing theory and practice with children having difficulty learning to read. The research concerns a case study of my work as a school district mentor of literacy learning in Yukon schools. I examine my work with a small group of teachers in a practice-based apprenticeship in literacy learning and support for struggling readers. I draw on Donald Schön's (1983, 1987) notions of reflective practice and educating the reflective practitioner to analyze the learning of these teachers, drawing attention to situations and circumstances where their "double-loop" learning gives way to advances in their understanding of children's learning and reading instruction.

### **1.2. Research Questions**

This study explores how practicing teachers learn more about Literacy Processing Theory (LPT) and instruction in a variety of Yukon primary classrooms. It is an analysis of how the elements of Schön's view of reflective practice influences change in teachers' theories-in-use as they pertain to literacy instruction. This study seeks to answer the following questions:

(1) What effect will reflective dialogue have on shifting beliefs and changing instructional practice in literacy instruction for the most vulnerable learners as observed in practice and teacher language?

(2) With what frequency will teachers require the support of a “mentor” on site to develop consistent clinical practice in terms of observation/response in literacy instruction?

(3) What effect will the iPad footage have in supporting developing understandings of literacy behaviour in action and the relationship between action and reaction in the literacy teaching/learning context?

### **1.3. Local Context**

Yukon Education serves almost 5130 children and is comprised of 23 Elementary schools and four dedicated Secondary schools across the Territory. Twelve of these schools are in the capital city of Whitehorse, 14 are in smaller communities within 100 and 600 km of Whitehorse and one is a fly-in community in the Arctic Circle. In most rural schools, with the exception of 2 larger schools, classrooms are multi-grade, usually separated by primary, intermediate or secondary age groups. Some classrooms may be comprised of 2 grades whereas others may be comprised of 3 or 4 depending on the size of the community and number of children. In the two smallest communities schools are administered by a Principal-Teacher with the support of a Remedial Tutor. Seven of the community schools offer a Kindergarten to Grade 12 program, four offer a Kindergarten to Grade 9 program and three others offer Kindergarten to Grade 7, Kindergarten to Grade 8 and Kindergarten to Grade 10.

### **1.4. Background and Role of Researcher**

During my 28 years as a primary teacher with Yukon Education, I have spent the last 17 years working with vulnerable learners at the acquisition stage of literacy learning. I began in 1997 as a Literacy Intervention or Reading Recovery® teacher. Training for Reading Recovery teachers comprises a year-long training schedule that integrates theory with practice. This training year is intensive and thorough and immerses teachers in the praxis of an early literacy intervention. Teachers-in-training must teach four children daily while attending 22 professional learning sessions every

other week for a half day inservice. These inservices involved observing and interpreting learning behaviour based on a theory of literacy acquisition, as well as designing alternative instruction for vulnerable learners based on the learner's strengths and abilities. Teachers-in-training observe live lessons behind a one way mirror in order to develop observation and interpretation skills "in the moment." For the last 11 years I have worked as an Early Literacy Intervention Consultant (including the role of Reading Recovery<sup>®</sup> Teacher Leader). Although I was required to teach children in this role, I was primarily responsible for providing opportunities for ongoing professional learning to Intervention Teachers. I designed professional learning opportunities to support teachers as they refined their understanding of literacy processing theory and applied it in practice with vulnerable learners in their respective schools. I also worked with classroom teachers in understanding and interpreting assessments for Literacy Processing Theory.

## **1.5. Purpose and Significance of Study**

The purpose of this study is to sharpen the lens through which teachers see the vulnerable literacy learner and how to support the successful acquisition of literacy. This is significant because children need to see themselves as able and successful early on in their education to empower continued success and achievement in future learning experiences.

After working with vulnerable learners for 17 years, I have come to know that it is not only *what* you teach, but *how* and *when* you teach it and that this is predicated by the abilities the child reveals to us. Teaching children to read at the best of times, is a complex process that requires teachers to integrate several sources of information not only from their personal repertoires of knowledge but also from observations of how children respond to teaching (Clay, 2013; Hattie, 2012).

Too often when children struggle we attribute the difficulty to a deficiency in the child and/or his repertoire of responses. Assessments that measure reading ability do not take into account attendance, instructional programming, trauma, and the child's attitudes and perceptions about reading and school in general (Clay,1987; Vellutino,

2010). Learning to read is influenced by teaching (Darling-Hammond, 2005; Fullan & Hargreaves, 2012). We often assume that the classroom instructional program that is in place is suitable for all learners. Although proficient readers may be able to actively and successfully integrate a variety of sources of information from classroom instruction into their current processing system and continue to learn to read despite programming, vulnerable readers may in fact be trying to do as the programming suggests, and continue to experience difficulty learning to read. Therefore, it is possible to concede that classroom instruction can render a learner to become vulnerable. These children are quite possibly learning to be learning disabled (Clay, 1987; Vellutino, 2010).

## **1.6. Conceptual Framework**

After completing my research and reading Schön's book, *The Reflective Practitioner* (1987) I was intrigued by his conceptualization of indeterminate zones of practice that are characterized by uncertainty, uniqueness and value conflict. In discussing professional practice Schön makes the distinction between two kinds of problems: those solved with the application of research-based theory and practice (what he refers to as technical rationality) and those that defy technical rationality. Of these two types of problems, Schön (1987) suggests that the former presents itself as "well-formed instrumental problems that can be solved by applying solutions found within traditional theory and practice. The latter types of problems conversely, are undefined and present themselves as "messy, indeterminate situations" (p. 4). The solution to these types of problems is not found "in the book" because these problematic situations fall "outside the categories of existing theory and technique, the practitioner cannot treat [them] as an instrumental problem to be solved by applying one of the rules in her store of professional knowledge. The case is not 'in the book'." (p. 5).

As I thought about this conceptualization I began to see an application for this concept with vulnerable literacy learners. Generally, these learners do not respond the same way as their peers to traditional methods of lesson delivery. For example, while some children remember abstract letters and their corresponding sounds from simply hearing them, other children need to use them in writing to learn them, or associate them with something personally meaningful and concrete. There are no textbook applications

that help support vulnerable learners transition from a primitive processing system to a proficient processing system (Clay, 2013). Often solutions need to be tailored to the individual by means of an experimentation and assessment cycle of response. LPT can help set the problem as well as offer potential responses that require trial and error followed by assessment that will either serve to resolve the issue or set the next cycle of experimentation and assessment. Schön (1987) agrees that to deal with a problem competently in the indeterminate zone of practice, the practitioner “must do so by a kind of improvisation, inventing and testing in the situation strategies of her own devising” (p. 5).

Schön (1987) suggests that navigating the indeterminate zones of practice requires artistry. He notes that artistry found in the Fine Arts “bears a strong family resemblance to the artistry of extraordinary lawyers, physicians, managers and teachers” (p. 16). Developing artistry requires being immersed in a practice with the support of a senior practitioner or coach. In this study, practicing teachers learned to observe, design, implement and assess by engaging in observation, designing, implementation and assessment. In short, they learned by doing so in practise. John Dewey (1974) talks about learning by doing, “[the student] has to see on his own behalf and in his own way the relations between means and methods employed and results achieved. Nobody else can see for him, and he can’t see just by being ‘told,’ although the right kind of telling may guide his seeing and thus help him see what he needs to see” (p. 151). Borrowing from Schön, this study was designed to help practicing teachers develop artistry in supporting vulnerable literacy learners through a reflective cycle of observation, interpretation, design, implementation and assessment of learning.

## **1.7. Organization of the study**

This thesis is organized in six chapters. Chapter One is the introduction of my dissertation and discusses the significance of this research. Chapter Two is my literature review relating to Literacy Processing theory, reflective coaching and practice, and cognitive constructivism. Chapter Three describes the methodological considerations for this study, which consist of Schön’s variations of reflective coaching in

practicum settings. Chapter Four presents and describes data, Chapter Five discusses data and Chapter Six offers conclusions and implications of my research.



## Chapter 2.

# Conceptual Framework and Literature Review

## 2.1. Introduction

Teaching children to read is a complex process, as evident in trying to help children who struggle to learn to read. To be effective, teachers must understand what the child already knows and scaffold new strategies into an existing repertoire of strategies in a way that helps a child become independent and successful. Similarly, a practice to help teachers learn something new (in practice and theory) requires that coaches or knowledgeable others understand what the Teacher already knows and ways to scaffold new information and practice into an existing working system. This chapter identifies what teachers need to know about literacy learning and also how to help teacher's learn it.

## 2.2. Literacy Processing Theory (LPT)

*I choose to define reading as a message-getting, problem-solving activity.- Marie Clay*

Literacy Processing Theory (LPT) was developed by Marie Clay who was a Developmental Psychologist from New Zealand. As she worked in schools with children, she wondered why some children learned to read and others had difficulty. She studied children who *could* read, to find out what they did as they constructed meaning from text. Reading Recovery<sup>®</sup> was designed using this information with the understanding that teaching vulnerable learners meant teaching them the kinds of thinking strategies proficient readers of the same age used (Clay, 2013).

LPT describes a constructivist approach to literacy acquisition. It recognizes that reading is a complex process that involves the integration of information from a variety of sources in order to construct meaning while simultaneously supporting the construction of a personalized reading process. Over time and with use, a primitive processing system evolves into a proficient processing system that is able to operate on more complex text (Clay, 2001).

Visible and invisible sources of information are used to construct understanding of text (Smith, 1982). Sources of information available from text include meaning (from illustrations or context), language structure (syntax) and visual information (graphemes and phonemes) (Clay, 2005). In addition to these, invisible sources of information that support understanding are background knowledge of the event or phenomena, knowledge of how books work, and knowledge of the language of the text to name a few. Marie Clay (2005) notes that readers use information from a variety of sources to make decisions about their reading, and then use additional information to evaluate the response in a continuous cycle of learning.

In his paper *Toward an Interactive Model of Reading*, David Rumelhart (1994) talks about sensory input entering the processing system through the eyes in the form of graphophonic information. The system then adds non-sensory information including the “orthographic structure of the language (including information about the probability of various strings of characters), information about lexical items in the language, information about the syntactic possibilities (and probabilities), information about the semantics of the language, and information about the current contextual situation (pragmatic information).” All of this information comes together “in one place and the reading process is the product of the simultaneous joint application of all the knowledge sources” (p. 878). Whereas other theorists believed there was a one way process of achieving understanding of text, Rumelhart thought that to construct meaning, readers traveled up and down a system looking for the best fit.

In addition to various sources of information, readers are assisted in constructing their processing systems by using some “in-the-head” strategies that detect dissonance between sources of information and provide possibilities for resolving dissonance. Clay

noted that readers had to be active in the process of learning to read and that regular deposits into their knowledge bank by the teacher (Freire, 1960) would not support the development of a personal processing system. An important strategy for becoming a proficient reader according to Clay is to constantly **monitor** reading output. An error in understanding text cannot be addressed if the reader does not detect dissonance between available sources of information. The reader must ask himself questions about meaning and with the detection of dissonance, stop and do something about it.

Once dissonance is detected, the reader sets in motion the process of determining the problem. Another in-the-head strategy identified by Clay is that of searching for additional information. The reader has already used some information in the first attempt and now must seek new information to either confirm the first attempt, or to change the first attempt. The reader can reread text for word omissions, substitutions or errors, re-examine illustrations or context, think about the language structure or reapply knowledge of letter/sound correspondence. A variety of information sources are important to help readers make decisions, choose among alternative possibilities or confirm initial constructions by allowing for an immediate cross-check and alignment of pieces of information (Smith, 1982; Clay, 2005; Rumelhart, 2013; Holdaway, 1979). It also ensures a certain amount of independence in resolving conflict in reading. It is in the independent operation of in-the-head strategies that helps the processing system build strength and proficiency.

Inherent in the operation of a literacy processing system is Singer's (2013) idea of a series of subsystems that are called into operation to solve unknown words in text. Having a host of information available in the processing of text it is significant that some of the information may or may not be used at any given time. Singer suggests that different sources of information are used for resolving issues in text and that the same sequence or subsystem may not be used time after time. Where one discrepancy might be easily resolved using meaning and syntax, another discrepancy might be resolved using background knowledge and a quick check of some dominant consonants. Individual readers will choose appropriate sources of information depending on the problem and the information they bring to the task. Clay (2001) suggests that children will take different paths to common outcomes. The teacher's job is to help children

develop strategies for detecting dissonance, solving problems in text and to help them use these strategies flexibly.

Understanding Vygotsky's (1962) conceptualization of the Zone of Proximal Development is integral to appreciating the kinds of support children need to help them evolve as proficient readers. According to Vygotsky there is a fine line between work that is too hard and work that is too easy. When faced with difficulty, a processing system that is under construction will break down and serve no fruitful purpose aside from frustrating or disappointing the learner. When work is too easy, no new learning takes place and as a result, processing systems fail to grow and change. Between these two areas is the zone of proximal development which is an area of learning that is incrementally difficult but not so difficult that it cannot be achieved without the support of a teacher or knowledgeable other. The teacher supports the student as he or she tries to master strategies in hopes that the teacher will no longer be required.

Knowing what children control in terms of the reading process is integral to knowing how to support them. Whereas proficient readers might easily assimilate new information with little support, vulnerable learners require support that is crafted to their idiosyncratic needs. Developing a system of prompts that corresponds to a gradient of difficulty is critical to their success. Marie Clay (2005) identified the goal of learning to read as developing a self-extending system that helps to extend a child's learning the more proficient it becomes. By supporting children in their zone of proximal development, teachers are able to help children in learning to extend their own learning. To this end, Clay calls for teachers to become sensitive observers of the behaviours children employ as they work with text.

Children begin their learning in different places. Crafting lessons for vulnerable learners requires that teachers understand what the child controls so that together they can help the child build on his or her strengths. . A strength-based approach is critical when helping children move from a primitive processing system to a more sophisticated processing system. A strength based approach works hand in hand with a Constructivist approach. Building on the child's strengths means teachers need to know what those strengths are. Using assessments that measure real literacy activity (reading and

writing), can elicit information from the child that provides educators with a window into their current operating system (Clay, 2014). Moreover, observing for and interpreting behaviours from a strength based perspective, educators generally find that the child knows more than was previously noted. A strength based approach also helps to keep children motivated as they build on their successes layer by layer.

## **2.3 Strength-based Approach vs. Deficit Model**

The strength-based approach was initially developed as a social work practice theory that emphasized people's self-determination and strengths. It views clients as resourceful and resilient in the face of adversity. It is client-led, with a focus on future outcomes and strengths that people bring to a problem or crisis. It is self-empowering in that it supports clients in using their strengths to help develop solutions. Dr. Martin Saleebey viewed it as a way of thinking, "a distinctive lens for examining the world of practice," (Gray, 2011. p. 6).

Traditionally when people sought help the diagnoses and assessments are made based on what was wrong with them. This deficiency-based paradigm, or deficit model, is disempowering and can be construed as oppressive. It sees the person as the problem rather than a person with a problem. The professional language of deficit is cynical and dubious, the relationship between client and worker is not equal, nor is it self-actualizing. The problems are removed from their context and "supposes a disease with a cause and a solution," (Gray, 2011, p.6).

Since then a strength-based approach has been adapted and applied in other contexts. In Education specifically it informs the way children are viewed and as a result, impacts the relationship between teacher and student. It also influences the way teachers listen to, hear and interpret the child's story and as a result, the way that they design intervention (Clay, 2014).

## 2.4 Reflective Practice – Donald Schön

*I have used the term professional artistry to refer to the kinds of competence practitioners sometimes display in unique, uncertain, and conflicted situations of practice. Note, however, that their artistry is a high-powered, esoteric variant of the more familiar sorts of competence all of us exhibit every day in countless acts of recognition, judgement, and skilful performance.- Donald Schön*

When someone learns a professional practice she must learn the “conventions, constraints, languages, and appreciate systems, their repertoire of exemplars, systematic knowledge, and patterns of knowing-in-action” (Schön, 1987, p.37). She must learn the rules of the practice but must also know when to break or manipulate the rules. This is especially important when working in what Schön (1987) calls the “indeterminate zones of practice” (p. 101) where traditional knowledge or technical rationality, does not always bring the desired resolution.

Schön (1987) suggests that on a daily basis in both our personal and professional lives, we execute a series of behavioural sequences that help us achieve our normal, everyday goals almost without thinking about them. He calls this “knowing-in-action” (p. 25). He suggests that we reveal what we know in action but are not necessarily able to describe it verbally. This knowing-in-action is governed by our theories-in-use, which are made up of “governing variables, action strategies, or assumptions” (Argyris & Schön, 1974, p.19).

At times however, situations arise that cannot be resolved using our prevailing knowing-in-action. The resolution of these “unique, uncertain and conflicted situations of practice” (Schön, 1987, p. 6) or indeterminate zones of practice require an artistry that acknowledges the idiosyncratic nature of the situation beyond the patterns-of-knowing traditionally applied to conventional problems of a practice. Artistry requires that the practitioner acquire a depth of knowledge of and about practice that allows her to develop and execute solutions using specific situational information that is dynamic and applied flexibly.

Schön (1987) suggests that one way to help students develop artistry is to immerse them in the practice, guided by a senior practitioner or coach. The dialogue

between the student and coach is instrumental in providing the necessary elements of the practice as well as the knowledge, rationales and practical application. In dialogue the coach uses the language of the practice as well as language about the practice that helps to inform the student's theory-in-use and ultimately her knowing-in-action. The dialogue helps make visible what has up to this point, remained invisible.

The coach approaches a problem in the indeterminate zones of practice and through demonstration, explanation and experimentation, models the process for resolving anomalous situations. In this way the coach is using what Schön (1987) calls a "hall of mirrors" approach to coaching wherein the coach sees himself in his students and orchestrates a type of intelligent mimicry. Initially the student may imitate the coach, but eventually the student assimilates new knowledge into her existing background knowledge, thereby constructing her own understanding of the practice.

Within the practicum setting the coach is not only able to introduce conceptual knowledge, but also helps the student to reflect on and examine her own practice. Schön talks about two kinds of reflection: reflection-in-action, which happens in the practice setting during teaching, and reflection-on-action, which occurs after the fact. The latter can help students understand how their knowing-in-action may have contributed to the anomalous situation, but it has no impact on present action. Reflection-on-action can, however, have an impact on theories-in-use if it causes students to re-examine governing variables. In a presentation to the American Educational Research Association in 1987, Schön shares an example from an education context where teachers watched a videotape of a 14 year old boy trying to recreate Twinkle, Twinkle Little Star using a collection of pitched bells. The following explains the way the boy did it.,

He would strike the first bell, and many bells, until he found one that he liked 'bom'—he called that 'twinkle, twink.'" Then he would reach for the others: 'bom, bom, bom, bom bom, bom'—find the other one and put it right next to it. Then he'd reach for the next one, and he'd go back to the beginning: 'bom, bom, bom, bom, bom, bom, bom.' Then he would go back to the beginning again, and then search: 'bom, bom, bom, bom bom-bom.' The teachers watched this and zoned in very quickly on the fact that Ricky kept starting from the beginning again.

In response the teachers began assessing the boy's process.

They said that what Ricky was doing was exhibiting 'rote learning.' They took it to indicate a lack of mastery of the tune, and they felt that he lacked basic music skills. They thought it was a sign of poor auditory memory, perhaps, and seemed to show an inability to follow directions, and the need for a 'security blanket'—these were different phrases. And one of them said, "it's like learning your ABC's. Until you know your ABCs you have to say them all at once. But if you really know them you can recognize an A anywhere or an M. You don't have to go through the whole thing all over from the beginning in order to get it."

On a whim, the researcher asked the teachers to do the same exercise and they found that they had to use the same process as Ricky to reconstruct Twinkle, Twinkle Little Star. They moved between Ricky's thinking and their own and as a result came to see both his thinking and their own in a new way. The teachers began to see the boy's process in a new way. Schön (1987) describes this as "giving the kids reason" or attributing children the benefit of the doubt and acknowledging their intelligence in the educational exchange. The exercise of observing the lesson after the fact caused the practitioners to re-examine the student's role in the teaching/learning relationship and as a result, perhaps modify the governing variables that had informed their theories-in-use.

Alternatively students may reflect "in the midst of action without interrupting it" (Schön, 1987, p. 26) and change the course of their response in mid-stream that brings about an alternate or desired outcome. Schön refers to this kind of reflection as "reflection-in-action" (p.26).

An important part of reflection-in-action is observing the response our action achieves, interpreting it and then executing a move in reply. We may be required to shift the direction of our action mid-stream in order to achieve the outcome we desire. Responding to emerging outcomes is what Schön (1987) refers to as "listening to the backtalk" of a situation (p. 31). According to Schön, backtalk is the result of earlier moves and "responds through on-line production of new moves that give new meanings and directions to the development of the artifact" (p. 31). The backtalk is the impetus for making decisions and changing course on the run.



Another kind of reflection occurs in the complex system of communication between coach and student wherein the student receives information from reflection-in-action, and from the coach in the form of demonstration or explanation and then endeavours to embody that information in her own practice. Schön (1987) says the student is “testing the meanings she has constructed by applying them to her further designing,” (p.101) and thereby developing a more complex theory in use. Once a coach responds to this new and likely refined understanding of practice, Schön suggests that student and coach have engaged in “reciprocal reflection-in-action” (p. 101). Working together in this way, toward convergence of meaning, they are engaged in a kind of spiral learning where theories become more refined and complex the more encounters they share (Bruner, 1960).

While Schön talks about a type of reflection that occurs quickly while participating in action, Ellen Rose (2013) argues that Schön has removed reflection from its traditional definition. In her book *On Reflection: An Essay on Technology, Education, and the Status of Thought in the Twenty-First Century*, Rose mourns the loss of the kind of reflection that takes place in quiet solitude and offers an opportunity for “leisurely involvement with ideas” (p. 2). Talking about reflective thought she suggests that,

reflective thought unfolds slowly, in its own good time, during periods of stillness seized from the bustle and busyness of everyday life and because it takes place over time, or even, I might say, outside the demands and constraints of time – reflection entails a depth of understanding quite contrary to the superficial grasp of a situation or idea to which we are limited by snap decisions and split-second thinking (Rose, 2013, p.3).

Rose (2013) is distressed that the modern world requires quick thinking and that it is robbing itself of the potential for wondrous ideas and deep understanding that comes from reflection *then* action.

## **2.5 Double-Loop Learning**

As the coach demonstrates and explains a practice, the student is engaged in learning not only the conceptual underpinnings, but also a behavioural or practical

response. Argyris and Schön (1974) differentiate between two types of learning. In terms of theories-in-use, single loop learning refers to learning that satisfies our governing variables. It is one-dimensional learning that reinforces existing praxis. Conversely, when we have experienced something that makes us scrutinize our knowledge and behaviour, and produces change in our governing variables, we are said to have experienced double-loop learning. Argyris and Schön (1974) assert that, “the theory-builder becomes a prisoner of his programs if he allows them to continue unexamined indefinitely” (p.19). Modifying a theory-in-use requires the learner to experience double loop learning, where the learning serves as impetus to double back on our existing theory-in-use and change it to satisfy our new understanding.

