Show Me, Help Me, Let Me: Supporting Teachers’ Changing Conceptions of Reading

Assessment and Reading Instruction

Arlene L. Grierson B.Ed., M.Ed.

Department of Graduate and Undergraduate

Studies in Education

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Faculty of Education, Brock University

St Catharines, Ontario

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Abstract

This qualitative inquiry used case study methodology to explore the change processes of 3 primary-grade teachers throughout their participation in 7-month professional learning initiative focused on reading assessment and instruction. Participants took part in semimonthly inquiry-based professional learning community sessions, as well as concurrent individualized classroom-based literacy coaching.

Each participant’s experiences were first analyzed as a single case study, followed by cross-case analyses. While their patterns of professional growth differed, findings documented how all participants altered their understandings of the roles and relevancy of individual components of reading instruction (e.g., comprehension, decoding) and instructional approaches to scaffold students’ growth (e.g., levelled text, strategy instruction), and experienced some form of conceptual change. Factors identified as affecting their change processes included; motivation, professional knowledge, professional beliefs (self-efficacy and theoretical orientation), resources (e.g., time, support), differentiated professional learning with associated goal-setting, and uncontrollable influences, with the affect of each factor compounded by interaction with the others. Comparison of participants’ experiences to the Cognitive-Affective Model of Conceptual Change (CAMCC) and the Interconnected Model of Teacher Professional Growth (IMTPG) demonstrated the applicability of using both conceptual models, with the IMTPG providing macrolevel insights over time and the CAMCC microlevel insights at each change interval. Recommendations include the provision of differentiated teacher professional learning opportunities, as well as research documenting the effects of teacher mentorship programs and the professional growth of teacher educators.
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# Table of Contents

Abstract ........................................................................................................... ii
Acknowledgements .......................................................................................... iii
List of Tables .................................................................................................... v
List of Figures ................................................................................................... vi

CHAPTER ONE: OVERVIEW AND BACKGROUND TO THE STUDY ............. 1
  Problem and Rationale .................................................................................. 3
  Research Questions ....................................................................................... 5
  Overview of the Remainder of This Document .............................................. 6

CHAPTER TWO: REVIEW OF THE LITERATURE ..................................... 7
  Teachers’ Beliefs, Social Constructivism and Conceptual Change .............. 7
  Reading Instruction, Assessment, and Teachers’ Beliefs ............................ 21
  Teacher Professional Development ............................................................... 39
  Research Investigating Teachers’ Conceptual Change Processes ............ 57
  Rationale for the Study ................................................................................ 66

CHAPTER THREE: METHODOLOGY ......................................................... 68
  Rationale ..................................................................................................... 68
  Methodology ............................................................................................... 73

CHAPTER FOUR: FINDINGS .................................................................... 112
  Emma: Nurturing the Whole Child ............................................................... 113
  Judy: Surviving “the Splits” ....................................................................... 141
  Violet: Developing Confidence in Her Teaching Competence ................. 173
  Cross-Case Analyses .................................................................................. 205

CHAPTER FIVE: DISCUSSION ................................................................. 223
  Factors That Influenced Teachers’ Change Processes .............................. 223
  Conceptual Models of Teacher Change and Implications for Theory ....... 243
  Personal Reflections and Implications for Practice ................................. 250
  Implications for Research ......................................................................... 258
  Conclusions ............................................................................................... 263

References ..................................................................................................... 265

Appendix A Administrator Participant Interview #1 Potential Question Prompts ..... 289
Appendix B Teacher Participant Interview #1 Potential Prompts .................... 291
Appendix C Teacher Participant Survey ......................................................... 294
Appendix D Teacher Participant