## **2.6 Constructivist Teacher Education**

Constructivism has recently become more prominent in pre-service and inservice teacher education. It has been declared a more natural and empowering approach to teaching and learning for instructing both pre-service and inservice teachers (Cannella & Reiff, 1994). Constructivism describes the learning process where understanding is achieved through the integration of what a learner already knows and believes, with new ideas and activities that are presented in some form (Cannella & Reiff, 1994, Richardson, 1997). Rather than viewing the learner as an empty vessel to be filled with knowledge (Freire, 1960), constructivism calls for an engagement with content where learners ask questions, challenge ideas and formulate their own opinions and conclusions.

Most constructivists agree that constructivism is about learning and meaning-making. Richardson (1997) notes that,

The extent of the agreement among the various constructivist approaches is that constructivism is a learning or meaning-making theory. It suggests that individuals create their own new understandings, based upon the interaction of what they already know and believe, and the phenomena or ideas with which they come into contact. Constructivism is a descriptive theory of learning (this is the way people learn or develop); it is not a prescriptive theory of learning (this is the way people should learn) (p. 3).

Richardson also notes that constructivists would agree that the traditional model of instruction (transmission model) does not promote the integration of prior knowledge with new information, nor does it promote the conversations necessary for achieving a convergence of meaning, internalization or deeper understanding.

Although constructivists agree on what constructionism is, Richardson (1997) notes that there are a number of disagreements amongst constructivists. She notes that much of the dissent amongst constructivists relates to the difficulty in translating a descriptive theory of learning into the practice of teaching. In her book *Constructivist Teacher Education: Building New Understandings* Richardson (1997) identifies two approaches to constructivism – the psychological Piagetian approach and the social constructivist approach. She notes that disagreements are generally found between and within these two approaches.

Richardson (1997) describes the Piagetian approach to the construction of knowledge as individualistic with the purpose of leading “toward higher levels of understanding and analytic capabilities” (p.5). This is achieved when students actively engage in “reconstructing their existing understandings by restructuring their cognitive maps” (p.5). Richardson suggests that this can be achieved when teachers arrange for the students to experience a “certain amount of cognitive dissonance” and when they design tasks in a way that require students to restructure their “existing cognitive maps” (p.5). Recently Piagetian/psychologists, according to Richardson, have conceded to bringing the social into their constructivist framework claiming,

... the negotiation of shared meaning within social interaction often provides a source of cognitive dissonance that allows individual students to restructure their concepts (p. 6).

Those that critique Piagetian Psychological Constructivism claim that it serves to maintain the status quo of economic and social class by awarding power to the teacher in the form of pedagogical decisions. Moreover this kind of constructivism values individual learning over social learning and separates thought from action, and the knower from the known.

Social Constructivism conversely, values the social element of learning as “instrumental, if not essential, in both the construction and appropriation of knowledge” (Richardson, 1997, p. 7). Richardson describes two forms of the social constructivist approach to learning: the situated cognition and the sociocultural.

The situated cognition form of this approach describes learning and the construction of knowledge as a product of the interaction between a person and their environment. Richardson notes that both the person and environment change as a result of this learning process. Moreover, the use of language in the construction of meaning is key to this form of social constructivism as is the idea that learning cannot be separated from action. The situated cognitive approach to social constructivism includes the idea that there are many ways of knowing that cannot be separated from the knower.

Like the situated cognitive form of the social constructivist approach to constructing knowledge, the sociocultural form relies on social interaction as the basis for learning. Inherent in the social interaction are “cultural meanings that are shared within the group and then internalized within the individual” (Richardson, 1997, p. 8). This approach originates from the work of Lev Vygotsky.

Taking the debate a step further, Jennifer Vadeboncoeur adds that the two approaches to constructivism differ in their conception of the purpose of education.

In the first view the purpose of education is to educate the individual child in a manner which supports the child’s interests and needs.....

In the second view the purpose of education is social transformation and the reconstruction of society aligned with democratic ideals (Vadeboncoeur, 1997, p. 15).

In keeping with the idea of social transformation, Vadeboncoeur identifies another form of constructivism, namely emancipatory constructivism. In an effort to shift the social climate to a more equitable social order, Vadeboncoeur sees the need for a teacher education model that “interrupts and challenges the status quo and facilitates a critical analysis of inequality” (Vadeboncoeur, 1997, p. 35). She notes that school populations are changing and becoming more multicultural. If we construct our personal understandings, in developing pedagogy teachers must be aware of the diversity

amongst individuals. Teachers must recognize alternative experiences “due to class, race, gender, sexual orientation, linguistic diversity, and other differences” (Vadeboncoeur, 1997, p. 31). To truly understand how *all* children develop and learn, the discourse of power and privilege cannot be ignored.

Although constructivism has become more popular in recent years and pre-service and inservice teacher education programs are experimenting with various conceptions of constructivist ideology, Richardson (1997) suggests that constructivism appears different depending on the subject matter being taught. She suggests that a constructivist approach in Math looks different from a constructivist approach in Science simply by the nature of the content. MacKinnon and Scarff-Seatter (1997) suggest that perhaps as a result of the diversity in interpretation of constructivism conveyed in teacher preparation programs and use of the term constructivism there is some confusion about constructivism in the field. They emphasize that,

constructivism is a way of thinking about the events of teaching and learning. It is neither a person nor a method, but a theory of knowledge. And it is not the only theory drawn upon in teaching by any of us, whether he or she is aware of it or not (MacKinnon & Scarff-Seatter, 1997, p. 54).

MacKinnon and Scarff-Seatter suggest that the use of a constructivist approach doesn't have to be an either or decision. They believe that both the Piagetian and sociocultural approaches to constructivism are compatible in science teaching.

## Chapter 3.

### Research Methods

#### 3.1. Introduction

From the beginning of my doctoral program, I was interested in helping find a way to support practicing teachers as they worked to improve literacy achievement for vulnerable learners at the acquisition stage of literacy learning. I knew I wanted to **do** something about improving instructional practice as opposed to simply reading and writing about improving instructional practice. I designed a process for helping practicing teachers learn more about a literacy processing theory, while at the same time learning how to interpret a student's response to instruction and implement a contingent practice.

After I had completed the research I began to search for ways to present it. Initially I thought that it fell under the Participatory Action Research method based on the fact that I was a participant in the research and that the teachers had input into the topics we discussed and how we would collect video samples for analysis. As I read more about PAR, I noted that the teachers and I were not equal in our participation in designing this research. In fact, I came to them with a practice and invited them to work with me. All they really knew prior to starting was the format the sessions would take, that we would use an iPad to videotape lessons and that we would discuss the teaching/learning interactions after the lesson. Thinking more about method I realized that I am a practitioner first and an academic second. I came to this degree program with a practice knowing that I would be explaining it based on academic literature and prior research. This speaks to the need for a method that begins with a practice. Interestingly Herbert Blumer, in developing a method of Naturalistic Inquiry suggests that a research approach offers both a theoretical perspective as well as a method for studying a problem, "because a perspective always implies a corresponding method and

a method always implies a corresponding perspective.” Thus Blumer believed that researchers must select an approach in which the perspective and method are congruent rather than incongruent with one another,” (Blumer, 1969, p. 108).

In explaining qualitative research designs John Creswell (2008) describes Grounded Theory Research as “exploring common experiences of individuals to develop a theory” (p. 60). Within this broad framework of qualitative research resides Naturalistic Inquiry, also known as Constructivist Inquiry (Agostinho, 2005), which posits that research be conducted of authentic life experiences in natural settings and provide space and time for theory to emerge from the data. Lincoln and Guba’s (1985) conception of Naturalistic Inquiry holds that “data processing is a continuously ongoing activity, making possible the meaningful emergence or unfolding of the design and the successive focusing of the study” (p.11). Although Glaser (2004) would argue that imposing a practice on a group of teachers as I did would not be considered Grounded Theory, Lonnie Athens (2010) might say that I had used Blumer’s method of naturalistic inquiry to develop a grounded theory of the principles of supporting practicing teachers in developing new understandings of literacy acquisition.

The Naturalistic Inquiry approach enabled me to implement my coaching practice in the contexts of the participating teachers, collect data on the various interactions between the teacher, the student and I, and then analyze the data according to Schön’s theory of reflective practice.

### **3.2. Research Questions**

This study explores how practicing teachers learn more about LPT and instruction in a variety of Yukon primary classrooms. It is an analysis of how the elements of Schön’s view of reflective practice influences change in teachers’ theories-in-use as they pertain to literacy instruction for vulnerable learners. This study seeks to answer the following questions:

(1) What effect will reflective dialogue have on shifting beliefs and changing instructional practice in literacy instruction for the most vulnerable learners as observed in practice and teacher language?

(2) With what frequency will teachers require the support of a “mentor” on site to develop consistent clinical practice in terms of observation/response in literacy instruction?

(3) What effect will the iPad footage have in supporting developing understandings of literacy behaviour in action and the relationship between action and reaction in the literacy teaching/learning context?

### **3.3. Ethics Approval**

I initially sought support from the Director of Student Learning in my district. She verbally agreed, pending Simon Fraser University Ethics approval, to allow my research project to proceed. In early July 2013 I applied for Ethics Approval from the SFU Office of Research Ethics. After completing some revisions I was granted SFU Ethics Approval on August 15, 2013. I subsequently received permission from the Administrators of the schools, participating teachers, parents of children in these classrooms and the students themselves. Data collection began in September 2013.

### **3.4. Setting and Study Participants**

This study takes place in four school settings in Yukon Territory; three urban elementary schools in the capital city that include students in grades Kindergarten through grade seven, and one rural school that offers grades Kindergarten to grade 9. The urban classrooms were single grade classrooms and the rural classroom was multi-grade consisting of students in grades one, two and three. The rural community is a small village bordered on two sides by a lake and river and is home to approximately 450 people.



There are two distinct participant groups in this study. The teachers were chosen in consultation with the Primary Curriculum Consultant (at the time) in this district. Considering the length of this study and the requirement to meet every two weeks, it was decided that four participants would be invited to participate. To mitigate the time necessary for building relationships, it was necessary that the four participants have an existing professional relationship with me and have knowledge of my theoretical and practical position in terms of literacy teaching and learning. It is important to note that Yukon is a small jurisdiction and that primary teachers were aware of my role as Early Literacy Intervention Consultant and Reading Recovery Teacher Leader. These teachers may also have participated in a series of workshops offered by the Reading Recovery Centre over the years including a three day inservice session on The Observation Survey of Early Literacy Achievement (Clay, 2012). I have also presented at Yukon Territorial Teacher's Association Conferences not only as a Reading Recovery Teacher Leader but also as a classroom and Reading Recovery teacher. I have also offered professional development sessions hosted by Yukon Education. In addition to having a prior relationship with me, the participants must also have demonstrated an interest in learning more about teaching vulnerable children to read and write by critically analyzing their teaching decisions.

The second participant group is made up of children chosen by the participating teachers from their classrooms. An important element of this study was the opportunity for dialogue between myself and the teacher, about their observations (in iPad videos) of particular literacy behaviours, tentative interpretations of that behaviour and the offering of alternative instructional practices at the acquisition stage of literacy teaching and learning. It was important that the child selected, although perhaps demonstrating noncompliance to some degree in the classroom, would allow for this type of dialogue to occur. It was understood by all four teachers that the children they chose as focal points initially for this study might necessarily be replaced by others depending on the quality of our discussions and/or the child's progress in learning to read and write.

From a design perspective, the primary consideration in choosing the children for this study was that they be vulnerable learners. Given the instructional practices of the individual teachers and the way they chose to define "vulnerability," the students were

chosen based on their level of achievement and success with classroom instruction. These children were not responding to the whole group or small group instruction like their peers were. These children were responding with inattention, frustration, passivity and resistance. In essence, the choice was made based on how the children performed on instructional tasks in comparison to their peers.

### **3.4 Research Procedures**

*Learning is the process whereby knowledge is created through the transformation of experience – David Kolb*

In his theory of experiential learning, David Kolb (2005) asserts that, “knowledge is a transformation process, being continuously created and recreated” (p.38). We know from Jerome Bruner (1960) that deep understanding is derived at by visiting and revisiting complicated concepts, in greater increments of complexity. In the process of learning about a given concept, knowledge is transformed with each encounter so that subsequent encounters can incorporate more information and transform the knowledge again at a deeper level. Kolb (2005) states that, “learning is described as a process whereby concepts are derived from and continuously modified by experience. No two thoughts are ever the same, since experience always intervenes” (p. 26). This notion of spiral learning formed the basis of my decision to meet with each teacher in this study, every two weeks between September and December. Time was provided by the district to release each teacher from the classroom for seven half-days every two weeks (2.5 to 3 hours each time).

Supporting vulnerable learners requires the marriage of theoretical knowledge and practical application (Clay, 2005). Although theory stays constant, practice will shift depending on the response of the child in that moment. Theory tells us what children need to be able to do, but practical application will depend on the child’s current strengths and abilities. Learning to identify and interpret theoretical constructs in the idiosyncratic literacy learning behaviour of children requires that teachers observe behaviour as part of their learning and in conversation with a coach, construct an understanding of that behaviour as it relates to theory. In his book *Theory U: Leading from the Future as it Emerges*, C. Otto Scharmer (2009) talks about this kind of learning

as a matrix that “works as an integral whole, not as a linear process” (p. 44). Using sport as a metaphor, Scharmer (2009) invites us to examine the actions of Bruce Lee, Muhammad Ali or Michael Jordan – “they dance with the situation they are dealing with – they constantly observe and sense (connect), allow the inner knowing or intuition to emerge, and then act in an instant” (p.44). In order for teachers to dance in the situation and develop skilled and flexible application of theory, teachers must examine knowing-in-action on an ongoing basis (Schon, 1987).

Kolb suggests that this kind of learning can occur without the support of a mentor or coach, however in this study I play the role of coach to help make visible relevant student behaviours that may have otherwise remained invisible. My role was to incorporate new information about theory and practice into the dialogue that individual teachers may not have already had.

In experiential learning theory David Kolb (2005) suggests that the role of an educator “is not only to implant new ideas but also to dispose of or modify old ones” (p. 28). Of course constructivist theorists would suggest that the coach can only facilitate this process, it is the learner that integrates new beliefs into old belief systems in conjunction with experience. Kolb (2005) continues,

If the education process begins by bringing out the learner’s beliefs and theories, examining and testing them, and then integrating the new, more refined ideas into the personal belief systems, the learning process will be facilitated (p. 28).

My initial visit to teachers began with a conversation about their concern for the child they had identified as struggling to take on literacy. This conversation was important for me to understand how teachers were framing the child’s learning and from what theoretical perspective they were drawing their conclusions. Following this conversation I observed and recorded that child engaged in activities associated with literacy learning in the classroom. For the purposes of this study, this procedure for collecting specimens of classroom experience was modified for subsequent school visits as it was difficult to film an authentic lesson in the classroom when we had to be aware of filming a student that we didn’t have parental or child consent for. In keeping with the need for continuing discussion of literacy processing in action, we continued the practice

of recording the literacy behaviour of children, but in small groups or individually. Had it not been for the nature of research and the need for consent, I may have continued recording children in whole group learning situations depending on the needs of the child.

What began with a simple methodology of observing children's literacy behaviours and talking reflectively about the behaviour in terms of literacy processing theory, quickly evolved into a more complex cycle of learning. After revisiting the lesson on the ipad, interpreting the child's behaviour in terms of theory and identifying a goal for further development, the teachers wanted to know what the teaching of these concepts might look like. These queries led us to a more dynamic and complex cycle of learning that resembled Kolb's cycle of experiential learning. The teachers and I began a cycle of sharing a concrete experience in the form of a lesson, reflectively observing and interpreting the child's behaviours in terms of theory, developing an abstract conceptualization of what the child needed to learn next and actively experimenting with new hypotheses (Kolb, 2005). At this point teachers were left with new information to experiment with before our next session two weeks later. School visits beyond the first one adhered to this framework, all components of which were recorded with an iphone or an ipad.

Subsequent visits to teachers began with a reflective conversation about the time in between our sessions, and teachers' accounts of incorporating their new learning into classroom practice and observations of student learning as it related to changes or additions the teacher had made. This was important as it kept the child at the centre of our discussion and demonstrated how our teaching is contingent on the child's current operating system and what he or she needs to learn next. From that discussion the teacher and I identified a related focus for that mornings' session. Together we designed a plan for teaching and observing student behaviour. Depending on the focus for that morning, the decision would be made as to whether the teacher would teach a lesson and I record it, or I would teach a lesson and the teacher record it. This began the cycle of experiential learning according to Kolb; this lesson was our concrete experience.

After the lesson the teacher and I observed the video and made our observations. In keeping with constructivist theory and helping teachers construct a deeper understanding of literacy processing theory, this was a time for teacher's self-reflective analysis of teaching moves and discussion of student response. Depending on the teacher's knowledge of praxis, this was also a time where I as coach, might notice and name (Johnston, 2005) student behaviour as it pertained to a theory of literacy processing. I found that I was also noticing and naming teaching behaviour that served to either strengthen the child's processing system or not. From this concrete experience and a refined understanding of the child's current processing system gleaned from our discussion, the teacher and I constructed a hypothesis about how we might challenge the child's current problem solving system and facilitate the development of a more complex and proficient system. We developed a subsequent lesson to test our hypothesis. This conversation was recorded.

Based on a refined understanding of the child's current processing system and the theoretical notion of what the child needed to learn next, we delivered the lesson. Again, the decision was made that either the teacher or I would deliver the lesson while the other recorded it. Once complete the teacher and I would observe the lesson and reflect on teacher behaviour and student response in terms of a theory of literacy processing. The teacher might self-reflectively analyze her own behaviour and reflect on the student's response to teaching behaviour thus completing the experiential learning cycle.

At this point the teacher and I discussed how she might use this information in her classroom instruction. This discussion included elements of management in terms of timetable, resources and child groupings. In some ways this method of research was mirrored in the method of working with children i.e. noticing and naming specific teaching moves, praising the partially correct and making suggestions for further growth and development.

In addition to these school visits, there was an opportunity for three group meetings when all four teachers came together as a group to discuss their experience as learners, their understandings of literacy learning of children at the acquisition stage of

literacy learning and their response to an alternative approach to professional learning. The district provided release time for these four teachers to meet for 3 half-day sessions. These conversations were recorded.

### **3.5. Analysis of Method**

The Naturalistic Inquiry approach used in this study allowed for the authentic practice of coaching teachers to take its own course without the restrictions of adhering to specific procedural requirements (Miles, Huberman, Saldaña, 2014). It allowed for each teacher's idiosyncratic, authentic response to coaching and it allowed me to respond to each of the teachers in a manner that corresponded with what they needed to know in that moment.

Schön's (1987) framework for coaching reflective practice was helpful in terms of understanding the process of learning a practice. Although my practice encompassed the components of reflective practice, I didn't have the language nor the coherent theory to explain what it all meant. Schön's framework gave me a structure with which to analyze the data. Initially I was intrigued by the examples of double loop learning, but with further investigation and reflection, I came to understand the importance of framing a problem.

Data was collected via video or audio recordings, all of which were subsequently transcribed. Audio recordings included conversations between the teacher and I prior to a lesson when the teacher reflected on her experience since our last meeting and where I might offer an interpretation of her observations, or information to construct deeper understanding. During these conversations the teacher often shared experiences connected to our previous discussion, asked pedagogical questions or sought advice. In addition I collected audio recordings of the conversation as we observed a video of either the teacher teaching, or I modeling a lesson. These conversations included the teacher's interpretation of the student's response to instruction, me directing the teacher's attention to something significant in either her behaviour, or the student's behaviour and my explanation or description of what the child needed to know next.

Video data was also collected on an iPad. These recordings served as a vehicle for discussion and reflection, but also as a baseline for me (the coach) of the student and teacher's knowledge of a process. Subsequent video recordings illustrated change over time in both teacher practice and student achievement.

While analyzing data for emerging patterns I paid particular attention to the elements of Schön's (1987) reflective practice. I found connections between the teachers' theories-in-use and their response to student learning. This provided a baseline or starting point from which I could begin to help them understand more about the theory and practice of literacy processing. As I implemented a reflective practice with teachers, I watched for examples of double loop learning which suggested to me that they were possibly changing the governing variables of their theories-in-use and beginning to challenge their previous assumptions, beliefs and theories about how children learn to read and write. The examples of double-loop learning were characterized by analytical and critical comments about their own behaviour and understanding. I purposefully looked for examples of double loop learning as they indicated possible change in teachers' current operating theory.

Over time the data revealed that the children's learning was improving and that they were becoming more proficient readers and writers, suggesting that our practice was having a positive effect on teachers' understanding and practice.

Schön's (1987) theory of reflective practice is comprehensive and explains the many elements of reflective practice as well as the relational aspects of social learning. In using his theory to interpret the data, I have been able to connect faithfully, all of Schön's components of reflective practice to the data collected from the process of supporting classroom teachers as they develop a deeper understanding of literacy acquisition theory and practice.

## Chapter 4.

### Findings

#### 4.1. Data Description

##### Denese's Story

Denese has been teaching for 12 years, three years in a multigrade rural classroom, grades K-3 and 10 years in a larger urban school working in Special Education. For the last 3 years Denese has been teaching grade one. Prior to working in Public Education, Denese worked at the Kwanlin Dun First Nations Head Start program.

Denese and I began working together on September 12, 2013 after receiving Ethics Approval from SFU, permission from the Department of Education, her School Administrator, the students' parents and the students themselves. I had previously asked her to choose a student whose learning would form the basis of our discussions about literacy learning at the acquisition stage of development. She chose Nigel.

When we began our initial conversation, I asked Denese to share her observations of Nigel's learning behaviour in literacy to this point. She had characterized him as a vulnerable learner because of his lack of engagement and inability to follow instructions. Denese said he often needs things repeated and wondered whether "it's because he doesn't understand some of the things you're showing him or that it's a level of anxiety." She also noted that although they had been working on learning letters and sounds, "he doesn't know half of the sounds of the alphabet yet and he knows very few of his sight words." Although he struggles, Denese



thought he “had lots of strengths.” When I asked her to talk about some of his strengths, she responded:

he can formulate ideas and, when we're writing in journals, he can think of a great topic, start with a picture and he just needs encouragement to write. So he'll say what he wants to say and he often gets letters/sounds for some of those words. He likes it when you come and give him some positive feedback and he starts to put his head up a little bit more, he's prouder. Right now he's learning that books have patterns and he's becoming more familiar with tracking and he'll try it but he still needs more instruction and encouragement on it. He's just beginning to recognize a pattern and continue to the next page and he can look at pictures and look for picture clues. He's just shy to say what he knows.

This description of Nigel's emerging literacy behaviour reveals a deeper level of understanding of literacy processing theory at the acquisition stage. Denese reveals her theories-in-use as she shares her observations of Nigel's abilities. She observes specific emergent behaviours in both reading and writing.

As we observed the videotaped whole group lesson, I noticed that Denese's first six turns of our initial conversation were about Nigel's inattention. Where Denese was observing inattentive, wiggly behaviour – I was inserting observations and interpretations based on an alternative working theory.

Denese: so his posture - until he sits up it looks like he's not interested

Shari: *but then he's sitting up*

Denese: *and I can't remember if that is when I prompted him*

Shari: *he's turning around but he is saying something*

Denese: *so his head is back down - head's down – looking at his hands, I prompted him to sit up*

Shari: *see he's engaged there – he's making that noise*

Denese: *still looking at his.....*

Shari: *so he's participating there*

Denese: *distracted by someone behind him – head back down on the desk – so having him in the front is helpful for me getting him back on task and using that visual for him to look at that card and to repeat that*

*Shari: and when you were doing the assessments – how many letters did you find that he knew?*

*Denese: he a lot of the letters, it was the sounds – actually – he didn't know all of the letters – he didn't know the names of 8 letters - mixed with upper case and lower case letters. And then he didn't know the sounds, they were confusions or he just didn't know the sounds for 10 of the letters*

*Shari: so [he knows] some things – he's in and out of attention*

*Denese: in and out of attention and that is typical of him in a whole group setting - at the floor or at the desk. So I'm looking at also at the other kids around to see if they are flailing - doing things – and maybe three rows down there were a couple kids off task as well but I can see in this video that they are looking and doing things and Nigel isn't – at times, so -*

*Shari: I mean he is sitting in place – his chair's not moving*

Denese could see that Nigel had been participating more than she had originally been aware of. Observing one student and “listening to the backtalk” (Schön, 1987) is difficult when working with an entire class. Reflecting on the whole group lesson where Nigel appeared inattentive and wiggly while reviewing orally letters and their corresponding sounds, we were able to discern some examples of him participating in the lesson. The next two turns demonstrates a softening of perception perhaps.

*Shari: I mean he is sitting in place – his chair's not moving*

*Denese: No – he could be absorbing what we're saying, but he needs to feel how those letters sound in his mouth when he's making them – at the time – **oh, he's doing it there***

*Shari: he's doing it at times, maybe not all the time but you can see he's – and you had mentioned that earlier, you could see his mouth moving*

*Denese: maybe it's his confidence that's low – **or he's bored***

At this point I felt Denese was opening to possibility, especially when she offered the idea that Nigel may have been bored. It seemed to me that this observation implicated her in his response – that maybe it was about the lesson and not about him. My response, “right – could be many things and we'll try to figure those things out as we go,” offers confirmation but also keeps our thinking tentative as we can never really know for certain what is happening for any given child. This response may also serve to prevent Denese from becoming defensive (Schon, 1988, p. 23). Most importantly

teachers must learn to listen to the backtalk and interpret behaviour knowing that this child is capable of learning. Schön refers to this idea as “giving the kids’ reason” (1987, 1988).

As we continued to observe the seatwork part of the lesson Denese and I noticed a different set of behaviours. Schön talks about the role of the coach.

Through advice, criticism, description, demonstration, and questioning, one person helps another learn to practice reflective teaching in the context of the doing (1988, p.19).

Guided by my observations and questions, Denese was able to observe what Nigel was doing independently to help himself with his learning. We discovered that Nigel was referencing a letter strip on the board, he was using his neighbour’s work to confirm his response and we eliminated the possibility that his fine motor ability was hampering his work. More importantly, we noticed that Nigel was engaged and productive. He persisted with his assignment until it was done. At no point during this exercise was he disengaged. Denese and I noticed that Nigel was on task more often when he was doing something as opposed to when he was simply sitting and listening to instruction.

These observations formed the basis of our next session together. Inherent in this kind of coaching, Schön talks about creating a Hall of Mirrors where the coach demonstrates “reflective teaching in the very process of trying to help the other learn to do it” (1988, p. 19). Having developed the hypothesis that Nigel may learn better by doing and listening as opposed to just listening, we designed an experiment to test our hypothesis. Schön claims that “reflective teaching and reflective supervision are kinds of research” (1988, p.19). Experimentation is a kind of detective work that is essential in working in the zone of indeterminate practice. Denese and I agreed that I would demonstrate a different way of teaching children about letters and sounds.

Using a small chalkboard and piece of chalk, I asked Nigel and a classmate to make 2 small lines on the board representing the initial and final letter of a word. I introduced a letter sound and on my chalkboard made a copy of the letter symbol that they could reference. I then said a word and asked the boys to listen to the word, say it

to themselves and determine whether they heard our target letter sound at the beginning of the word or the end of the word and to print the letter symbol on the appropriate line. Nigel was engaged and able to do this exercise independently and confidently periodically looking at his neighbour's board for confirmation. In many ways this task was more complex than what Denese had been asking Nigel to do in the listening exercise and he was doing it successfully. From this experiment Denese was able to learn more about Nigel's capabilities that augmented what she had learned in the listening lesson. Denese noticed that Nigel was engaged, happy, motivated and enjoying it. On reflection Denese commented that Nigel was happy, confident and taking risks. She concluded that this demonstration was "an eye opener for me, seeing how another activity benefits, because not everyone learns the same way so that's why it's important to have different tools." In a very calm, quiet and collaborative way, Denese is making herself available to the opportunity of learning something new. To me this is an example of double loop learning that Schön refers to as making change possible addressing the governing variables of our theories-in-process.

As we continued with our conversations about literacy theory and practice and reflected on my demonstrations and her teaching I began to realize that Denese's theory-of-action differed slightly from her theories-in-use. Schön suggests that often what people think they are doing differs from what they are actually doing (Argyris & Schön, 1994, p.7). Although Denese has a good understanding of what to look for in children's literacy behaviour and how to describe it (a theory of action), I noticed that she neglected some important pieces in her teaching (theories-in-use) beyond the emergent level. Literacy processing theory describes problem solving strategies that can help children figure out words they don't know so that they can extract meaning from text. Text provides clues from three sources of information – context, language structure and print (letters and words). Although Denese taught for the use of all three sources of information to help solve problems, when it came to specific incidents of teaching and reflection-in-action, she taught for the use of print knowledge and had neglected to remind Nigel to search for clues from the picture and the language structure to support the use of visual information.

Through a complex network of conversation, demonstration, experimentation and reflection as well as learning to observe and interpret behaviour I worked with Denese to construct meaning and bring congruence between her theory of action and her theories-in-use. When I suggested she could support his learning by using the meaning of the text and the language structure inherent in the text Denese made a connection.

Shari: now I'm just wondering here, when you started I thought it was really nice. You said, "what do you do when you come to a tricky work?" and they were calling out, so obviously the teaching has been there. Nigel said "picture cues" and I think John said, "stretch the word out." This is a great opportunity to use the picture and say, "you know James is asking something of his dad, look at the cars there, what do you think he's asking?" and then get him to elicit the language, and then say, "okay now read it, how does James say it?" So it kind of narrows his choices down and then he can look at the letters and confirm it or figure it out. It's like bringing the meaning back in, just look looking at the letters....

Denese: yes, I was more focused on the letters

Shari: but at the beginning you said to use picture cues and I think to help use them more when he is stuck to say, "what do you think James is asking, he's asking dad something" and just see if he can come up with the language, and if he can say it, then you can say, "now read it" That's just a little extra because for him the visual information is his weakest part, so if we can support him with what he's good at, which is meaning, then it might help him and you had already started it at the beginning when you asked, "What can you do?"

This also demonstrates "double loop learning" that was discussed in Chapter Two in which Schön and Argyris (1974) refer to a kind of learning that doubles back to examine the governing variables of theory-in-use and changes it. Schön and Argyris differentiate between single-loop and double-loop learning suggesting that single loop learning serves to reinforce the assumptions and beliefs already held by the practitioner. Double loop learning allows for new learning to permeate what is already known and serves to change beliefs and assumptions as well as behaviour.

Reflecting on the data collected I realized that Denese was teaching from a theory-in-use that operated on the expectation of sequence – that the children must learn one thing before another. For most children, this expectation can be realized.

However, when working with vulnerable children we must be prepared for the unexpected (Clay, 2005). Schön (1987) refers to the unexpected as “indeterminate zones of practice.” Within these zones of practice it is important to carefully observe children’s behaviour as they respond to teaching. Listening to the backtalk as Schön refers to it – teachers can observe how the students are internalizing the teaching and if necessary, shift the teaching and expectation. Learning is a process that is unpredictable in the sense that we can never be sure what the learners have extracted from the teaching until we see them in action. At that point we can design new lessons to respond to an existing repertoire of behaviours. At one point during our 5<sup>th</sup> session while observing a video of Nigel and Denese working together, I noticed a sequence of behaviours that demonstrated the kinds of problem solving actions we were teaching for. Nigel’s behaviour indicates understanding of his responsibility when reading.

Shari: and look what he did here – he said “look at” – and you just sat there and **he** realized it wasn’t right and went back and fixed it – he’s monitoring –

Denese: can we go back, I didn’t hear that, I was writing

Shari: in the lesson – he said ‘at’ - you can just barely hear him – I just remember that too when I was standing there with the camera – he said “look at” and then he went back – so if you think of that in terms of independent solving –

Denese: so he went back and self corrected –

Shari: so he’s monitoring and “look at” sounds right and makes sense, but he’s noticing ‘at’ wasn’t there – so he went back, [self-corrected] and said, “look dad”

Denese: so he noticed by the text – visual [information]

Shari: he was using the visual information – which is something we’re teaching for and he did it – so he’s really paying attention and you’re pointing that out to him with the “can” and the “car” – which is helping him in other places as well – so I thought that was really good – independent solving – that’s the monitoring, searching and self correcting – so that’s processing right there – that’s his thinking

Shari: nice link – very nice

Although Nigel was demonstrating an emerging understanding of his role as an independent problem solver that collects clues from various sources of information in an effort to re-construct the meaning of the text, Denese is viewing reading as a memory

activity as opposed to a thinking activity. Nigel is constructing a processing system that is becoming more refined, the more he reads (Clay 2005).

Denese: yeah, but he still didn't get [the word] –

Shari: but that's the beginning - we'll see that in more books – but this is the beginning and if you keep it there to remind him of this lesson that we had

Denese : and it does eventually help

Shari: yes, that was a great link – did you notice – he didn't get shout on the page before, so you helped him, but he got it this time, so you can even see the growth from the beginning of the book to the end of the book –

The data supports the idea that Denese is developing a greater understanding of the marriage between theory and practice. She is aware of what she has to teach, but is not as confident with observing and interpreting the student's response to her teaching. Denese acknowledges her emerging understanding of learning – beginning with what the child knows and can do and moving him forward from there.

It's a very big learning curve for me to accept where they're at – because I do want to make sure that by the end of the year they're doing that so I tend to be pushy before they develop bad habits – that's my thinking – I have to remember where they're at developmentally.

## **Leslie's Story**

Leslie is in her fifth year of teaching having spent her first four years teaching grade three in a small rural school. In the summer of 2013, Leslie was transferred to a larger urban centre and has spent this school year teaching grade one for the first time. Leslie is currently working on a Master's program from the University of Calgary.

Leslie and I began working together on September 11, 2013 after receiving Ethics Approval from SFU, permission from the Department of Education, her School Administrator, the students' parents and the students themselves. I had previously asked her to choose a student whose learning would form the basis of our discussions

about literacy learning at the acquisition stage of development. She chose Matthew to take this journey with her.

In the very first minutes of our initial conversation, I asked Leslie to share her observations of Matthew's learning behaviour in literacy to this point. She had characterized him as a vulnerable learner because of his distractibility, pencil grip and messy printing. When prompted for further information Leslie added that Matthew is "still struggling with letter recognition and sound association" which must be dealt with "before we can move on to more writing and reading. "

When I asked Leslie about the kinds of lessons she had" the children participate in that enabled her to make these observations, she replied,

I do small groups and I'm focusing on their basic letter/printing skills right now so when I do small groups I'll have him with maybe four others and we're just focusing on certain letters with the Foundations program. So we've moved through probably half the alphabet by now and I'm just noticing for him it's very difficult because he easily gets distracted so he'll be drawing all over his page or getting him to find the right lines that we're looking at, because with Foundations there is a sky line, the plane line, the grass, the worm line. It's difficult for him to follow and find that on the page and then he'll tell me he doesn't remember that letter, or this letter. .... and his journal writing too, his drawings are very messy so it's hard to get him to narrow down a thought process on what we're going to write about and I'll scribe for him sometimes, just the ideas. On the white board during Morning Message he'll be able to get some of the letters if I ask him to circle or underline a letter or what makes that sound – so some of the time it's the ones I know we've prompted and worked on already. His attention will wane because he'll be watching what someone else is doing and not paying attention to his work so he' won't even get the chance to practice as much as he can.

Although I was anticipating Leslie to use language that represents literacy learning at the acquisition stage in relation to Matthew's current abilities, i.e. directionality, (left to right, top to bottom and return sweep), tracking words one to one, matching voice to print, noticing the words and letters he knows, making comments about the pictures, recognizing and remembering patterns in early text reading, writing words he knows and using existing knowledge of phonemic awareness in written messages, I was able to get a sense of Leslie's theories-in-use about literacy teaching



and learning. Leslie's interpretation of Matthew's abilities reflect a set of "governing variables" (Arcyris & Schön, 1974) that set the problem differently than problem setting from a processing approach to literacy instruction. This provided a starting place for my work with Leslie.

As I reviewed the data I noticed that in the initial discussion after the first lesson, I had set out three different concepts worthy of further dialogue to broaden Leslie's understanding of literacy processing. These concepts included Matthew's emerging self-perception, the concept of directionality in literacy learning and understanding the purpose of printing letters and knowing letter sounds. Of these three concepts, Leslie responded most profoundly to my comments and observations about directionality suggesting that Leslie was able to connect this concept to her prior knowledge of literacy teaching and learning. I knew that I had to begin working with Leslie from her current theories-in-use.

In our first session, I used my iPad to video record a small-group printing lesson with instruction on how to print individual letters. Although Matthew was motivated to participate, he was unable to produce letters to the teacher's standard. This resulted in many erasures that frustrated him. Matthew's behaviour revealed to us that this task was too difficult. Although Leslie knew he was unable to complete this task to her satisfaction, she didn't know how to modify the lesson so that he might be more successful. As I reflected on the lesson prior to reviewing it with Leslie, I was thinking about how I would proceed. I knew that I had to help her use her current theory-in-use as a foundation for the on-going construction of a more robust set of governing variables and be careful to maintain a relationship with Leslie that would "minimize defensiveness" (Schön, 1987).

As we viewed the video and engaged in a dialogue of "reciprocal reflection-in-action" (Schön, 1987, p. 10) Leslie made the discovery that her teaching had the potential of confusing Matthew. Directionality is a foundational concept in learning to read and write and can be easily confused by some learners (Clay, 2005). Early on teachers must be vigilant in modeling accurate left to right and top to bottom directional behaviour. Leslie notices that she was remiss in this instance.

... and that's me too - needing to make sure that when we start, make sure I start right on the side (pointing to left side of page) and then get him to go that way [right] because I can easily confuse him if I'm going back and forth – I don't want to do that – and the other ones are pretty good at getting it [but Matthew] needs a little more help.

This is a good example of what Schön calls “double-loop learning” (1987) in that the detection and explanation offered by Leslie is sure to cause her to adjust her set of governing variables that make up a theories-in-use and change how she approaches her lesson design.

I noticed a change in Leslie after this first discovery. It was a humbling experience for Leslie and I got the sense that she was opening to new ideas, new learning and greater understanding.

Leslie and I met for the second time two weeks later. We reviewed the videotaped lesson from our previous session and I asked her to look for “the things that [Matthew] could do well.” I was hoping to reframe the way Leslie had problematized Matthew's learning, look for his strengths and then build from there. I also wanted to revisit a concept that was important but not necessarily part of Leslie's current theories-in-use.

Leslie: he actually did what I told him to do without me even having my eyes on him, [that] is really impressive because I just assumed in my head that....

Shari: he'd be waiting

Leslie: or he'd be doodling or something, but when I'm looking over here, he'd actually already done an L when I said, “let's do an L” and that was really nice to see.

Shari: so in some ways, taking initiative

Leslie: yeah

Shari: he wants to do it, and that's so great

Leslie: Yes, that is really good

Reflecting on Matthew's behaviour during the lesson, Leslie discovered that he was trying to participate but was frustrated by the requirements of the lesson. Leslie had observed and interpreted Matthew's behaviour in a way that sets the foundation for subsequent learning. Schön (1987) talks about an “evolving role” of the practitioner as

she listens to the “back talk that results from earlier moves” (p. 31). Via the video Leslie was able to see that Matthew was in fact trying to do as she asked, which gave her a new appreciation for his response to learning. Matthew has the desire to learn and will take the initiative – these are important attributes for learning new skills.

As I worked with Leslie to reshape her theories-in-use, it was important that we addressed Matthew’s emerging theories-in-use. Matthew revealed to us early on that the printing lesson was difficult for him and resulted in him being frustrated with the task. The author Maya Angelou says that “when a person shows you who they are, believe them.” It was important that we use Matthew’s behaviour as an indicator of what he was capable of at that time. I was concerned that he would extend these feelings of frustration about the printing task, to future authentic writing and reading tasks as well as his perception of himself as a learner thus formulating an ineffective theories-in-use. I took the opportunity to revisit my original concern from our first session about the number of erasures during the printing exercise.

Shari: I was concerned about his being erased all the time because he’s got such good energy

Leslie: yeah, it’s tough. It’s hard with those things. I don’t want to damage their perception of what they’re doing, I just like having the clear space to do the next letter. It’s nice to see what they’ve already done but when you only have three lines – so at what point do you say it’s time to erase, or its time to keep – I don’t know – with most kids, you know, they do it and then I say now show me three and then erase it and they’re fine with that – so every kid is different.

Shari: with the vulnerable kids we don’t have a lot of room sometimes. They’re threshold for [frustration] is very tiny, ....but he seems to have done really well when you’ve given him a model.

Leslie: yeah, he does

Shari: ... so that he experiences that success all the time – do the model first so that he can copy that, as opposed to after [he’s made the mistake] –my concern for him, because [printing] is hard for him, if we spend too much time here, we turn him off the [writing] and in my mind, literacy is more about the [writing of ideas] and printing can come once the [writing process] becomes [more established].

Leslie: yeah, and what I might try to do, even at journal time, ...I have the date on the board and he’s right at the front, but it’s ....too distracting [for him to look up] so I can take one

of those sheets, put it on his desk and I put the date so that he can copy that even....

Although Leslie justifies the erasures at first, she comes to understand my point and begins designing alternative ways of supporting Matthew. Schön's (1987) term for this kind of working together to achieve a convergence of meaning is "reciprocal reflection on reflection-in-action." This conversation leads Leslie to understand my point and to extrapolate to other literacy lessons. As coach, I bridged the gap between a new conceptual understanding and something Leslie was already doing.

In keeping with the theory of teaching children to read and write within the context of whole text (Clay, 2005), Leslie and I decide that I will demonstrate a small group lesson in writing where the children help me write a message as I model the process to them, and then move to work on individual pieces of writing. The message the children and I decide to write is, "**I saw frost.**" Schön (1987) talks about the initiation of someone into a community of practitioners, "He learns their conventions, constraints, languages, and appreciative systems, their repertoire of exemplars, systematic knowledge, and patterns of knowing-in-action" (p. 14). As I demonstrate teaching, I am using the language of literacy instruction and later as Leslie and I reflect on my reflection-in-action, I am using language about literacy in the form of rationales, explanation and theory of learning. In the following example I demonstrate with the language of instruction as well as a system of knowing in action.

Leslie: so you did the a-w – they wrote the /s/ and you did the a-w – so for 'frost' they did the,

Shari: but did you hear Ellen? – she said – "saw - /s/ - /o/ - that's an o"- and I said – "yes – and lots of times it is, but this time it's a-w" – and I just quickly wrote it in

Leslie: that's where I get lost – should I just let them put what they hear or should I help them – we're doing a model on the board for example, like what you did – "oh, it sounds like o, so I'm going to put the a-w, that's what it is this time" – that's where I get kind of lost –

I continue with language about literacy learning at the acquisition stage. In this example we talk about emergent writing.

- Shari: one of the things we have to learn about the English language, is that there are many ways to represent a sound – and so to say, “you’re right –in most words that would be an o, but in this one its an a-w” and over time they will learn [to be flexible], if you say it often enough – what you really want them to understand, is that this is complicated and so there are things they need to know but I’m not expecting them to know that [yet] and I’m just going to write it in – so I think its important to point it out otherwise they’re going to say, “well, why did she do that?” and to praise what they give you because she’s absolutely right, in most words it would be an o. So when I wrote it on the board, I just quietly put the other ones in, so when we got to ‘frost’ and when I said ‘frost’ and they identified the f, they put the f up there and then when I asked them to “say it again, what else can you hear?,” they identified the s. So I quickly wrote the r-o, because what’s going on in their minds is that s
- Leslie: yes, and they’re hearing that end sound – I think it was Matthew – when he was writing one of his words and he just heard the end sound – so you said – “ok, write that down” –
- Shari: it was ‘got’ –
- Leslie: yes he just heard the /t/ –
- Shari: and g isn’t one of the first letters they hear – and what’s interesting about the g – the letter name says the soft sound and not the /g/ [hard sound] which we use more often - so until we have this under control, I wouldn’t even worry about that letter.

In this exercise, conceptual and practical knowledge is made available for Leslie to add to or change her theories-in-use.

At our last session, Leslie introduced a new book to Sarah. Her teaching and reflection-in-action during the lesson demonstrated an emerging knowledge of theory and practice as she explained the rationales for her decisions. As we reflected on her reflection-in-action she took the initiative to point out and explain what she was doing and why. Leslie was taking steps to ensure Sarah would successfully read a book and in so doing, develop a healthy self-perception and emerging theory-in-use. Beyond teaching specific literacy concepts and strategies, Leslie also worked to help Sarah shift from being passive, to being actively engaged in her own learning by using wait time and specific prompts that required Sarah to do the thinking. Leslie noted that Sarah was talking more in the book introduction and noticing and using the details in the pictures.

She also responded to Sarah in a way that revealed she was observing behaviours and interpreting them “on the run,” praising for independent use of strategies as well as for partially correct responses.

Through a series of explanations and demonstrations in addition to Leslie listening and imitating, Leslie has been able to construct an understanding, albeit tentative and fragile at this point, that involves the weaving together of theory and practice to support children as they learn to navigate print. Schön (1987) says,

In the design studio, as in other kinds of reflective practicums, the coach’s showing and telling are interwoven, as are the student’s listening and imitating. Through their combination, students can learn what they cannot learn by imitation or following instructions alone. Each process can help to fill communication gaps inherent in the other (p. 111).

In supporting teachers to become reflective practitioners I noticed there was a similarity between how I was working with teachers, and how I was coaching them to work with children. Where I was listening and observing without judgment, analyzing comments and behaviours to get a sense of their current operating system, noticing and naming strategies they were using that would be helpful in achieving their goals, praising decisions, giving them time and space to construct their own theories-in-use, I was inadvertently modeling how I was asking them to work with children. One teacher commented that she was doing with her children, everything that I was doing with her. She had appreciated the noticing and naming of productive strategies that made visible to her, her own operating theory. Schön (1987) talks about a “hall of mirrors” model of coaching. In an article entitled, “Conceptualizing a “Hall of Mirrors” in a Science-Teaching Practicum,” MacKinnon (1989) talks about the ‘parallelisms’ that exist between the practice of coaching and that of teaching and that “the model is more powerful when the practice of supervision mirrors the practice of teaching” (p.41).

I gave the teachers “reason,” trusting that new information and demonstration, coupled with their prior experience, they would construct an understanding of theory and practice that would form the basis of their theory-in-use. I was also careful to take into account their “perceptions and viewpoints and, where appropriate, to attempt to modify and build on, but certainly not ignore, [teacher’s] ideas” (MacKinnon, 1989, p. 45). I also

made sure that I noticed and named productive strategies so that I could make them visible to the teacher so that she could experiment further with their use. While reflecting on reflection-in-action I highlighted teaching moves that seemed to have the desired effect of bringing the student closer to proficiency in a particular strategy and I laid the foundation for inquiry on those teaching moves that were perhaps not as effective. Moreover I demonstrated teaching moves and upon reviewing the video, offered information and explanation about the desired effect or outcome.

During our last session, Leslie introduced a storybook to Sarah and then had her read through it again. Leslie has listened and participated in conversation about literacy teaching at the acquisition stage of learning and is imitating my demonstrations and as a result her reflection-in-action, although tentative and emergent, is changing, suggesting that her theories-in-use are changing too. Observing the video later, Leslie and I discover many examples of reflection-in-action where she plans her next move based on Sarah's response to the story and Leslie's teaching. Leslie is "listening to the backtalk" and making decisions on the run based on what she has observed.

Leslie: okay, so now, let's give it a read through, "The Big Hole"  
Shari: (takes control of the book) Look at the ummm, (teacher points to the picture) car – Look at the car

Leslie has made sure that Sarah controls the book (she has it in front of her and turns the pages). Leslie is holding back her comments, giving Sarah time to think and execute.

Leslie: look how many though?  
Sarah: Look at the cars – Look at the (mouth ready for /b/  
Leslie: what's this? (points to the hole in the road) – (no response) big

Leslie uses Sarah's strength, to support her weakness. Sarah knows that stories make sense and Leslie can use that to help her use the initial letter/sound. When Sarah is still unsure, Leslie tells her the word ensuring that Sarah does not get frustrated or anxious.

Sarah: big hole - (turns page) Look, /L/, Here is, um, Here is.....a, the (looks at Leslie)

Leslie: (pointing to digger)  
Sarah: hole  
Leslie: what is this? ..... /d/..... digger  
Sarah: digger, Here is the digger

Sarah goes back to reread and Leslie gives her time and space to do this. This helps Sarah to put the meaning back into her head and helps establish habits that will become part of her theory-in-use.

Leslie: good job - notice how you said 'look' at first but then you realized "wait a second, that's not look – that starts with a different letter, that starts with a H" – you said it was 'here' – very good checking

By offering specific praise for her thinking, Leslie makes visible something useful and strategic that Sarah did, ensuring that Sarah will do it again.

Sarah: Look at the  
Leslie: (pointing to digger)  
Sarah: um, digger. Here is the  
Leslie: isolates b in 'big'  
Sarah: dump, /d/  
Leslie: it is like a dump truck, but they call it, /b/, big truck

Again, Leslie praises a partially correct response, "it is like a dump truck, but this book calls it a big truck" – Sarah was using meaning to get dump truck, but needed to look at the /b/ at the front. Leslie supports Sarah here also because it may be that she is still confusing b and d and she doesn't want to dwell on that.

Sarah: big truck. Look at the um, big (looking at picture) truck  
Leslie: can you say that one more time and make it sound like talking?

Leslie asks Sarah to repeat because she knows that phrased and fluent reading supports comprehension. Leslie wants to make sure that Sarah knows what good reading should sound like.

Sarah: here is the big  
Leslie: (isolates L)  
Sarah: Look at the big truck



Leslie isolates the /L/ in 'Look' as a demonstration for what she wants Sarah to do – Sarah is using the pictures for the meaning, but is learning to use the letters to support the meaning.

Leslie: very good

Sarah: Look, Look, um (looks at teacher and shakes her head)  
Look, No,

Here Sarah is already realizing the importance of looking at the letters and understands that this is what Leslie wants her to do.

Leslie: that's okay – check the words

Sarah: Here is the

Leslie: (pointing to picture)

Sarah: flattener

Again, Sarah's strength knows that the pictures carry the meaning, but is just learning to incorporate the use of the letters. Leslie is teaching her this by demonstration and praise.

Leslie: could be a flattener – but what sound does this make?

Sarah: /r/, (together they say... ) roller. Look at the roller. Look at the cars.

Leslie: good for you, you noticed right away that there was more than one car – so, let's read it one more time and let's read it faster now that we've read it once.

Leslie is offering specific praise to ensure Sarah is making her rendering of the story "match" what the author has written.

Reflecting on the data it is clear that even at the first session of this study, Leslie was reflecting-in-action and supporting learning with feedback and suggestion. She was listening to the backtalk that was the child's response to teaching and responding with additional instruction/information. The difference seems to be in how Leslie interprets the child's behaviour. In the final exercise during the last session of this study, Leslie is paying more attention to the child's response to learning and adjusting her teaching based on some new conceptual and practical knowledge in addition to the child's behaviour. The focus of this lesson is the child's learning as opposed to the task that

seemed to be the focus of the first lesson in September. It might seem that Leslie's theories-in-use have become more robust with the addition of some key pieces of knowledge and the experimenting embedded in the time she spends with her students between sessions with the coach. Engaging in a reflective practice while participating in dialogue about the practice seems to have shifted Leslie's behaviour, which suggests a shift in theories-in-use.

## **Stephanie's Story**

Stephanie has been teaching for 11 years. Most of her experience has been in rural, multi-grade primary classroom, with additional experience in urban settings. Prior to receiving an Education Degree, Stephanie had earned an Early Childhood Development Diploma and has had a number of years of experience in Early Childhood Education and Preschools.

Stephanie and I began working together on September 19, 2013 after receiving Ethics Approval from SFU, permission from the Department of Education, her School Administrator, the students' parents and the students themselves. I had previously asked her to choose a student whose learning would form the basis of our discussions about literacy learning at the acquisition stage of development. She initially chose Liam.

When we began our initial conversation, I asked Stephanie to share her observations of Liam's learning behaviour in literacy to this point.

he is reading well below where he should be with the fact that he was in Reading Recovery and he continues to struggle with one, any type of written format, or reading, with his words. He doesn't view himself a reader, one so that tells me that his confidence is lacking for a reason. Two, he often finds purposes for reading but he can't find success in the books that he chooses to look in so his interest level and his reading level are very different so trying to meet that up has been very challenging and three, when I can get him interested in a book it seems that unless he's sure he's memorized that word before, he's not willing to look at it or attempt it - so he will try the book after it's been read to him, so even the simple phrases, but he won't attempt to read the word unless he's heard it first. So why is it that - for me it's, why is it that he can hear a word, remember it and then put it into - and sentences and phrases - put it into his language but

not look at it and know that he's seen it somewhere else but transfer it to this new book.

Shari: and what about writing – what have you seen in his writing?

Stephanie: very limited, lots of reversals, letter formation is really difficult for him. He is very reluctant, same thing. So one, we're looking at providing different tools, so if given a choice of tool he'll choose a crayon and then I'll get more writing as opposed to a pencil or if you are requiring, and so I've seen him perform. Being able to do neat printing on a line because that was required of him but that is not a choice style for him so one, I'm wondering is it the line, is it the space that's affecting his thinking so that he can't get this thoughts on process, or does he not yet understand that print is a way of communicating messages?

Shari: have you done any kinds of spelling or word work

Stephanie: very little so far this year in terms of directed spelling lessons – very little – we just talked about words we know and we just talk about looking around the room and “oh, if you know that person's name then you know that word because it's in their name” – so looking - and that's very general with all the kids – the other thing I just provide them with some sentence frames if they're really reluctant. With Liam specifically we do writing every single day and they do it in what's called their “Everyday Book” – but he could not get past the idea of picking up a pencil, first of all – or a tool to use – and then when I told him “really it's just about making your muscles stronger” – then he's willing to practice letters – but he'll write his name over and over – so that's what he's doing – and that's what I've given him to do up to this point – I've said to him, if you don't know what to write, just write your name because it will make your finger muscles stronger – and so that he's willing to do so he'll write his name many times for me– and then yesterday we looked at it – he was talking about – oh you can write your name, but look at your shirt, it's really cool - it says “this kid has attitude” – you can write that on your paper you know – you could just copy your shirt – so that he was willing to copy on his sheet – but that was already written for him and it was something that was said to him over and over again because it was his shirt and he thought it was very funny, so he could connect – so I guess my big question with Liam is how do I get him to connect the fact that he can use reading and writing to communicate?

As I reviewed the data I noticed that Stephanie's comments were more about motivation than they were about literacy. Liam would neither read stories nor pick up a

pencil for writing. I wondered if Liam was the right student for this project. I had asked Stephanie to choose a student who struggled with literacy, but whose repertoire of behaviours would allow us to engage in conversations about literacy acquisition, what it is, what it looks like and how to support its development. Although Liam's behaviours are likely connected to his perception of himself as a literacy learner, he would need to cooperate and participate in reading and writing lessons so that we could observe and discuss his response to teaching.

Reviewing the transcript of our initial conversations I also noticed Stephanie's analytical approach to observing behaviour. This is important when working with vulnerable learners. Borrowing from Schön's (1987) idea of the zone of indeterminate practice and the need to approach design from a non-traditional perspective, vulnerable learners require us to become sensitive observers and interpreters of learning behaviours so that we can design individualized lessons that will serve to move learning forward.

As we began our third session, Stephanie and I decided that substituting Samantha for Liam would return us to the purpose of this study, which was to become engaged in ongoing conversation about literacy learning at the acquisition stage. When I asked Stephanie what she had noticed about Samantha's literacy learning she noted that although Samantha was in grade two, she was reading at the Emergent Level of text, or Text Level 2. This information tells me that Samantha is reading patterned text and has not yet progressed to using problem solving strategies to inform her reading. Stephanie also noted,

that I'd like to see some spontaneous use of writing, like just for pleasure or messages and [Samantha] will not, she's not even doing that very pre-literacy type of [attaching] a label, or caption on her diagram.

Stephanie continued by saying that Samantha "has the composing part down. She's able to talk to me orally about the story and about what she wants to say more about, but she's not remembering exactly what she wants to put down on the page." Stephanie is observing and interpreting behaviour, looking at the details of Samantha's current behaviour and relating it to what Samantha needs to learn. Schön (1987) might

interpret this as Stephanie's ability to "listen to the backtalk" of the situation in order to integrate that information with theory in order to design next steps.

We began by looking at Samantha's work in her "everyday book" and noticed that she hadn't been in school every day. This would obviously put her behind her peers in terms of achievement, but it doesn't mean that she wasn't able to learn and do the work. In this case it was even more important to observe and interpret idiosyncratic literacy behaviour as Samantha would not be taking the same path to learning to read and write as her classmates.

We observed a lesson with two students, Samantha and Karen. Stephanie had identified oral language as something both girls needed more experience with. She also noted distinctions in writing between these two students. Karen was already using letters and their corresponding sounds independently in her writing whereas Samantha often could not remember her writing idea long enough to get it written down. In this lesson Stephanie read a story to the girls in order to offer some language that might help them compose a story for writing. As Stephanie began reading I soon noticed the extraneous talk.

Stephanie: I was asking for clarity for her there – she parrots the word insect but I don't think she necessarily knows what it is half the time

Shari: I'm just concerned about the [interruption]

Stephanie: I threw them

Shari: it wasn't [really] related to the story

Stephanie: not at all

Shari: I'm just thinking in terms of Samantha – not so much Karen – in terms of learning the language (of the story) – .....some of the conversation was interrupting the flow of the story so whether they're [understanding] the whole story I'm not sure– they may be getting pages– but whether they're understanding the whole story – so some of the conversation was interrupting – in terms of her [maintaining comprehension]

Stephanie: they've had this story probably 2 maybe 3 times already – so they do know the story - but you're right – there is too much conversation – I can see it myself and I could hear it when I'm looking at it

Shari: and the conversation may be pertinent to Karen, but not to Samantha

Stephanie: and not really – she said she loves porcupine ribs – she meant pork ribs – dry garlic ribs – I don't think she's ever eaten porcupine ribs – that was the connection she made

Shari: the conversation might be meaningful – but [she] is not engaged in that part – especially when you have a group – making sure the conversation [is applicable] so we don't lose her

Stephanie: she wanted to know if there were owls in the Yukon

Shari: again, we're moving away from this nice lesson with the book...

Stephanie: I know, we're all over the place

Shari: ...and the language and that's really what we want is to give them some language that they can then use in the writing, right?

And you're right- usually the first read through we just listen – the second or third then you can add pieces of conversation

Stephanie: but they're not there – that book was too long – I should have stopped it at the owl page – I should have stopped it there

Shari: well, I don't know if it was too long – there were a lot of interruptions – and you always want the language to be a little bit higher than their language – beautiful illustrations – they really support [the story] – and I don't think they got the ending – because of the frequent interruptions – they didn't get that part – all of that was happening and he was asleep.

As we reflected on the lesson Stephanie agreed that there was too much conversation distracting from the purpose of the lesson. At the end of our conversation Stephanie concluded that in future she would have to stay focused.

Stephanie: I'm just thinking of what my goals are going to be working with them – one is my own topic - stay on topic – really make sure that whatever my lesson is – is really focused on what I want – because there was a lot – I was trying to pull in a lot of different language – and it's too much – that's a different thing all together – to do a story talk and discuss it and do the book – that's different then when I'm wanting to use it as a prompt for writing

Shari: and I think you still could – you read the story and then go back and talk about it – there were some really nice pieces of language in there that you can use as a lesson – and

there were some concepts about owls, the fact that owl slept the whole time when all this was going on and missed it all – [Samantha] needs a little bit more focus –

Upon reflection Stephanie not only noted how her response to the girls may have been confusing them, she also had made a decision about how she would respond next time. Stephanie had made an observation that could quite possibly change her behaviour in the future. This is an example of double loop learning that changes the governing variables of theories-in-use.

In a subsequent lesson I demonstrated ways of supporting Samantha in constructing a problem solving system based on using visual information (letters and words) to cross check information from language structure and meaning. The book we chose provided Samantha with a variety of opportunities to practice problem solving in text. In early text levels children must learn to incorporate information from letters in their repertoire of strategies. When Samantha told the story with her own words she said, “Mom is going to the zoo, Sally is going to the zoo.” The text read, “Mom is at the zoo, Sally is at the zoo.” I stopped her the first time to help her notice that going and at are not the same. This required that Samantha slow down and really look at the letters, in order to align letter information with information from meaning and language structure. Samantha read this particular page a second time and then she read the whole story a second time, providing opportunities to practice. I knew that if she didn’t begin to notice that the author’s letters and words were important, she wouldn’t be able to read progressively difficult text. After the first correction, I made sure I waited for Samantha to request my support, but she never did. After I pointed the tricky bit out the first time, she took the learning into her own hands and elected to read the sentence and page over again. Stephanie noticed how I stayed focused on the strategy Samantha needed to learn first.

... but you keep it really concise and I don’t – I know when I talk with the kids we do a lot of talking and last time realizing – being able to watch myself and realizing how often I took them off track - so I was creating that stumbling block for them because I kept making connections to everything else and it took away from the lesson itself – so you have the conversation but you keep it moving.

As Stephanie engages in reflection-on-action it provides her with an opportunity for double loop learning where she critically analyzes her own behaviour and decides that she has something to learn. The extraneous talk that Stephanie refers to, was a theme in the lessons I observed up to this point.

Although Stephanie approached the observation and interpretation of learning behaviours from an analytical standpoint, it was important to help her notice the behaviours in terms of literacy processing and then use the language that describes it.

Stephanie: I think she was happy to come and read and excited to try it but I think the change in predictable pattern threw her

Shari: I like how she takes charge – that’s good. I like this – right there, there’s the story – she wants to – she’s kind of all over the place – I’m trying to keep her focused on this job –

Stephanie: this is a lesson we’ve done lots in class – looking at the print and using it – she so enjoys it

Shari: look how fast – my face is in awe – but she came into that structure quite easily – so she knows something about “look” and she knows something about the words that follow – and quickly and it matched. So that was a familiar structure – it came quite easily to her – so her structure is “mom is going” which is different [from the language structure in the book]– so she’s just learned something new about that structure – look at how she’s looking at the print – which at level 3 and 4 you need to do – it’s not predictable any more – so she hasn’t really got that yet

Stephanie: she’s ready for it

Shari: she’s ready for the challenge – the structure is interesting - she’s struggling with the structure – she will get it – but you’ll notice when her own language structure can’t help her – she has to look more closely at the letters and she’s doing it – so she’s triumphed in the end, but she’s working on that new structure – interesting that she could read “look” but she couldn’t get the “l” – so I’m not sure, maybe she was expecting something more difficult

Stephanie: I think she was expecting – because she does know the “l can” phrase – but obviously it’s not - it’s the pattern she knows

Shari: she fixed that – so she’s really looking

Stephanie: yes, her eyes were really paying attention to the letters there

Shari: which level 3 requires – I think we’ve found her level – on the back [of the book] it says Level 2/3 – but I think she



could move into Level 3's fairly soon – and you know – there were places there that I wanted to see what she would do – she really wants to work at it – work ethic, that's great – pulling it all together

Stephanie: she's really, really processing there

Shari: so she knew the structure that came after 'can' – than that's a subtle shift they've (publisher) made there – so this was a very subtle change and I didn't think she'd notice it at all – and she did –

Stephanie: because even with the picture – you'd have to look really closely at the picture to realize that mom was talking there – so it's not from the picture – she's noticing the letters on that one....

Shari: and – at a glance – she's not studying [the letters]– so she's bringing in meaning and structure – that was of course, visual information because like you say – you can't tell from the picture – so she's bringing it all together – so she's got some nice processing already going on – we've just go to develop it.

At a subsequent session, Stephanie wanted an opportunity to work with Samantha while I observed. Prior to the lesson, Stephanie had some questions that pertained to her new understanding.

Stephanie: okay – so this is a 3 – and this is pretty repetitive too right – that's where it moves – it goes from one sentence to two sentences – so when I'm pointing out this lesson to her, would I show her? because this is pretty predictable – like, "here is" - she's going to know this part here – I think that's pretty predictable with all of her 2's, but would I point out that, "oh, look there's 2 lines here

Shari: no – just wait until she gets there – I think the power is in helping her when she needs it – sometimes when we "front-end" load we're putting too much information out there and it's not necessarily something she will remember, or need – so we wait til she – if there's a tricky bit then we give her the support she needs

Stephanie: okay – and that was a question I had because that's something we had talked about a lot – is I do a lot of front end loading and too much information sharing before we start the book

Shari: what we're really trying to find out is what does she do when she comes to a tricky bit – so if we're in there all the time and giving too much information, she never has to think about anything – and we really need to get her to start thinking about the story – and the other thing I would

do when it gets tricky is go right to the picture – then come around to the letters – meaning first – she’s really good at using meaning and we’re teaching her letters so we go in first to the meaning and then go to the letters – teach – she’s already got the right answer and then we’ll show her what it looks like in letters – just to make sure we’re not always going in at the letters first because that’s what’s tricky for her first of all, and it’s about the message first – the letters support getting the message.

After reviewing the data it was revealed to me that the topic of Stephanie’s extraneous talk recurred several times over the course of this study. Stephanie was coming to understand how the teacher supports the development of a processing system. When learning something complex it is understandable that conversations about specific topics repeat and as they repeat, the level of complexity in understanding changes. This is reminiscent of Jerome Bruner’s (1960) idea of spiral curriculum. At our first session with Liam, Stephanie became aware of how her talking may be inhibiting comprehension or in Samantha’s case, the construction of a processing system. With each successive experience she became more and more knowledgeable and proficient at providing just the right amount of support for the anticipated outcomes. In this particular lesson Stephanie uses the language of processing to support Samantha as Samantha constructs a processing system. Stephanie also exhibits self-control with the amount and type of support she offers Samantha.

Shari: night and day – for me because I’m not with you every day, I thought that was a great lesson – and I think some of your teaching points were bang on and I think the language you used was great ... I think you were teaching for strategies – which is great

Stephanie: thank you – that’s what we’re aiming for – and that’s what’s been so amazing about this – because you kind of know but then you get into bad habits

Shari: but what’s interesting is – I’ve modeled maybe a couple of times but I think your experience as a grade one teacher is coming through and you’re well versed with strategic processing theory, you’ve had lots of conversations about it but what was interesting to me, the shift was night and day from the first time. Just your wait time and the way you were allowing her to notice. You’re not noticing everything, you’re letting her notice.

Shari: I think one of the things that I would suggest here is that she needs to use two sources of information

Stephanie: she needs the visual [information] and to check the picture

Shari: so "what would make sense here, look or book?" – and then she's crosschecking which is ...

Stephanie: what we want

Shari: yes, so she can be more independent – "how can you check?" I like how you brought that in – because she wasn't really looking

Stephanie: she wasn't and as soon as she used her finger then she was paying attention to the words

Shari: so nice call on your part ... and you just sat there and let her do that – that's what **she** needs to do – she went back to check on herself. I think the fact that you've been helping her with 'here' – just simply saying "here" – over time she's starting to put the clues together – "how do you know that was 'here'?" – the H – so all that is going to come together in her brain and she's going to be saying the word "here" pretty soon on her own. Look at the patience – the wait time. That is very good – and then you went to - you slip up every now and then

Stephanie: I know – my hand is in there again – I'm holding my hands under the table saying, "keep my hands out" (laughter) - Little Teddy Bear – what kind of bear is it – what kind of stuffy

Shari: I'm just going to go back because I think there was some great teaching right there – so already

Stephanie: she's really proud right there

Shari: well, already she's pulling in the 'here' without any support – and even – and you pointed, which is great because you're bringing her to meaning – even if you said – "what would make sense – here is teddy" and then draw her eye to that B

Stephanie: yeah, **and** what would make sense

Shari: and what would make sense – she would have got that - so always going to those. I liked your praise there ... so what do you think she needs to do to be a reader at level 3? What is it that she's not doing that we wish she would do more of?

Stephanie: Meaning – making it make sense – but that's a language ...

Shari: not necessarily – but I think you're right – I think it's a cross check – meaning and visual information - right away you picked up on the two things she did well – she noticed that she skipped 'bear' and then she looked – she didn't stop there – she kept going – but I think for you to praise that was really good. You picked up on that right away. So

what we need to do is ask her, "did that make sense and look right? Did it match?"

Stephanie: Did it match? – that's a good one

Shari: and getting away from the word and just asking, "what would make sense and look like that?" – pull the two together – and it would be good to get that going before we get too far along

Stephanie: in the other ones – just focus on these ones

Shari: yeah – so lots of good things there T - your wait time – you're taking her to the picture – and then a little more work just matching it to that first letter – yet there was change over time in that 'here" – she started by saying the didn't know it – and then she knew it by the "H" and then there was no question by the end – she was using it later – so even in a single book we were seeing change over time

Stephanie: and I think one of the key things is noticing "here" – I did a lot of reflecting on where the kids are at – but I did a lot of noticing where my teaching is at too – so that's been the change from the beginning of the school year until now is taking away that focus of where the kids are at – because they're going to be where they are – doesn't matter – but am I addressing them where they're at? – and I don't think I was – I think that's probably the biggest part of this has been reminding myself that I need to go back to where they're at – not where I want them to be –

After a series of conversations about the specific teaching and learning of one child, that included reflecting on reflection-in-action and reciprocal reflection in action, Stephanie and I were able to observe learning, interpret it and design a response.

## **Tracy's Story**

Tracy has been teaching for 10 years in multi-grade rural classrooms. She taught for three years in a grade 4/5 classroom and then moved into a grade 1-3 classroom in a different rural setting.

Tracy and I began working together on September 17, 2013 after receiving Ethics Approval from SFU, permission from the Department of Education, her School Administrator, the students' parents and the students themselves. I had previously asked her to choose a student whose learning would form the basis of our discussions about literacy learning at the acquisition stage of development. She chose Mark.

When we began our initial conversation, I asked Tracy to share her observations of Mark's learning behaviour in literacy to this point. She noted that "he's totally disengaged most of the time, very tired, avoidance, all of those characteristics of a passive learner." When prompted for more information Tracy added that he uses references around the classroom to support what he knows about letters and their sounds. Regarding sight words, Tracy shared that they had been working on four sight words (I, see, ride and on), two of which had been introduced the day before. She said, "we've been using wicky stix, magnetic boards and next week I'm going to introduce the dry erase crayons." She also noted that Mark was "able to find the word 'I' in some morning poems but that she's not really clear yet if he knows the difference between a word and a letter, "But now when he writes his sentence in his journal, he knows it has to be an upper case."

As we continued to talk about Mark's repertoire of literacy behaviours, Tracy was able to share some specific observations.

he starts with his drawing and they're getting more elaborate compared to where they were in grade one – and he stays on topic, he doesn't veer off and talk about something else. If he's talking about moose hunting, there's a moose, his dad, maybe his mom in the picture. Like in the pictures with the sun, usually the sun is in there. He stays on topic. I'm quite pleased because he doesn't try to talk about going to [the city] or anything like that.

As I thought about Tracy's description of Mark's current literacy behaviours, I was initially interested in her lack of reference to literacy processing and strategic problem solving beyond the minor reference to letter and word knowledge. I began to wonder if Tracy knew more about literacy processing theory but didn't possess the language to describe it or whether she didn't know what to look for in the behaviour of children learning to read.

In their book *Theory in Practice: Increasing Professional Effectiveness* (1974) Chris Argyris and Donald Schön make the distinction between theory of action and theory-in-use.

When someone is asked how he would behave under certain circumstances, the answer he usually gives is his espoused theory of

action for that situation. This is the theory of action to which he gives allegiance, and which, upon request, he communicates to others. However, the theory that actually governs his actions is his theory-in-use, which may or may not be compatible with his espoused theory; furthermore, the individual may or may not be aware of the incompatibility of the two theories.(p. 7)

What I came to understand after re-examining the data is that Tracy had provided me with a glimpse of her theory of action pertaining to literacy acquisition. To really understand her theory-in-use I would have to observe her behaviour and listen carefully in conversation (Arygris and Schön, 1974). To enhance and refine Tracy's theory-in-use, I would have to arrange for opportunities of double loop learning in our sessions (Arygris and Schön, 1974, p. 19) and learn how to recognize them. According to Arygris and Schön, double loop learning "changes the governing variables of one's programs and causes ripples of change to fan out over one's whole system of theories-in-use" (1974, p. 19). At this point I wasn't sure what these opportunities would look like for Tracy and I would rely on her revealing to me in some way, when she'd accomplished some double loop learning. I continued to make observations, provide explanations and demonstrations and waited for signs that Tracy was learning more about literacy processing theory and practice.

After Tracy described Mark's current repertoire of literacy learning behaviours she informed me that Mark was on an IEP (Individual Education Plan) and had had specialists come in and do testing with him.

During our conversation prior to using my iPad to record a lesson between Mark and Tracy, I proffered some ideas that I knew Tracy needed to know more about in terms of understanding literacy processing theory and practice and how they related to Mark. These ideas included understanding our writing goal for Mark (composing and transcribing independently) and keeping the end in mind, that letters are abstract concepts and that rote memory may not be enough to remember them, using Mark's ideas for motivation, and Teacher using praise as a means of support, reinforcement and confirmation. Using Jerome Bruner's (1960) notion of spiral learning or spiral curriculum I began the conversation about these ideas/topics knowing that they would resurface in our reflections and conversations.

After videotaping the lesson, Tracy and I sat down to reflect on the teaching and learning behaviours. Tracy's very first observation revealed additional information about what she understood to be important for Mark's success, she said, "he should be turning the pages, I should not be." I agreed that this was a simple action that could encourage dependence on the teacher. After Mark read the entire story, Tracy had him go back to find words. I noted, and in essence praised Tracy for waiting until after Mark had read the entire story so that he could enjoy the story in its entirety and then take a closer examination of the smaller details. In this example I had practiced what Peter Johnston calls, "noticing and naming" (Johnston, 2004). I wanted Tracy to know that her action had the potential of moving Mark forward in his learning, so that she might think about it and do it again another time. It also serves to value and reinforce what Tracy brings to the exchange. In his description of the Coach's role in supporting learning, Schön (1987) talks about things like questioning, answering, advising, listening, demonstrating, observing, imitating and criticizing (p. 114) but he doesn't specifically talk about praise. In my experience praise has worked to reinforce action and serves to build the kind of relationship that can withstand challenge. I wanted it clear to Tracy that I wasn't trying to change her entire repertoire of teaching responses, but refine and enhance it. We needed to start with what she already knew and I established that foundation by praising parts of her repertoire when I observed them.

At another point in the video Mark was having difficulty with a word and Tracy pointed immediately to the first letter and asked him for the letter sound. It took a rather long time for him to respond accurately and from there she went to the subsequent letter and then the letter after that. Before getting to the end of the word, Mark had forgotten what the initial letters were as well as what the story was about. At this point I reminded Tracy about our conversation about using Mark's strength to support his weakness. It became obvious that letters and sounds were Mark's weakness and to go there first would make the reading process difficult. We knew from his writing that story context was Mark's strength and so at difficulty, to return to the picture and elicit a response about what was happening would put the ideas (and often the author's language) into his head that he could then return to the text and match with the letters with the language and context. Mark could be praised for solving the problem (doing the work) and once this was accomplished Tracy could go back and help Mark make a closer examination of

the letters in the word. On three more occasions when Mark experienced difficulty, Tracy pointed to the letters. Reflecting on her action, Tracy noted that,

it's ingrained in me. Now for readers like him I will be more aware of that. I didn't know so this is good for me. My EA's (Educational Assistants) are really about that too because I probably taught it without realizing it

Reflecting on the data I noted that this example could be illustrative of double loop learning where Tracy's observations and new understandings have the potential of shifting the governing variables of her theories-in-use and ultimately enhance and refine practice. This example also provided the foundation for our conversation about the texts that Mark was reading. Early in the learning process at the emergent stage of literacy acquisition, children are provided with patterned text that helps them to learn about the concepts of print i.e. directionality, one to one matching, initial and final letters, concept of front and back, concept of word and letter, punctuation and capital letters. These books are not conducive to learning about the reading process because there is no story line and often the language is contrived. It was important that we choose books with a context and natural language so that Mark could learn to build a processing system.

As we continued to reflect on the teaching and learning behaviours in the writing portion of the lesson I admired the way she let him draw the picture rather than having him write immediately. I was hoping to secure this practice in her teaching repertoire with Mark as well as value and make visible what she has brought to this lesson. Interestingly Tracy noted that Mark's picture was an important tool that gave her the information she needed to help him. This unsolicited comment helped me to understand more about what Tracy understood about the pedagogy of literacy acquisition. Furthermore, observing this writing lesson helped us to realize that Mark knew a lot more about letters and words than we had originally assumed. Tracy noticed and commented that Mark referenced a chart in the classroom to help him write a word with /ch/ in it. Taking Tracy's comment a little deeper I responded, "yes, but did you notice that he just got up out of his chair, glanced over and then came back. He didn't even go right up to the chart. The /ck/ was right beside it and he knew it wasn't the one. I wondered as I watched, will he put a 'ch' or 'ck'"? This was a pleasant surprise considering how excruciating it was for Mark to use letters for figure out words in



reading. In this example of what Schön (1987) might call reciprocal reflection-in-action (p. 101), my detailed observation of Mark's behaviour may serve as a model to improve Tracy's capacity for observing and interpreting literacy learning behaviour so that she may make more proficient decisions about teaching. When I re-examined the data, I found several similar examples where I modeled behaviours with Tracy that she then could emulate with Mark. What I discovered was that the ways in which I observed and listened to Tracy and interpreted her comments and behaviour in terms of facilitating the construction of a literacy processing system, mirrored a process that I was trying to instill in Tracy as she responded to her students. Schön refers to this as a Hall of Mirrors where the practice of coaching mirrors the practice of teaching (MacKinnon, 1989).

As we continued to reflect on the lesson after the fact, I commented on a nice example of reflection-in-action where Tracy talked with Mark about saying words slowly when attempting to write them, and rereading his writing to monitor the production of it. During the lesson Tracy noticed that Mark was letting her say the words slowly, so she explained how it would help him write words. Further in the lesson, she reminded him to reread his writing to check that it made sense. I commended Tracy for her reflection-in-action in an effort to make them visible to her because I wanted her to continue this practice. These behaviours are important and will facilitate Mark's independence over time. However I did follow those remarks with the observation that even though she asked Mark to say the words slowly and read his writing again, she proceeded to do both of these for him. She agreed, "I did read it again. He needs a minute or two but I rush. I want it now and I need to think about his need because he needs me to give him a minute or 10 seconds." This exchange illustrates another example of double loop learning.

An important concept in facilitating learning is that nothing stays the same. As learning behaviour changes, so must teaching behaviour and careful observation plays an important role in knowing when and how to make a shift. Tracy and I were talking about the example of Mark getting up from his chair to go look at a chart on the wall. I noticed that he quickly glanced at the chart as opposed to examining the chart. This suggested to me that he might respond to a transition. I suggested to Tracy that she begin to transition from saying /ch-chin/ and showing him /ch/ on the chart, to just saying

'chin'. This little boy had received an inordinate amount of support up to this point and he had learned to sit and wait for help. The shift would be from offering two kinds of support, to offering one kind of support. Mark's behaviour was the catalyst for change. He showed Tracy and I that he didn't need as much support as he was being given. In this example we listened to the backtalk of the situation, specifically what Mark could already do, how long he had been doing it, what he needed to do and how the teacher might shift her behaviour to achieve a shift in his. At this point, because Mark's situation was unique and there were no Manuals to refer to for direction, Tracy would have to experiment with alternative ways of achieving change. In terms of coaching practitioners, Schön (1987) makes a distinction between changing things and understanding them. He notes that the practitioner "has an interest in understanding the situation, but it is in the service of his interest in change" (p.72). At the end of the lesson I offered to demonstrate how we might shift Mark's dependency on adults and I added, "let's see what he can do today." We had established an hypothesis and the next step was to test it by trying something.

At the end of the session Tracy was wondering why Mark hadn't improved in literacy until now. Of course we will never really know why but her questions provided me with an opportunity to describe the kinds of support we were offering Mark. On a piece of paper I drew several dots and I explained that those dots represent everything a teacher says, in this case about literacy. If children have the appropriate background or prior knowledge and have had success problem solving text, they can connect some of those dots on their own and use them to strengthen their processing systems. Vulnerable learners on the other hand, need us to bring those dots a little closer, or add more dots so that they can make connections on their own. The distance between these dots represent smaller increments of difficulty. Vulnerable learners can learn to develop a problem solving process, but they require more scaffolding and a teacher that knows what to scaffold, how to scaffold and when to scaffold. As it turned out, this made sense to Tracy and after reviewing the data I noticed that she referenced these dots on a few occasions.

When I returned to work with Tracy and Mark two weeks later Tracy reported that she had begun moving away from Mark and letting him take more responsibility for his

writing. She also noted that she had him reread his writing to ensure it made sense. In an example of reciprocal reflection-in-action I responded by summarizing her comments in the language of literacy processing theory, “so he is monitoring his writing, making sure it makes sense and sounds right.” After reviewing the data, I began to see that our discussion this time involved aspects of literacy processing in greater depth. After recording a reading lesson we met to reflect-on-action. Tracy and I continued our discussion from our last meeting about Mark using letters to confirm his predictions from meaning and language structure. Tracy had been modeling the strategy of using the first letter of the word, the context and the language structure to predict what the word might be. Tracy was scaffolding the construction of a processing system by articulating the first letter sound and requiring that Mark bring his knowledge of the story and language to make a prediction. Tracy reported that most often Mark would respond with the right word. The next step was to release the responsibility for articulating the first sound to Mark.

As we continued to reflect on the lesson I noticed at one point that Mark hesitated while reading. I pointed it out to Tracy and then applied literacy processing language, “he’s monitoring his reading, he knows something is not quite right but either he doesn’t know what to do about it or he doesn’t have patience, but the fact that he’s monitoring is a good thing.” I explained to Tracy that monitoring or noticing discrepancies is the first step to solving tricky pieces of text. Monitoring is simply noticing and initially children will notice but often not do anything about it. In the end, if monitoring is absent children won’t be aware of errors and therefore will not self correct them. Part of my role as coach is supporting a growing knowledge of theoretical concepts with the language that goes with it. Similarly, Schön (1987) also sees this as part of the instructor or coach’s role in developing artistry to navigate the zone of indeterminate practice.

At this point the conversation spiralled back to text level. Earlier in our work together Tracy and I talked about text level and how it was important to get Mark into text level 3 as it provides readers with opportunities for problem solving and constructing a working system (Clay, 2005). Tracy agreed that Mark needed to read level 3 text because “he wants to see more words.” Tracy’s comment helps me to understand more

about what she understands of theory-of-action. Understanding that constructing an understanding of literacy processing theory is itself a process, I repeated that level 1 and 2 text are patterned and require little thinking if you can remember the pattern. Level 3 text contains a storyline and a variety of words and phrases that requires the reader to do some strategic thinking. By doing the strategic thinking, a problem solving process is constructed. Each time this topic appears, I will provide the information that Tracy needs in order to understand the distinction between text level 2 and text level 3 so we can expand, little by little over time, her current theory of action.

In addition, text level 3 requires that at difficulty students find ways to solve their problem. Reviewing the lesson on video, I was able to point out a subtle behaviour that I thought it was important for Tracy to recognize. Mark was uncertain about a word and he hesitated (monitored), and then looked at the picture for more information (searched). I mentioned that this would have been something to praise Mark for so that we could make it visible to him and encourage him to do it again.

In addition to searching the pictures for helpful information, children must learn to search the letters and words for information that will help them either confirm a hypothesis, or solve the word. This was what Mark needed to learn and although Tracy understood that, she had a hard time finding an appropriate response to his behaviour and rather than have him do some of the solving, pointed out the error. I intervened to explain **how** she might have participated in his construction of a processing system.

... what he said was, "come up, come up" and he forgot "here." You came in to show him, which is a good thing, but I think I would have said, "good for you, you've got 'come up' – now let's work on this part. So, praise what he's already done because as soon as you come in he knows he's made a mistake. If we can praise what he's already done, "I like the way you got 'come up' because that's what [Mother Monkey] is saying, but where does she want him to go?" And then bring in the meaning. He can probably get it from the meaning and then we could go back to the word to examine letters. "Where do you think Mother Monkey wants him to go, 'come up ....." He might say "here" and we could respond, "okay, let's check." We're getting him to look at the first letter and then he can confirm his response. After that it's, "okay, read it again and make sure it makes sense, sounds right and starts that way" – always praise the problem solving he's done and then do the teaching.

As I continued to reflect on the data, I realized that this one example also illustrated Tracy's understanding of the learning and reading processes. Mark missed the word 'here' in the phrase, "Come up here, come up here." The word 'here' occurs several times in this Level 3 book and is used differently i.e. 'Here comes Tiger' and 'Come up here.' Tracy believed that he knew the word because he had seen it on a previous page. I argued that he knew the word through context and language structure as well as having read this story before. I could see that he hadn't looked at the word – he was reading for meaning but not checking on himself by looking at the letters. The difference in theoretical understanding between Tracy and myself is the difference in belief that learning to read is simply about remembering letters and words versus about constructing a complex problem solving system. I knew Tracy's understanding was tenuous at best but I also knew that this conversation would continue the next time we observed Mark read. I had to begin from what she currently understood and build on that.

When we observed the writing part of this lesson, as coach I was able to point out some beginning practices to help Tracy release some responsibility to him. After having a conversation with Mark to get some ideas for writing bubbling, I suggested two strategies. One was to have him say the word he was trying to spell out loud to himself, listen to the sounds and then write the corresponding letter, saying, "say the word, what can you hear?" and "say it again, what else can you hear"? It was also important that Mark take responsibility for ensuring his idea made sense. Tracy could do that by saying, "read it again, what comes next?" By using these phrases, Tracy would be modeling a thinking process that Mark would take on over time. I needed to present this information so that Tracy could be thinking about it as she worked with Mark in the subsequent two weeks. It will form the foundation of her growing understanding.

After two weeks I went back to work with Mark and Tracy. Tracy reported that she has practiced giving Mark more responsibility by creating some space between them when he's writing independently. Tracy explained how Mark was participating in his learning more and becoming more willing to take risks. She described an incident with the Learning Assistance teacher.

Sometimes he shuts down because he doesn't want people helping him. This is new, this is very new. So we give him his space and he does what he needs to do at his pace and level. So I guess we need to learn to trust him a little bit more – giving him that power.

Tracy's comment about trust made my heart skip a beat. It made me think our conversations from a strength-based perspective and her observations of Mark reading and writing with a commentary, were changing her perspective of him as a learner and helped her realize something about the teaching/learning relationship. Teachers must trust that children are capable. Tracy went on to say that from this discovery she had had conversations with other staff members.

I even helped change the beliefs of other people in the school about Mark's learning. They all thought he was an empty vessel and not after what we've been doing. I said "No, there's more happening there. He's remembering, he's telling me stories from a few years ago. No, he's not empty at all. He just needs tiny building blocks"

This example illustrates Schön's notion of "giving kids reason" (Grimmett, Erickson, 1988, p. 19). He notes that the teacher "assumes that the kid is making sense and her problem is to discover that sense." It is evident that she is shifting her belief about Mark and his learning. I'm wondering if she is also shifting her beliefs about her role in the process. Having had this experience of truly helping this vulnerable learner, is she feeling empowered? Is she beginning to see that perhaps difficulty does not necessarily mean disability?

Reviewing the data on the reading portion of this lesson, I noticed that Tracy and I were once again talking about her jumping into the process when Mark was struggling. It was almost like a reflex for Tracy and many teachers believe it is their job to help, but I'm suggesting helping in a different way. The fact that Tracy and I have already had discussions about her helpfulness speaks to the need of providing ongoing support for teachers as they construct an understanding of their role in supporting vulnerable learners as they acquire literacy. The spiral learning is evident in this case. This time around, I was able to explain in more depth why it was important to wait and see what Mark would do.

- Shari: See where he did that? “Tom looked up in the” and right away your finger went in
- Tracy: I need to let him go back
- Shari: even to sit back and see what he would do
- Tracy: okay
- Shari: because he might have come back and if he did, that would be better than you getting in there so quickly

Reviewing the data, I can see where Tracy’s level of understanding has shifted. This time around, although Tracy could tell me that she needed him to go back, she wasn’t able to **do** it yet. This is a shift from earlier teaching behaviours. We’ve come from awareness to knowing and now we’ll work on doing.

As I reviewed the transcripts of this session again, I could see a shift in her behaviour over the course of that one lesson. On a subsequent page of this same book I noticed that Mark’s behaviour actually seemed to scaffold Tracy’s response and our reflection-on-action made it clearer.

- Shari: I just love that. He went, “here are” and I could see your hand flick. You wanted to put your finger in but he went back and self corrected it. You were praising a lot for self-correcting and I would continue to do that especially on these early books to get it engrained. Those are the habits he needs – those are the dots he needs to connect.
- Tracy: okay – so one of the dots is for him to go back on his own, checking the dots and even stopping.

Throughout my sessions with Tracy, I have praised her on decisions that had the effect of moving Mark incrementally to a more sophisticated working system. We had been having conversations about praise and how it worked to support vulnerable learners (and all learners for that matter) move their learning forward. I wanted my feedback to be specific and helpful and make her behaviour visible to her.

... what you did there Tracy is that you let the “kicks” go (it was ‘kick’) and you let it go but you came in here and you praised when he did it. That is sometimes more powerful than talking about it when he didn’t do it. What was nice about that is it was the principle you were teaching, not the word. When you said, “oh, you looked at the ending” you weren’t teaching the words ‘kicks’ and ‘shouted,’ you were teaching him to look at the ending – a strategy he can apply to all words

As I was leaving her school that day she told me that she was applying the praise strategy more often with her students because of how it made her feel. She hadn't seen herself as a confident teacher at that point, but by noticing and naming the parts of her current practice that were supporting the construction of processing systems, she was feeling better about herself as an educator. I see this as part of the "hall of mirrors" that Schön refers to where interactions between coach and practitioner are mirrored in the interactions of teacher and student.

On a subsequent visit I noticed a change in Tracy's language. At the beginning of each session, I asked Tracy how things were going and what she wanted to focus on that day. Tracy had practiced some things in between sessions and then often had questions or observations to share the next time. When she shared her observations and new learning with me I noticed the incorporation of language pertaining to strategic thinking.

... keeping my finger off the book is one thing because I can be a crutch for some of my kids and I've really been trying to keep my hands out of their books because it's important that they go back and look and turn the page and be independent readers and writers.

Of course, this is Tracy's theory of action and as I observed her teach I noticed that she had to remain mindful of how she supported Mark. Later in the lesson Mark was fumbling with the words and phrases and Tracy let him work at solving his problem and then said, "go back to the start and try it again." Mark went back to the beginning, reread and worked it out. There were additional examples of Tracy either giving Mark more time to notice the tricky bits and doing something about it, or giving him only enough information that he could make an attempt and do some of the work. Mark was becoming a strategic thinker in terms of problem solving text. He was monitoring his reading, searching for more information by either rereading or taking another look at the letters and words, working at difficulty and most often working out the tricky bits and self correcting.

A concept was becoming increasingly clear. Tracy needed to understand more about teaching for change. As Mark's reading and writing abilities grew some of the prompts we had been using, wouldn't be as effective. Tracy had been encouraging



Mark to reread from the beginning of the page. I pointed out that this should change over time.

Shari: In terms of this book, the fact that you stayed out and let him do the thinking, he noticed, he monitored the mistake and he did something. Often times he would go back and reread. A more proficient reader doesn't need to go back to the beginning but he did. He needs that but later on we should see that he might only go back a word or two. At one point I thought he might go back and repeat the word only but he didn't, he went back to the beginning. He may still need to do that, but later on we might see him make a shift to going back only a couple of words.

Tracy: Thank you, I might not have known that – I might have continued to have him go back to the beginning.

Shari: take the cue from him. If you notice him go back a word or two the just let him. That might be enough because it means he's keeping the rest of the story in his head. Right now he may be thinking of so many things that he needs to go back and collect more information.

I realize now that Mark may have been going back to the beginning of the page because he had been instructed to. I took this opportunity to help Tracy develop an awareness of change over time and what to look for, always "listening to the backtalk" and taking inspiration from the child's current behaviour.

In the indeterminate zone of practice Schön suggests that there is no script for navigation and that often it is a trial and error process. We collect data, develop a hypothesis and then test the hypothesis. At one point Tracy was asking about interrupting Mark's reading to use a little whiteboard to help him learn the distinction between two letters. I suggested she wait until he had finished reading. I suggested she "let him finish the story then take him back to that page and get [her] whiteboard out," and then I added, "try that and see how that works." There is no blueprint for teaching vulnerable children to read and write. Teachers must listen to the backtalk, experiment with different strategies, reflect on the effect of the strategy and perhaps modify their instruction.

Although it is evident that Tracy is learning to be mindful of some of her actions and comments in order to support Mark, it is also evident that there is a discrepancy between her theory of action and her theories-in-use. Much of Tracy's current behaviour

may be due to her imitating my demonstrations and although we use literacy processing language in our discussion, her understanding is tenuous. If we think of learning as a continuum, Tracy has advanced along the continuum, but is still requiring support in developing a better understanding. At this point Tracy still thinks of reading as remembering words as opposed to using strategies to solve words. She will keep Mark at a Level 4 text because those books have “everything in there, all the words he’s been working on are in there.” As we previewed additional books Tracy analyzed some of the language and vocabulary.

Tracy: ‘dog’ will be different, but he’s got the picture. ‘Hungry’ he has.”

Shari: or he’ll get to

Tracy: he’ll get to

Although Tracy understands that Mark can use the pictures to figure out some of the words, she may not yet understand that his ability to read is supported by pictures but also language structure at this stage. He may be able to read the word “hungry” in text but it’s because he’s bringing many pieces of information together to do that. He may not recognize the word “hungry” on a word card or in a list and out of context. By listening to the backtalk in our conversations, I can see where Tracy has shifted her understandings, and also where I need to create opportunities for our conversations to spiral around these topics again.

As I’ve viewed and reviewed the data, I’ve come to realize that as educators, we have been conditioned to teach as opposed to observe learning. John Hattie (2012) talks about using learning to inspire teaching and Schon (1987) talks about “listening to the backtalk.” Meeting with Tracy and engaging in an ongoing conversation has provided us with opportunities to reflect-on-action via the iPad video footage and shift teaching behaviour. At our last session together Tracy began with a description of two different kinds of behaviour she had observed in Mark. She sat back and watched as Mark tried to solve a problem in text.

the other day he looked at ‘went’ and ‘with’ and he thought he saw ‘with’ in another book and so we went back – I let him take me on a little journey. I wanted to know what he was thinking even though it was ‘went’ instead of ‘with’ in the book. Mark attempted to find out how he could solve his problem of not knowing what this word was ...

he is trying. Another thing we talked about last time when he goes back to check his work, sometimes he just goes back a few words and then sometimes he goes back to the beginning. It's not consistent, but he is going back and I'm giving him more time. I've been trying to hold off a bit and I compliment him on going back and figuring things out on his own.

Tracy provides a more detailed description of Mark's reading behaviour that reveals not only a shift in her theory of action, but as I observed her teach I noticed that her theories-in-use had also changed. She was waiting to intervene, taking her cues from Mark.

As we reviewed the last taped lesson of this project, Tracy and I watched as Mark resolved some of the tricky bits. Mark's strategic thinking was evident as he listened to himself read, thought critically about his word choice, kept going or reread depending on his decision of suitability. He was using a variety of strategies to read this text. At one point Tracy noticed that Mark struggled with the word 'mice' but got 'where' every time.

Tracy: he even gets 'where' every time

Shari: but you know why – it's because he's using Meaning. He probably doesn't know that word and he probably couldn't read it off a list, but he's pulling it all together. He's up here (I raised my hand above my head) with his processing.

Tracy: I'm still down here (showed me with her hand). I've got to get back up there. Like you say, he will not move forward because I'm not giving him the strategies.

Shari: I think you're going to the word all the time, "you know that word." Reading is much more complex and he is doing much more complex stuff. What you need to say is, "what are they asking? there is a question mark here, what are they asking? Where are they going, what do they want? then you could go back and say, "were you right? could that be 'where'?" Right now he's using meaning, structure and visual information."

Although Tracy's theories-in-use have shifted and she has become more aware of the kinds of thinking children do as they learn to read, her understanding of processing theory is tenuous and perhaps not robust enough yet to use flexibly in designing lessons for other vulnerable learners without support. The data reveals that Tracy is far more involved in the conversations and demonstrates that with the language

she uses to describe Mark's reading and writing behaviour but there is also a willingness to take responsibility for her role in the teaching/learning negotiation.

## 4.2. Data Analysis

The data collected helped to determine if this reflective practice could influence change in teacher knowledge and praxis, and understanding of vulnerable learners and how they acquire literacy. I used open coding when I first reviewed the transcripts of conversations, discussions and lessons and to identify themes and sub-themes. As I reviewed the data again and understood more about Schön's notion of reflective practice, some codes emerged from the data that helped categorize not only teacher responses, but also coaching comments. Further review of the data helped me to refine the coding system and at this point, some codes were broken into sub-codes.

As I read Schön's work to understand my research, I found a concept that was very helpful in describing what I was trying to achieve. In Argyris and Schön's (1974) book *Theory in Practice: Increasing Professional Effectiveness*, they talk about the difference between theory-of-action and theories-in-use. What I realized was that I was hoping to shift practicing teacher's theories-in-use so that they could better understand vulnerable learners in literacy and in the end, understand all learners a little better. I have been thinking about the relationship of these two concepts and have wondered if the chasm between the two always exists (and I think it does) or if the chasm is more pronounced because much of conventional professional development in education espouses theory, but not necessarily how to apply it.

Also in this book, Argyris and Schön discuss double and single loop learning. As I read I realized that I was designing a practice to foster double loop learning so that as teachers observed and learned something new, they would adjust their theories-in-use, and perhaps learn the language and concepts to describe literacy processing at the acquisition stage of learning. It was important to acknowledge that the four teachers in this study had experience in the field and were not apprentices. I wasn't helping them to develop a theory, but I was attempting to support them in adjusting their working theory by helping them to develop new constructs in literacy learning to apply to vulnerable

learners. As I reviewed the data, I looked for examples of double loop learning that might serve to effect change in the teacher's theories-in-use. Examples of double-loop learning occurred most often when incongruence was observed between teaching practice, teaching intentions and results. One teacher noted, after I asked a question about the way she modeled a printing exercise, that her placement of the letters may have been confusing for the learner trying to understand directionality. On another occasion, after observing the learner's inattention during a "listening only" lesson, I modeled another way of teaching the same content with a "doing" component. The teacher realized that the student revealed he knew more during the "doing" lesson.

As these were practicing teachers in permanent teaching positions I thought it was important that they realize that I wasn't there to dictate what they should be doing. In reality I wanted to supplement what they were already doing. The methodology included Peter Johnston's notion of "noticing and naming" (Johnston, p.11). As teaching is intuitive in nature (Hattie, 2012) I wanted to ensure that I made visible what the teachers were already doing in their practice that supported vulnerable learners. In a sense, I was acknowledging existing knowledge and understanding, and scaffolding new bits of information that would broaden and add depth to their current understandings. While viewing the video footage, I would point out what I thought was great practice through the lens of literacy processing theory, and describe it in terms of its' benefit to this specific student. For one teacher especially, this practice reassured her of her competence. For all of the teachers, this information served as a foundation for further development.

Even though these were experienced teachers, what emerged from the data is that my methodology was designed for developing artistry in teaching vulnerable learners at the acquisition stage of literacy learning. After reading Schön's book *The Reflective Practitioner*, I recognized in this study the elements of developing artistry that he describes in his book. Where Schön describes artistry as the means by which we navigate the zone of indeterminate practice, I realized that in terms of literacy education, vulnerable learners reside in a zone of indeterminate practice. Schön describes uncertainty, uniqueness and value conflict as zones of indeterminate practice.

In the varied topography of professional practice, there is a high, hard ground overlooking a swamp. On the high ground, manageable problems lend themselves to solution through the application of research-based theory and technique. In the swampy lowland, messy, confusing problems defy technical solution. The irony of this situation is that the problems of the high ground tend to be relatively unimportant to individuals or society at large, however great their technical interest may be; while in the swamp lie the problems of greatest human concern. (1987, p.3).

The children chosen for this project were not making the same gains in literacy acquisition as their peers in the classroom. They were not responding in the same way as their peers, to the instruction offered. The teachers were delivering lessons from resources endorsed by the Yukon Ministry of Education but these children were not able to incorporate the lessons into their response to text the way their peers did. These children represented problems of real-world practice that could not be resolved with classic textbook solutions.

In early literacy education, I see vulnerable learners as residing in something similar to Schön's zone of indeterminate practice. Technical rationality speaks in general terms and perhaps applies to the general population of a classroom but textbook lessons are not as effective for vulnerable learners. These children require a different set of learning circumstances tailored to their idiosyncratic response to text. These circumstances are crafted from the teacher's understanding of a processing approach to literacy acquisition and its application, and it begins from what the child already knows. The teacher's careful observation and interpretation of the child's response to text is informed by her understanding of the theory. Vulnerable learners are unique. The instruction must begin with the child's current operating system and be cultivated from there based on their response to teaching.

Teaching vulnerable learners to read is a dynamic process that requires the integration of theories related to learning and literacy. But because this teaching must begin with what the child already knows, teachers must be prepared to flexibly apply these theories and to experiment with alternative responses in order to help the child achieve literacy goals. The elements of reflective practice that Schön describes are important from this standpoint, especially the elements of reflection-in-action and

reflection-on-action. The teachers noticed that all of the children identified were vulnerable in some way. In the first lesson that we videotaped with the iPad, two teachers adjusted their teaching during the lesson to better engage their student. They were reflecting-in-action and shifting their practice during the lesson. Another teacher reflected-on-action while watching a video of herself teaching, and noted that she had done too much talking and had confused the child. In another case, after viewing a videotape the teacher noted the child was struggling but didn't know what to do to help. These teachers were already demonstrating reflection in- and on- action.

Another important element in Schön's reflective practice is listening to the backtalk. One could say that in these initial sessions, these teachers had been reflecting-in-action and adjusting their teaching/support as the lesson proceeded, because they were "listening to the backtalk" of the child's experience. I would say that the teachers had noticed the children were either inattentive, uncooperative or frustrated and knew they had to change the course of the lesson in order to shift the experience for that child and affect change in the trajectory of their learning.

Initially I might have said that the teachers had not listened to the backtalk and adjusted their course of action in the lesson, but after reviewing the data it is clear that they did listen to the backtalk that was the child's response. It gave me pause to think more carefully about what it meant to listen to the backtalk. As I analyzed my thinking I realized that listening to the backtalk couldn't just be about how the child responded to the teaching. It also had to be about the theory that informed the teacher's observation and interpretation of the student 's response to teaching. It would mean that the teachers had interpreted the child's behaviour based on what they currently understood about literacy learning at the acquisition stage.

As I continued to think about this, I noted that the initial cues that triggered the teachers' concern for these students (inattention, recalcitrance and frustration) were seen as obstacles to learning. The teachers had observed and then interpreted the behaviours through the lens of deficit. I wondered how the behaviours would have been attributed had they been interpreted through the lens of a strength based practice. Had the teacher's observations been informed by a literacy processing theory of learning and

what these children could already do in terms of literacy, the behaviours may have been interpreted as having occurred in response to the teaching. Through their behaviour the students were telling us that they were having difficulty making sense of the lesson. Not because the lesson was a poor one, but because the lesson had not been designed with their idiosyncrasies in mind.

Having determined from the data of our first session together, that the teachers were reflecting-in and on-action and listening to the backtalk in terms of the child's response to the lesson, what seemed to be missing was the thorough understanding of the theory and application of a process based approach to teaching literacy. Teachers were not able to interpret student behaviour through the lens of literacy processing theory.

Another integral part of this study was to work with children while simultaneously learning theory. Schön (1987) talks about education for the fine arts where practitioners learn to “design, perform and produce by engaging in design, performance and production” (p.16). In this study, with the support of a coach, teachers were engaged in working with vulnerable literacy learners while at the same time learning how to apply the theory to interpret student behaviour and to design and implement lessons. By participating in the practice Schön suggests that the practitioner (or apprentice) “learns [the practice's] conventions, constraints, languages, and appreciative systems, the repertoire of exemplars, systematic knowledge, and patterns of knowing-in-action” (p.37). My intention with this study was to support teachers as they began and/or continued, to construct an understanding of a literacy processing theory and its application as they worked with children. The teachers not only needed to understand the theory and practice, but they needed to adopt a language to describe and interpret it. Initially their actions with the students were guided by what they understood to be the sequence of instruction based on textbook knowledge. What I needed to do was to facilitate the transformation of what they understood to be the appropriate sequence of instruction.

Knowing that the teachers had their own set of experiences in teaching, I had to ensure that I began with what each of them already knew. In describing a starting



condition for a reflective practicum, Schön (1987) states that, “the coach assumes that an initial instruction or demonstration will be sufficient to get the student to do something. This initiative, rooted in what the student already knows, begins the learning circle. It’s function is to get the dialogue started” (p. 166). In this study, after the teacher introduced her student, we videotaped the student and teacher in action during a lesson. For one teacher the lesson was a whole class phonics lesson, for another it was a one-on-one reading lesson, for another it was a whole class printing lesson and for another it was a read aloud discussion with two students. The initial lesson was different for each teacher but it enabled a discussion about literacy acquisition. Each child had something to teach us about literacy teaching and learning at the acquisition stage for vulnerable learners. Respectively, for the first teacher the learning cycle began with differentiating instruction for vulnerable learners in phonics, the second learning cycle began with the idea of using the student’s strengths to support his weakness in learning to read, the third learning cycle began with building awareness of how a teacher’s instruction may serve to confuse a vulnerable learner, and the fourth learning cycle began with the understanding of teaching from what the child already knows.

While two of the teachers had been teaching for more than 10 years, the other two had been teaching less than 10 years. Aside from working with vulnerable learners in their classrooms, only one of the teachers had explicit experience working with vulnerable learners in literacy. As we began our conversations I listened carefully for cues that would help guide me, as we had discussed theory and co-designed lessons and experiences for the children and the teachers themselves. I knew that my relationship with the teachers would be critical in terms of them maintaining a willingness to participate. There was a point after reflecting on the first video and during the dialogue afterwards, that I sensed a degree of humility in the teachers that I hadn’t observed up to that point. Schön (1987) talks about the “affective dimensions of the practicum” (p. 166). He notes that students (or teachers) are trying to learn something without yet knowing what it is they are learning. This experience provokes feelings of loss; a loss of control, competence and confidence. With these losses come feelings of vulnerability and necessary dependence. If the coach is not careful, the student (or teacher) can become defensive.

After observing the video of the first lesson with one teacher I suggested that I could demonstrate another way of supporting this student in learning letter/sound correspondence, that involved him writing sounds upon hearing words. Because he was an active child, I thought it was important to have him do something. When the teacher observed him responding gleefully and without inattention, she seemed to become more humble. For another teacher, when I demonstrated how to support a student to apply reading strategies and she watched as he used them successfully, noted that she felt guilty that he hadn't learned to read thus far and was humbled that he was capable. The third teacher, upon reviewing a video of her own teaching, was humbled when she thought she might have been responsible for confusing the child with her teaching. The fourth teacher, after viewing the first video of her teaching realized not only that she was too verbose, but that she was asking the student to do something he was not comfortable doing. She said, "I set him up" to fail.

Very early on in our series of coaching sessions, these teachers became more humble than they already were and seemed to open up to learning. I wanted to be careful that I didn't do anything or say anything that would jeopardize our relationship or the learning that was taking place. I knew I had to be careful not to offend or cause distress. The teachers had to trust me. Where I sensed a little defensiveness in one teacher, another remarked that she "had a healthy ego." A third teacher had little confidence in what she knew as a teacher and the fourth teacher had little experience from which to draw. In terms of the function of the dialogue between coach and student, Schön (1987) identifies two issues when developing artistry. The first is that the coach must demonstrate and describe designing through "advice, criticism, questioning or explanation." The second is that the coach must "particularize his demonstrations and descriptions" (p.163) to address the momentary confusions, questions, difficulties or potentials of a particular student. Schön suggests that the coach improvises, drawing descriptions or demonstrations from her repertoire of experience, at times inventing them in the moment. The coach also reflects on her own performance so that her descriptions are more accurate and representative. The coach's response is an experiment that tests her own know-in-action, her awareness of the teacher's difficulties and the effectiveness of her intervention. In this process the coach must be able to travel freely in the reflective process, shifting as the situation requires from designing to

description of designing, or from description to reflection on description and back to designing.

The data suggests that I particularized my support depending on the messages I received from the teacher through description or demonstration. After reviewing the data, I noticed that for one teacher, I did more demonstrating and teaching than she did. Our conversations were rich, but she wasn't as comfortable being videotaped. For two other teachers, they wanted to do the teaching when we videotaped, and asked that I respond in dialogue. For another teacher, she wanted to see specific pieces of lessons after which she would try them with the student. On one occasion, the teacher taught two short lessons with the same book and same child, and then I demonstrated a third time in order to get at the heart of an issue with a student.

With our relationships intact, the teachers and I were learning from each other. The varied layers of reflection that we were engaged in resembled what Schön (1987) referred to as "reciprocal reflection-in-action" (p.163). He defines it as follows.

The student reflects on what she hears the coach say or sees him do and reflects also on the knowing-in-action in her own performance. And the coach, in turn, asks himself what this student reveals in the way of knowledge, ignorance, or difficulty and what sorts of responses might help her (p. 163).

In terms of our relationships, what I found as I transcribed our conversations was how effectively we finished each other's sentences, "speaking elliptically in ways that mystify the uninitiated" (Schön, 1987, p.163).

At the end of the study the teachers and I met informally to discuss the teacher's experiences as participants. They all reported that they learned things that they could extrapolate to other students in their classrooms. Although I noticed examples of double loop learning in the our conversations where teachers had reflected-on-action and made comments about what the child was doing and how they did or could have responded, it is difficult to know exactly what was learned. I originally thought that this study would be a beginning, an obvious limitation of this study. However, after viewing lessons delivered by at least three of the teachers during our last sessions together, I had to reconsider my original impression. It would have been interesting to follow the teachers

to see where their work in this study had taken them. Schön talks about learning outcomes of a reflective practicum and agrees that assessing learning derived from a reflective practicum is difficult. However, when he talks about students learning through a combination of telling/listening, and demonstrating/imitation he uses the word **woven** to describe how the teachers showing and telling are related to the student's listening and imitating. Schön (1987) writes,

[The student] does as she has seen [the coach] do, enacting the verbal description he has given. [The student] constructs in her own performance what she has seen as essential in his, experiencing from the inside the patterns of action she had observed from the outside and she produces a new product that may be compared with the one [the coach] has made. .... What began as an imitative reconstruction of [the coach's] action, she now experiences as something of her own, a new element of her own repertoire available for use, through seeing- and doing-as, in the next design situation (p.113).

From Schon's words I envision a tapestry shaped by a series of interconnected elements that after a while become inextricably linked to the whole. The coach has helped to change the landscape and the student now expects something different – there is no going back. Schon (1987) suggests that the experience of the practicum can become the teacher's background knowledge that she uses to make future decisions. She may not even realize she has learned anything until she enters a new context and she can see things differently.

When I think about the final lessons these teachers taught at the end of our time together, I think of Schön's (1987) words, "reflective imitation" (p.118). Although the lessons looked similar to mine in format, there is no way they could imitate the responses they made to these particular student's learning. They prompted when the child stopped, they taught when the student didn't know what to do and they praised when the student tried something he/she had never tried before. These teachers were reflecting-in-action, listening to the backtalk of the learning through the lens of literacy processing theory and designing responses tailored to the idiosyncratic response of the student. Schon (1987) says, "the student must learn operative listening, reflective imitation, reflection on her own knowing-in-action, and the coach's meanings" (p.188). After reflecting on the final lessons I can see that in a relatively short period of time, a

fabric of responses had been woven from the reflective dialogue and demonstration we had experienced. I could see evidence of a convergence of meaning and the beginning of a repertoire of literacy processing responses for vulnerable learners.

## Chapter 5.

### Discussion of Findings

#### 5.1. Coaching: The What

This study is about reshaping the lens through which teachers perceive vulnerable literacy learners at the acquisition stage of literacy learning, and through which they design and implement teaching decisions for these learners.

Initially I thought I would be making the reading process visible to teachers by pointing out children's problem solving behaviour and the teachers' response to the child's learning, relating it to Literacy Processing Theory and giving teachers language to describe it. I had thought that by making the process of literacy teaching visible to teachers in their own behaviour and that of the child, I might help them construct a deeper understanding of Literacy Processing Theory in practice so that they could better help vulnerable learners. Using an iPad to video record a lesson, and a reflective practice for discussing the lesson afterward, I was hoping to show teachers what they were already doing that was supporting children in the construction of a literacy processing system. I was expecting to be able to notice and name (Johnston, 2004) strategies teachers were using so that I might illuminate them, define them and talk about how they were useful in helping children *think* about what they were doing with text. By making visible those things that had a positive impact, teachers could develop confidence in applying them knowing what they did and why it was important, learn the language of processing and continue to apply them to advance children's learning. Knowing a strategy works and why it works, gives reason to replicate it.

By the same token, illuminating those practices that were not as effective in helping children move their learning toward proficiency, might help teachers to learn

more about differentiating instruction or to help them decide to eliminate unhelpful practices altogether. Based on the videotaped lessons and in collaboration, the teacher and I could generate additional ideas teachers might try to broaden a child's understanding and then implement them all the while reflecting on the child's response to this new strategy. Working in an indeterminate zone of practice in literacy acquisition, teachers would come to know that experimentation is a necessary reply to a child's idiosyncratic response to text and that our first attempt at sorting out confusion may not be the one that works in the end. The child's confusion is a cue for us rather than a fact about the child's ability to learn.

I was a bit surprised when during our first interaction the teachers did not mention anything about LPT and the child's emerging processing system as revealed in their behaviour. Elements of LPT that I was expecting to hear included things like one to one matching, directionality, inventing text based on the pictures or using initial letters to attempt words in writing. Although the teachers understood that my project was about literacy instruction, my first question was very general, "Why did you choose this student to be part of this project?" I assumed they would begin with aspects of literacy practice, but instead provided me with comments about their behaviour, or response to instruction. Comments such as, "he's inattentive, unfocused, disengaged." On one occasion when I prompted for more information the teacher provided additional information about his ability to remember letters and sounds.

Soon after our initial conversation the teacher and I agreed to videotape the first lesson in this process. This lesson was a typical lesson taught by the teacher. It served to provide me with additional information about this teacher's teaching, the child's learning and the relationship between the two. In all cases we saw students' inattention, frustration and/or uncooperative behaviour during the lesson. The combination of conversations and observations of behaviour provided me with information regarding the teachers actual theories-in-use. In all cases the teachers viewed the behaviour as an obstacle to learning as opposed to a consequence of teaching.

Initially I thought the teachers were not "listening to the backtalk of the situation" (Schön, 1987). Schön refers to the backtalk of the situation as how the parts fit into the

whole. In terms of architectural design, Schön talks about examining how ideas fit into the whole – or to consider what the landscape offers and then adjusting a design to make all the parts fit together. Thinking about Schön’s idea of ‘listening to the backtalk’ through the lens of LPT – I’d consider how the child responds to the teaching and what their behaviour reveals to us about what they understand and find easy. It would also offer information about the level of support teachers need to offer in order for learning to advance. I thought that perhaps the teachers weren’t adjusting their teaching upon observing the child’s response to instruction. After viewing and reviewing the iPad footage, I realized that the teachers were in fact, reflecting-in-action after noticing the child’s response. They had listened to the backtalk and were trying to support the learner either by providing more one-on-one or small group instruction, or scaffolding support from less helpful to more helpful depending on how the child responded. On closer examination I realized that they were using a theory and that they were teaching in accordance with that theory - listening to the backtalk and reflecting in the moment in order to make slight changes to lesson delivery that better supported the child. These changes did not necessarily alleviate the child’s tension or anxiety however, nor did it accomplish the goal of helping the child develop an independent problem solving system. I came to realize that the theory or lens through which they were interpreting the child’s behaviour was not comprehensive and detailed enough to make effective instructional decisions.

Thinking about this I began to see how the teacher’s initial interpretation of the child’s behaviour sets a course for diagnosis, instructional response and assessment of effectiveness. I realized how important the initial interpretation was to finding a productive solution. In her book *Reflexive Inquiry: A Framework for Consultancy Practice (SYS)*, Christine Oliver (2005) uses the phrase “hierarchy of meaning” to describe the actions and reactions that create strife and misunderstanding in organizations. She explains how an utterance or comment and it’s interpretation by the receiver of the comment, influence the action taken by one or both parties. I began to see how the teacher’s conception of how children learn to read influenced actions that followed.

I began thinking about Schön’s idea of problem setting. He suggests that our prior experience and background knowledge determine how we define problems. He



says, “depending on our disciplinary backgrounds, organizational roles, past histories, interests, and political/economic perspectives, we frame problematic situations in different ways” (1987, p.4). It occurred to me that the teachers were in fact setting the problem based on their current theories about literacy acquisition for vulnerable learners and that their theories were not comprehensive enough to provide effective solutions for these vulnerable learners. While the teachers saw the student’s initial behaviours as barriers to learning, I saw them as consequences of teaching. Generally speaking, teachers’ practice is reinforced because most children in a classroom learn to read. Without effective coaching, a classroom teacher may not learn how to interpret a vulnerable learner’s behaviours in such a way as to provide information that helps her design lessons that are responsive to the child’s idiosyncratic behaviours. Shaping or broadening the lens through which teachers perceive and interpret children’s behaviours may help to set problems in such a way that a more descriptive and specific response can change achievement and outcomes.

## **5.2. Coaching: The How**

In his article *Conceptualizing a “Hall of Mirrors” in a Science-Teaching Practicum* MacKinnon (1989) talks about how pre-service teachers are immersed in a practice so that they can learn that practice with the support of a coach or Supervising Teacher. In a practicum of this kind pre-service teachers observe a more experienced teacher in action, engage in conversation with that teacher as well as attend or reflect on University courses. While engaged in practice, the student teacher begins to construct an understanding of the theory and practice of teaching science. As I thought about this in terms of this project I began to see that although I was endeavouring to help practicing teachers construct a deeper understanding of LPT and practice, I was also actively trying to change their existing beliefs, assumptions and theories about how to teach vulnerable learners at the acquisition stage of literacy learning. The practicing teachers in this study had, over the years, learned how to teach literacy in a way that many children had benefited from. In some ways this phenomena served to reinforce practices for teachers. In essence, it provided single loop learning experiences (Argyris and Schön, 1974) for teachers in that student achievement reinforced the status quo in

terms of the theories of literacy instruction that teachers constructed from their experiences.

In his article *Conceptualizing a “Hall of Mirrors” in a Science-Teaching Practicum* MacKinnon (1989) talks about supporting pre-service teachers in their practicums and using Schön’s Hall of Mirrors model of coaching. Inherent in this model is ways for Supervising Teachers to model ways of working with Student Teachers in a way that they can then use these same means to work with students in their classrooms. This model assumes that student teachers are constructing theory as they work with their Supervising teachers and the students in the classroom (p. 42). In essence, they are constructing a lens through which they will teach children.

In this study, the teachers are practicing teachers and have already constructed a theory of teaching literacy that for the most part works with the majority of the children in their classroom. They have achieved a level of success that encourages them to repeat these lessons year after year. Vulnerable learners however, require that we offer instruction that is better suited to their idiosyncratic needs (Clay, 2005). LPT provides us with a comprehensive theory about what children need to learn to become proficient readers. Teachers must look more carefully at what a child can do and then only teach what they need to learn. The knowledge required by a teacher for instructing vulnerable learners needs to be more detailed and contingent upon what the child already knows. In this regard, the purpose of this study was to use the same kinds of strategies that Schön and MacKinnon write about, to adjust the lens through which teachers perceive vulnerable students’ repertoire of responses and how to change the trajectory of their learning.

In MacKinnon’s conception of Hall of Mirrors model of coaching in science education he illustrates the relationships between the Supervising teacher, student teacher and student and makes clear that these relationships are reciprocal – each support the others’ learning.

**Key:**

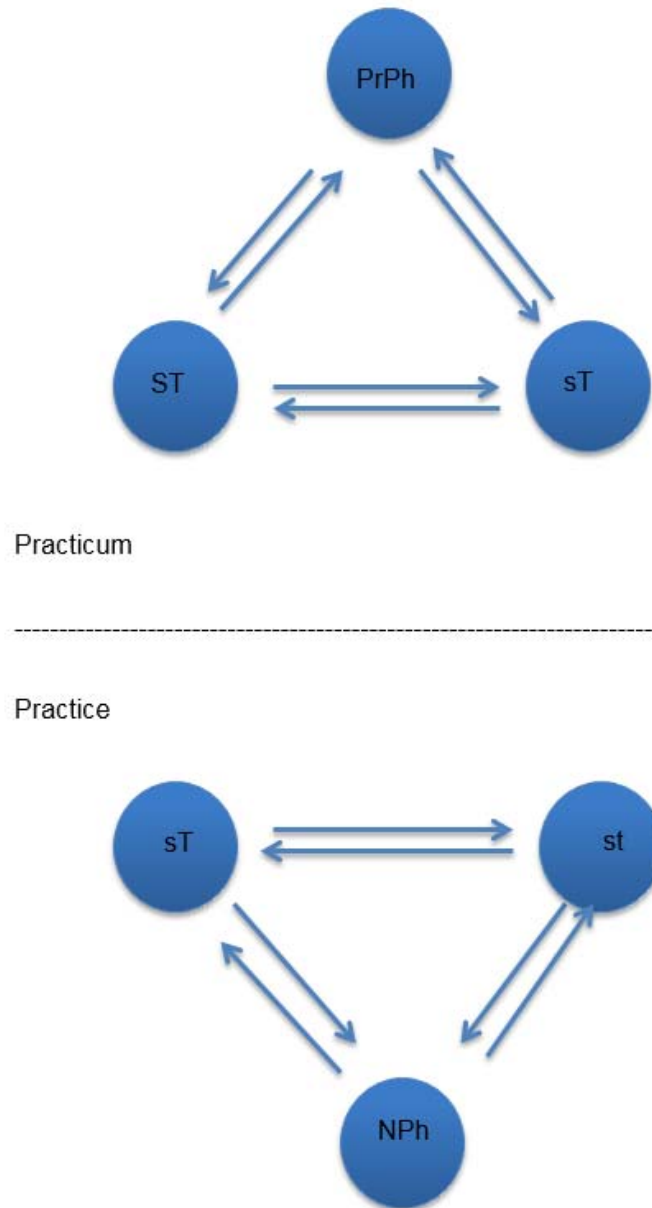
ST-Supervising Teacher

sT-Student Teacher

st-student

PrPh-Practicum Phenomena

NPh – Natural Phenomena



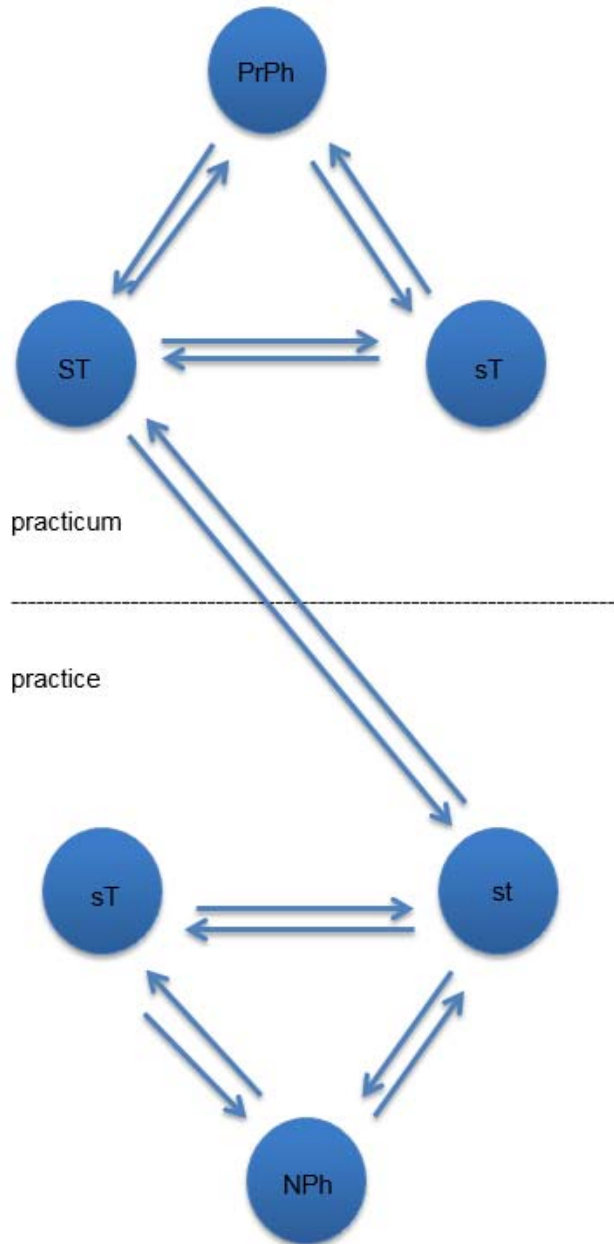
**Figure 1. Reflective Practicum (MacKinnon, 1989, p. 51)**

In this model MacKinnon sees the student teacher adjust her teaching based on the student's response to learning, just as the Supervising Teacher adjusts his or her coaching response based on the student teacher's response to coaching.

In this study there was an element of a Hall of Mirrors approach to helping teachers construct an understanding of theory and practice of LPT as it pertains to vulnerable learners. The way in which I worked with practicing teachers – listening to their explanations, observing their practice and discussing their interpretation of both the child and their own behaviour, I learned more about the teacher's zone of actual development and made an informed decision about what this teacher needed to learn next in terms of supporting this child. In this regard I was supporting the teacher as she moved into her zone of proximal development – acting as a scaffold between what this teacher already knew and what she needed to know to support this child. This is the lens through which I was modeling for the teachers – helping them use their sensitive observation skills to assist them in designing instruction that was responsive to the child's behaviour. In this particular study, supporting the teacher's developing understanding meant that I had to understand what the child already knew and where he needed to go in order to help the teacher understand. This is illustrated in the diagram below.

**Key:**

ST-Supervising Teacher  
sT-Student Teacher  
st-student  
PrPh-Practicum Phenomena  
NPh – Natural Phenomena



**Figure 2. My Conceptualization of Modeling for Lesson Design**

Supporting teachers as they understand how to approach vulnerable learners requires that the Coach understand how the child responds to text so that she can then help the teacher notice the parts of the child's behaviour that matter most in designing strategies for change (Schön, 1987).

According to Argyris and Schön (1974), changing practice requires change in the governing variables of theory and that this can be achieved with "double loop learning." Argyris and Schön (1974) differentiate between single loop learning and double loop learning suggesting that single loop learning serves to confirm already held beliefs, values and theory. Double loop learning alternatively, brings ideas back on themselves and influences re-thinking of theory, beliefs and values. Double loop learning enhances already held theories – either by changing them or intensifying them. In all four cases, the video tape of children responding favourably to teaching while at the same time learning the concept being taught served as a catalyst for change. It seemed that the teachers saw that as a reason to re-evaluate or review their beliefs, values and theories.

Applying these same theories and practices of literacy instruction to vulnerable learners had not been as fruitful for these teachers and in some ways had interfered with setting the child on an efficient and effective trajectory to proficiency. In this regard it was necessary to help teachers understand that these children can learn, but that they cannot learn the same way as their peers. This required injecting new information into the conversations with teachers and demonstrating new ways of teaching children in order to help teachers set literacy problems through a different lens. This kind of coaching led to experiences of double loop learning where teachers effectively changed the way they thought about these children and their ability to learn. Argyris and Schön (1974) define double loop learning as "[changing] the governing variables (the "settings") of one's programs and [causing] ripples of change to fan out over one's whole system of theories-in-use" (p. 19). In some way these experiences were building a bridge between teacher's espoused theories and their theories-in-use.

Using the iPad to record teachers' lessons and the coach's demonstrations was integral to double loop learning experiences. The iPad footage allowed the teacher and I to recall a specific part of the video without having to reconstruct it with language and

memory alone. It also saved us the time of having to recreate the episode. We were able to watch a specific incident over and over to describe, hypothesize, verify, interpret and discover new things. It was often while reviewing the iPad footage and reflecting on the teacher's action and child's response, that the teacher experienced double loop learning. Often it was the child's response to a lesson delivered by someone else that helped to create a space for learning in the teacher's mind. In *Educating the Reflective Practitioner*, Schön (1987) suggests that "reflection on our past reflection-in-action may indirectly shape our future action" (p. 30).

Where initially teachers were verifying and justifying teaching decisions and interpretations of the child's response to teaching, after reviewing the first video and participating in dialogue with the coach, the teachers took a different stance. It was as if they were opening up, or preparing for new learning. In her book *Mindset: The New Psychology of Success*, Carol Dweck (2006) refers to this as a *growth mindset*. She defines it as "the belief that your basic qualities are things you can cultivate through your efforts. Although people may differ in every which way ... everyone can change and grow through application and experience." (p.7). She continues that even though people may feel distressed, embarrassed or overwhelmed, people with a growth mindset, "were not labeling themselves and throwing up their hands. Even though they felt distressed, they were ready to take the risks, confront the challenges, and keep working at them" (2006, p.9). In dialogue, while viewing the videotaped lessons the teacher and I were able to identify teaching decisions that improved achievement and shape less effective teaching decisions so that they could achieve the results necessary for further growth. All of the teachers responded on several occasions with comments and even actions that demonstrated the possibility that some double loop learning had occurred.

Interpreting a child's emergent literacy practice requires that teachers have a thorough understanding of LPT (Clay; 1991, 2005, 2013, 2015) and understand how it manifests itself in children's literacy learning behaviour. It also requires sensitive observation of individual children's response to instruction and shifting teaching moves to ensure teachers are always operating in the child's zone of proximal development. The zone of proximal development is defined as "the distance between the actual developmental level as determined by independent problem solving and the level of

potential development as determined through problem solving under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86). As I reviewed the videotaped lessons I came to see that teachers were in fact shifting teaching moves in reply to the child’s response to instruction. However, as I observed the videos again and again, I noticed that the teachers were responding to the child in an effort to complete the assigned task. Their focus was on the activity, not on the child’s learning. Thinking about this I came back to Schön’s (1987) notion of the indeterminate zone of practice. He defines it as the place where nothing is predictable – where surprise reigns as does uncertainty, uniqueness and value conflict. Solving problems in the indeterminate zone of practice generally cannot be accomplished using common or traditional means. Practitioners must develop an artistry where solutions are designed based on the specific elements of the problem. Solutions may also come only as a result of experimentation where, with each try data is gathered and used to inform the next attempt. The teachers in this study were limited by their knowledge of literacy learning at the acquisition stage of development.

As I came to understand Schon’s theory of reflective practice and coaching for reflective practice, I came to understand that this project was designed to help teachers become reflective practitioners in teaching children to acquire literacy processing skills. It was about supporting teachers in taking a reflective turn (Schon, 1991) and endeavoring to figure out why individual children found learning to read difficult. The reflective coaching in this study was designed to help teachers understand that all children can learn to read (Clay, 2005, 2006, 2013) and that educators must find the way to teach them. Schon calls this “giving the kids reason” (Schon 1987, 1988, 1991). Schon (1988) suggests that this means teachers are “listening to kids and responding to them, inventing and testing responses likely to help them get over their particular difficulties in understanding something, helping them build on what they already know, helping them discover what they already know but cannot say, helping them coordinate their own spontaneous knowing-in-action with the privileged knowledge of the school” (p. 19). To extrapolate, as a coach I was modeling some of these principles with teachers and in a way, leading by example and offering a method within a method. Similarly, Schön offers the idea of a “Hall of Mirrors” that purports to model the means with which to support teachers in understanding a theory and practice, as well as extend



understanding of theory and practice. At the same time these principles can be extended to teaching children.

MacKinnon (1989) illustrates the relationship between supervisor and teacher as well as the relationship between teacher and student as reflective of one another. I might add that in working with teachers as they try to understand theory, interpret behaviour and design an instructional response – that knowledge of the child has to be included on the side of the mirror so that the supervisor can model the decision making process relevant to that child. In “The Reflective Turn,” Schön (1991) reinforces that a reflective practice does not regard practice as a “field of applications” only, but as a response to what the child already understands or misunderstands. He says, “When they bring an explicit theoretical framework to their studies, they use it to guide observation, description, or analysis of what practitioners already know or how they already learn in the context of their own practice” (p. 5).

## Chapter 6.

# Conclusions and Implications

## 6.1. Introduction

In a relatively short period of time I was able to observe a shift in the teacher's response to coaching. The turning point appeared during our first session when they saw the children responding differently to a different intervention. The teachers' conversation and behaviour changed from describing, justifying and rationalizing their teaching decisions to tentative inquiry of alternative interpretations and approaches. They became open to new learning.

## 6.2. Findings for Specific Research Questions

*What effect will reflective dialogue have on shifting beliefs and changing instructional practice in literacy instruction for the most vulnerable learners as observed in practice and teacher language?*

The reflective dialogue was pivotal in terms of the coaching relationship. It brought the coach into the teacher's zone of actual development in terms of what they could say about their practice. The teachers reported that they felt heard and valued. It also allowed me to make visible to the teachers, what they were doing in practice that was helping. It allowed me the opportunity to notice and name productive instructive samples and use the child's response to instruction to explain why those pieces of their practical repertoire was effective. The reflective dialogue highlighted samples of teaching that the teachers had taken for granted or had produced intuitively. It provided them with the language to described what the children were doing as well as the language to describe how they had responded. It was also the tool with which I was

able to take the teacher into her idiosyncratic zone of proximal development so that she could transform her practise.

*What effect will the iPad footage have in supporting developing understandings of literacy behaviour in action and the relationship between action and reaction in the literacy teaching/learning context?*

The iPad footage was instrumental in observing results in a short period of time. The footage allowed the teacher and I to view the sample of learning behaviour over and over again if necessary, to find the precise sample of behaviour that demonstrated learning. As well, the iPad footage ensured we were both remembering or viewing the same sample unhampered by personalized, descriptive language. Sometimes the sample behaviour was enveloped in or sandwiched between another behaviour that would have made it hard to describe.

*With what frequency will teachers require the support of a “mentor” on site to develop consistent clinical practice in terms of observation/response in literacy instruction?*

The teachers reported that meeting every two weeks ensured that they tried some of the new strategies with individual students before my next visit. It seemed to bring a sense of urgency to their teaching, making observations about the teaching and/or learning important so that they had something to share or report. It created a heightened awareness in the teachers of shift in the student’s response to text. Meeting every two weeks seemed to make the teachers more reflective and purposeful.

### **6.3. Limitations of Findings**

My intention was to work with each teacher and one student so that the teacher could learn to closely observe the student’s behaviour, receive coaching in terms of interpretation of behaviour through the lens of LPT and then discuss with me, a contingent response. I had originally thought that if we could work with one student, learn more about LPT and initiate the cycle of observing behaviour, interpreting it in terms of LPT, and then designing a response to learning, then the teacher could extrapolate the new concepts and language to other students in her class or to the class

as a whole. The limitations of this study revolved around obtaining consent from parents and students. Although most parents agreed to allow their children to participate with the promise of anonymity, there were a few in three out of four classrooms that did not grant permission. This made it difficult to collect video footage in an authentic way, from the perspective of the classroom instruction. When able, at various points we recorded lessons with small groups of children who would have been grouped together naturally. At other times we would have had to fabricate groupings which would have detracted from the authenticity of the study. whole

In terms of limitations, this study was also shaped by my particular perspectives, interests and experience with Literacy Processing Theory and my knowledge of vulnerable literacy learners. At the same time however, my knowledge of Literacy Processing Theory and my particular experience may very well have offered deeper insights into the analysis of data than would otherwise have been noted.

The delimitations of this study included the selection of children for which it was possible to discuss the acquisition of problem solving processes in literacy. For a variety of reasons, some children are difficult to manage in teaching situations. It was important for this study that those students selected provided opportunities for the teacher and I to discuss pieces of the literacy acquisition process as opposed to strategies for managing behaviour and participation, although these are often closely related. In addition, the four teachers invited to participate in this study were known to me. I have worked with each of the teachers in my capacity as Early Literacy Intervention Consultant and had developed relationships over time with each of them individually. These teachers were invited to participate because they understood the theoretical perspective with regard to literacy instruction for vulnerable learners, that I was bringing to this study, and the need to get to know one another was mitigated, allowing us to use the time to begin the project.

## 6.4. Researcher Comments

As research-practitioner I was able to begin with what the teacher already knew and create opportunities for learning in her zone of proximal development. I could account for the teacher's strength and comfort in the process and adjust my response accordingly. As it turned out, each teacher responded differently and required their own unique approach in order to shift understanding. One teacher responded well to Schön's Hall of Mirrors approach to coaching. She appreciated the coaching comments that celebrated and made visible the kinds of things she was already doing that helped vulnerable learners learn to read. She noted how it boosted her confidence and at one point she mentioned that whatever I did with her, she did with her students. Celebrating and offering specific praise and feedback for strategies that were working was something she could do with her students.

Two other teachers responded to Schön's Follow Me approach to coaching. These teachers observed me working with students and at our last session when they taught these students, their teaching resembled mine in that they observed behaviours, interpreted them through the lens of LPT and then immediately applied a contingent response. These teachers were reflecting in action and adjusting teaching flexibly, having quickly set the problem and then reset the problem according to the student's response. Although my conversations with these two teachers were very different, and their level of knowing in terms of espoused theory was very different, they both seemed to respond to the Follow Me approach to coaching and came away demonstrating the same kinds of contingent behaviours that shifted the student's learning.

Although all of the teachers participated in conversation about the learning and teaching of LPT, the fourth teacher responded to Schön's Experimentation approach to coaching. At one point we shared the teaching in that I would model a lesson (she would use the iPad to videotape it) and then she and I would discuss the child's response. Then the teacher would teach (I would use the iPad to videotape the lesson) and she and I would discuss the child's response to the teaching. Then a third time we would invite the student back and I would teach again, trying to emphasize a piece of the process that was missing in order to achieve the desired outcomes we had originally set

out for. In addition to this type of experimentation this teacher began each of our sessions with an inquiry that set us off to experiment with ways of supporting student learning.

Interestingly, from my work as Primary Curriculum Consultant with Yukon Education and having Reading Recovery in my portfolio, I know that 3 of the 4 teachers in this study were inspired to learn more and have spoken to their Administrators about participating in the year-long training to become Reading Recovery teachers. Perhaps this experience inspired them to learn more about teaching vulnerable learners because they saw a glimpse of what was possible.

## **6.5. Relationship of Findings to Previous Literature**

Schön spoke about how difficult it was to determine or measure what had been learned in a coaching and learning experience such as this. He noted that,

It is always difficult to say what a student has finally learned from the experience of a reflective practicum. It is especially difficult to say with reasonable certainty what she has not learned, for the experience of the practicum can take root in the subsoil of the mind, in Dewey's phrase, assuming ever-new meanings in the course of a person's further development. And background learning absorbed in a practicum may become evident only when a student enters a new context where she sees what she has learned as she detects how different she is from those around her. (1987, p. 168)

Schön speaks about dimensions of learning outcomes where each learning outcome is placed on a continuum and that a student's learning is dependent upon how he or she has internalized the messages of the practicum. Schön also identifies the quality of dialogue with the coach as one of the factors that contribute to rich and robust understanding. The teachers in this study have been inspired to pursue further learning which suggests that they learned something, the least of which is that they understood they had more to learn.

In her book *Constructivist Teacher Education: Building New Understandings* Virginia Richardson suggests that constructivism may seem different depending on the

subject matter being taught (1997). Researching the topic of constructivism in teacher education practice I noticed that the approach was designed to help teachers construct knowledge and often the subject matter was content or concepts. In this study I endeavour to help teachers construct an understanding of a problem solving process so that they in turn, can help students develop a problem solving process for accessing text. Learning to read is a problem-solving process (Clay, 2005) that requires children to figure out unknown words or phrases in order to access the author's message and construct meaning. This study was designed to help teachers construct knowledge of a process (theory and action) to support children in constructing a problem-solving process.

Teachers themselves must understand the concept of learning to read as a problem solving process and as well, learn to change their approach as the child's problem solving process shifts from primitive to proficient along a continuum. Inherent in this process is an ability to reflect-in-action in order to respond to the student's learning behaviour in the moment in order to help the student adjust to greater complexity over time.

In terms of Richardson's comments, this study was designed to help teachers construct an understanding of theory but also how to use their understanding to interpret student behaviour, design an immediate response to learning and assess the effect of their decision in a spiral that shifts student practice from primitive to proficient.

## **6.6. Implications for future research in a local context**

At present I have been using what I've learned and have been working to apply this type of coaching to a group of teachers in a school setting. I have been using a Hall of Mirrors and Follow Me approaches predominantly. We have been using the children in their classrooms and have made it specific to their contexts. We meet as a group for an afternoon to talk about strategies for assessing progress and as well, to talk about interpreting these assessments in terms of LPT. Then I visit classrooms to model lessons while the teacher uses the iPad to videotape lessons. These videotapes become part of our ongoing professional learning conversations – helping teachers

observe and interpret student behaviour and then designing a contingent response. Collectively we determine some goals in terms of practising what we've learned and then I return in 6 or 7 weeks to continue our dialogue and the cycle of learning that we had begun prior always responding to their zone of actual development and taking them into their zone of proximal development.

Going forward it would be prudent to complete a cycle of learning for the teachers in that it should continue for more than 4 months. This study revealed that it is possible to shift teaching in 4 months although I'm aware that teaching could fall back into old patterns without continued support. I think it would also be important to follow the teachers into the classroom to see how what they learned had been applied to their work with the children in their classrooms in small and large group work as well as with individuals.

It would also be interesting to examine more closely the kinds of shifts over time the teachers made in their understanding of the theory and practice of supporting vulnerable learners in literacy learning. I may have observed change in their level of inquiry but I'm not sure if they were aware of the change in their own understandings and if they were, could they articulate them.

## **6.7. Summary and Conclusions: Reshaping the lens**

There is no doubt that teachers want to help children learn. Teaching is a complex endeavour that requires the weaving together of a number of theories, actions and understandings to facilitate learning. Teaching the vulnerable learner amplifies the need for deliberate teaching decisions based on deep understanding of theory and practice and the co-construction of processing systems. Both teacher and learner construct new understandings with every decision they make.

Teaching the vulnerable learner cannot occur without specific knowledge of the learner. In fact I might suggest that teaching begins with learning. The child reveals to us what they know and can do in their zone of actual development, and we use that to scaffold new learning. Without truly understanding the learner, educators run the risk of



rendering them vulnerable. Without ensuring that each layer of the foundation is secure, new lessons misunderstood, may become a burden too heavy for the fragile foundation to bear. Our lessons should empower the children to work independently, strategically and successfully no matter where they are in the learning process. Similarly, professional learning should empower the teacher to work deliberately with confidence, knowing that their teaching will strengthen the child's current problem solving system and create empowered learners.

The need for professional learning opportunities that go beyond understanding theory and practice as two separate entities that inform each other, is important to ensuring learners do not become vulnerable. Instead teachers must be active within the complexities of praxis where deliberate decisions are made, assessed and redesigned in the moment to shift student understanding. Praxis embodies theory, practice and reflection in a unified process involving interpretation, understanding and application. Praxis is an informed, committed action to achieve an end. Although the end may be specified, the means may need to be altered. How we design the means depends on what the learner reveals to the teacher in every move they make. These deliberate decisions are made by the teacher quickly and in the moment for best effect.

In this study the aim was to help teachers reshape the lens through which they viewed vulnerable learners at the acquisition stage of literacy learning. The data suggests that Donald Schön's theory of reflective practice was well suited to this end. Teachers participating in a praxis governed by theory, practice, and reflection in their own context and supported by a coach, can have great effect in changing the experience for vulnerable learners in acquiring literacy. In a relatively short period of time, teachers were taking on the complexities of praxis in helping to ensure vulnerable learners get the instruction best suited to them at the time, to achieve their goals. There is evidence that both teachers and the students were empowered by what they had come to understand. The experience was truly transformational not only for the teacher, but (and maybe more importantly), for the learner.

## References

- Argyris, C. and Schön, D.A. (1974). *Theory in Practice: Increasing Professional Effectiveness*. San Francisco, CA: Jossey-Bass.
- Athens, L. 2010. "Naturalistic Inquiry in Theory and Practice," *Journal of Contemporary Ethnography* 39 (1), 87-125.
- Blumer, H. 1969. *Symbolic interactionism: Perspective and method*. Englewood Clis, NJ: Prentice Hall.
- Bruner, J. 1960. *The Process of Education*. Cambridge, MA: Harvard University Press.
- Butin, D. W. (2010). *The education dissertation: A guide for practitioner scholars*. Thousand Oaks, CA: Corwin.
- Cannella, G.S., & Reiff, J.C. (1994). "Individual Constructivist Teacher Education: Teachers as empowered learners," *Teacher Educaiton Quarterly* 21(3): 27-38.
- Clay, M.M. (2001). *Change Over Time in Children's Literacy Development*. Auckland, NZ: Heinemann.
- Clay, M.M. (2005). *Literacy Lessons Designed for Individuals: Part One*. Portsmouth, NH: Heinemann.
- Clay, M.M. (2005). *Literacy Lessons Designed for Individuals: Part Two*. Portsmouth, NH: Heinemann.
- Clay, M.M. (1987). "Learning to be Learning Disabled," *New Zealand Journal of Educational Studies*, 22, (2): 155-173
- Creswell, John W. (2008)(3<sup>rd</sup> Ed). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. Upper Saddle River, NJ: Pearson Education Inc.
- Darling-Hammond, L. and Bransford, J. (eds) (2005), *Preparing Teachers for a Changing World: What Teachers Should Learn and Be Able To Do*, San Francisco, CA: Jossey-Bass.

- Dewey, J. (1974). *John Dewey on Education: Selected Writings*. (edited by R.D. Archambault), Chicago, IL: University of Chicago Press.
- Freire, P. (1970). *Pedagogy of the Oppressed*. New York, N.Y.: Continuum International Publishing Group.
- Glaser, B.G., 2004. "Naturalistic Inquiry and Grounded Theory," *Forum: Qualitative Research*, 5 (1): 1-14.
- Gray, M., (2011). Back to Basics: A Critique of the Strengths Perspective in Social Work in Families in Society *The Journal of Contemporary Social Services*, 92 (1), p. 5-11, Milwaukee, WI: Alliance for Children and Families
- Hargreaves, H. and Fullan, M. (2012). *Professional Capital: Transforming Teaching in Every School*, New York, NY: Teachers College Press.
- Hattie, J., (2012). *Visible Learning for Teachers: Maximizing Impact on Learning*, New York, NY: Routledge.
- Jones, N.K. (2013). *Widening the Lens: How Seeing and Understanding Develop Together*, *Journal of Reading Recovery*, Spring, 2013.
- Lincoln, Y.S. and Guba, E.G. (1985). *Naturalistic Inquiry*, Newbury Park, CA: Sage Publications.
- MacKinnon, A. (1989). "Conceptualizing a "Hall of Mirrors" in a Science-Teaching practicum," *Journal of Curriculum and Supervision*, 5 (1), 41-59.
- MacKinnon, A. (1996). "Learning to Teach at the Elbows: The Tao of Teaching," *Teaching & Teacher Education*, 12, (6): 653-664.
- MacKinnon, A., & Scarff-Seatter, C. (1997). Constructivism: Contradictions and confusion in teacher education. In V. Richardson (Ed.), *Constructivist Teacher Education: Building New Understandings* (pp.38-55). Washington, DC: Falmer Press.
- Miles, B.M., Huberman, A.M., Saldaña, J., (2014)(3<sup>rd</sup> Ed). *Qualitative Data Analysis: A Methods Sourcebook*. Thousand Oaks, CA: Sage Publications, Inc.
- Oliver, C. (2005). *Reflexive Inquiry: A Framework for Consultancy Practice*, Great Britain: Karnac Books Ltd.
- Richardson, V. (Ed) (1997). *Constructivist Teacher Education: Building New Understandings*, Washington, D.C: The Falmer Press.

- Robinson, V. and Walker, J. (1999), "Theoretical Privilege and Researchers' Contribution to Educational Change." In *Stirring the Waters: The Influence of Marie Clay* edited by Janet S. Gaffney and Billie J. Askew. Portsmouth: Heinemann.
- Rose, E. (2013). *On Reflection: An Essay on Technology, Education, and the Status of Thought in the Twenty-First Century*, Toronto, CA: Canadian Scholars' Press Inc.
- Rummelhart, D.E. (2013). "Toward an Interactive Model of Reading," In *Theoretical Models and Processes of Reading* (6<sup>th</sup> ed.), edited by D.E. Albermann, N.J. Unrau and R.B. Ruddell, Newark, DE: International Reading Association.
- Schön, D.A. (1987). *Educating the reflective practitioner: Toward a new design for teaching and learning in the professions*. San Francisco, CA: Jossey-Bass.
- Schön, D.A. (1987). *Educating the reflective practitioner*. Presentation to the 1987 meeting of the American Educational Research Association, Washington, D.C.
- Singer, H. (1994). "The substrata-factor theory of reading" in *Theoretical Models and Processes of Reading* (4<sup>th</sup> ed.), edited by R.B. Ruddell, M.R. Ruddell and H. Singer, Newark, DE: International Reading Association.
- Vadeboncoeur, J. (1997). "Child development and the purpose of education: A historical context for constructivism in teacher education." In V. Richardson (Ed.), *Constructivist Teacher Education: Building New Understandings* (pp. 15-37). Washington, DC: Falmer Press.
- Vellutino, F.R. (2010). "Learning to be Learning Disabled": Marie Clay's Seminal Contribution to the Response to Intervention Approach to Identifying Specific Reading Disability, *Journal of Reading Recovery*, Fall, 2010.
- Vygotsky, L. (1962). *Thought and Language*. Cambridge, MA: MIT Press.

## **Appendix A.**

### **ORB Consent Forms**

#### **Consent Form for Parents**

##### **Who is conducting this study?**

Principal Investigator:

Shari Worsfold  
Simon Fraser University  
Department of Education

This research is a requirement of a graduate degree (EdD) and is part of a thesis which will be available to the public.

##### **Why are we doing this study?**

The purpose of this study is to determine *how* to support teachers as they learn a theoretical framework for literacy learning at the acquisition stage, while at the same time practising to teach vulnerable learners within this theoretical framework all the while challenging their beliefs about learners and learning.

Your child is being invited to participate in this research study because they are a member of the primary classroom that the participating teacher practices in.

##### **Your participation is voluntary**

Your child's participation is voluntary. You have the right to refuse to have your child participate in this study. If you agree to allow your child to participate, you may still choose to withdraw him or her from the study at any time without any negative consequences. There will be no adverse effects on your child's grade or evaluation in the classroom should you refuse to allow your child to participate in this study, or withdraw your child from this study after you have consented.

### **How is the study done?**

The researcher will work collaboratively with the teacher to identify a student or students that require support to achieve grade level proficiency in literacy. The researcher will use an ipad to videotape a 20 minute segment of that student during a literacy block when he/she is working alone, in a small group or in the large group. At times it may be appropriate to videotape the teacher as she works with that student or group of students so that the researcher and teacher can examine the sequence of events in terms of action and reaction. That segment of videotape will form the basis of dialogue that will help the teacher and researcher determine how to proceed with teaching. It will also provide opportunities to examine reflexively, the teacher's motivations for choosing a particular approach to instruction.

The researcher will visit your child's classroom on seven occasions, 2 weeks apart for half a day each time. Twenty minute video segments will be filmed at a time. Your child may not be the focus of a particular lesson, but they may be filmed in the background. The purpose of the study is to observe the teaching and how the child responds to the teaching.

### **Is there any way being in this study could be bad for your child?**

There are no foreseeable risks to your child in participating in this study.

### **What are the benefits of participating?**

This study will help us learn more about how to support teachers as they learn to address specific concerns with children's literacy learning. Every child learns differently and it can be difficult applying theory to practice in order to help specific children learn specific skills. This study will help us understand how to help teachers become proficient observers of learning by highlighting the relationship between teaching and learning in context.

### **Measures to maintain confidentiality**

All documents will be identified only by code number and kept in a locked filing cabinet in my home. Participants will not be identified by name in any reports of the completed study. Video footage will be taken using a password protected iPad and then transferred to a memory stick and stored in a locked filing cabinet in my home for two years beyond the conclusion of this research project.

### **What if I decide to withdraw consent for my child to participate?**

You may withdraw your child from this study at any time with no ill effects. If you do not consent to your child's participation in this study or if you consent to your child participating in this study and then withdraw your child prior to taping, then the child will be removed from the classroom when videotaping occurs. If you consent to your child's participation, but then later decide to withdraw your child from the study after the taping, then your child's face will be blurred on the video.

### **Organizational Permission**

Permission to conduct this research study from the Department of Education has been obtained. Permission to conduct this research in your child's school has also been obtained.

### **Study Results**

The results of this study will be reported in a graduate thesis and may also be published in academic journal articles and presented at academic conferences. If you would like to receive a copy of the thesis or website details when available on line, please include your mailing address on the signature page.

Segments of video footage may be used in public presentations. Due to the nature of digital video images, once the video image is disseminated to the public, the researcher does not have any control over how the video images are distributed and/or used.

**Who can you contact if you have questions about the study?**

If you or your child have any questions or concerns about this study, you can contact me by email or by phone.

**Who can you contact if you have complaints or concerns about the study?**

If you or your child have any concerns about their rights as a research participant and/or their experiences while participating in this study, you may contact Dr. Dina Shafey, Associate Director, Office of Research Ethics, Simon Fraser University.

**Future Use of Participant Data**

The future use of data is unknown at this time but in the event there is interest in using the data beyond this research study, please indicate your consent by checking the box.

**Parental Consent and Signature**

Your child's participation in this study is entirely up to you. You have the right to refuse consent to your child's participation in this study. If you decide to provide consent, you may choose to pull your child out of the study at any time without giving a reason and without any negative impact.

- Your signature below indicates that you permit your child to participate in this study.
- Your signature below indicates that you have received a copy of this consent form for your own records.

\_\_\_\_\_  
Signature of Parent or Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of the Parent or Guardian



Mailing address should you wish to receive a copy of the study results:

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## **Consent Form for Teachers**

### **Who is conducting this study?**

Principal Investigator:

Shari Worsfold  
Simon Fraser University  
Department of Education

This research is a requirement of a graduate degree (EdD) and is part of a thesis which will be available to the public.

### **Why should you take part in this study?**

The purpose of this study is to determine *how* to support teachers as they learn a theoretical framework for literacy learning at the acquisition stage, while at the same time practising to teach vulnerable learners within this theoretical framework all the while challenging current beliefs about learners and learning.

You are being invited to participate in this research study because you are a primary classroom teacher. Moreover you are familiar with a literacy processing approach to teaching literacy and are interested in developing a deeper understanding of the praxis that relates to the theory.

### **Your participation is voluntary**

Your participation is voluntary. You have the right to refuse to participate in this study. If you decide to participate, you may still choose to withdraw from the study at any time without any negative consequences. Refusing to participate or withdrawing after agreeing to participate will not have any adverse effects on employment or evaluation.

### **How is the study done?**

The researcher will work with you collaboratively to identify a student or students that require support to achieve grade level proficiency. The researcher will use an ipad

to videotape a 20 minute segment of that student during a literacy block when he/she is working alone, in a small group or in the large group. At times it may be appropriate to videotape you as you work with that student or group of students so that we can examine the sequence of events in terms of action and reaction. That segment of videotape will form the basis of dialogue that will help you determine how to proceed with teaching. It will also provide opportunities to examine reflexively, motivations for choosing a particular approach to instruction.

You will also meet with other participating teachers 4 times during the period September to December 2013 to discuss your learning and contribute your perspectives about this approach to supporting teachers.

The researcher will visit your classroom on seven occasions, 2 weeks apart for half a day. You will be released from teaching by a TOC so that you can work with the researcher; outside of the classroom, in the classroom, with a group of children in the classroom, or observe a teaching demonstration in the classroom.

Parents will be asked to sign a consent form allowing their child to be a part of this study. In the event a parent does not want their child participating in the research, that child will not be recorded nor will his/her responses be included in the research.

**Is there any way being in this study could be bad for you?**

There are no foreseeable risks to you in participating in this study.

**What are the benefits of participating?**

The benefits of participating in this study include developing a deeper understanding of literacy processing approach to teaching vulnerable learners at the acquisition stage of learning as well as the practical application of teaching for these higher level thinking strategies. This study may also help build some collaborative working relationships that may be of service beyond this study. Also, in the future others may benefit from what we learn in this study.

### **Measures to maintain confidentiality**

All documents will be identified only by code number and kept in a locked filing cabinet in my home. Participants will not be identified by name in any reports of the completed study. Video footage will be taken using a password protected iPad and then transferred to a memory stick and stored in a locked filing cabinet in my home for two years beyond the conclusion of this research project.

By consenting to participate in the focus group, you confirm that any information you encounter will be kept confidential and not revealed to parties outside the focus group. Although the objective is to maintain confidentiality, it cannot be guaranteed.

### **What if I decide to withdraw my consent to participate?**

You may withdraw from this study at any time with no ill effects. If you consent to participate, but then later decide to withdraw from the study after the videotaping, your face will be blurred on the videos to date and further videotaping will cease.

### **Organizational Permission**

Permission to conduct this research study from the Department of Education has been obtained. The Yukon Department of Education has agreed to provide Teachers on Call to release you from your obligations while participating in this study. Permission to conduct this research in your school has also been obtained.

### **Study Results**

The results of this study will be reported in a graduate thesis and may also be published in academic journal articles and presented at academic conferences. If you would like to receive a copy of the thesis or website details when available on line, please include your mailing address on the signature page.

Segments of video footage may be used in public presentations. Due to the nature of digital video images, once the video image is disseminated to the public, the

researcher does not have any control over how the video images are distributed and/or used.

**Who can you contact if you have questions about the study?**

If you have any questions about this study, you can reach me by email.

**Who can you contact if you have complaints or concerns about the study?**

If you have any concerns about your rights as a research participant and/or your experiences while participating in this study, you may contact Dr. Dina Shafey, Associate Director, Office of Research Ethics, Simon Fraser University.

**Future Use of Participant Data**

The future use of data is unknown at this time but in the event there is interest in using the data beyond this research study, please indicate your consent by checking the box.

**Future Contact**

If you would be interested in participating in future studies, please indicate your interest by checking the box.

**Participant Consent and Signature**

Taking part in this study is entirely up to you. You have the right to refuse to participate in this study. If you decide to take part, you may choose to pull out of the study at any time without giving a reason and without any negative impact on your employment.

- Your signature below indicates that you consent to participate in this study.
- Your signature below indicates that you have received a copy of this consent form for your own records.

\_\_\_\_\_  
Signature of Parent or Guardian

\_\_\_\_\_  
Date

\_\_\_\_\_  
Printed Name of the Parent or Guardian

Mailing address should you wish to receive a copy of the study results:

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

### **Sample of wording proposed to acquire child assent**

Did you know that everybody learns something new everyday? and that everybody has something to learn no matter who they are? Well, I want to learn about teaching teachers and your teacher said that she would like to help me. I think the best place to help teachers is in their classrooms with their students and I'm wondering if you would mind sometimes if your teacher worked with you while I watched or if I worked with you and your teacher watched? Sometimes I might even want to use my ipad to videotape you working with your teacher. Would that be okay with you? You don't have to participate if you don't want to, but if you do want to, please circle 'yes' here and print your name here.

**Verification Method for proving child assent**

Child's Name	Circle one (yes or no)	Date Signed	Parental Consent	Child's signature
	Yes No			
	Yes No			
	Yes No			
	Yes No			
	Yes No			
	Yes No			
	Yes No			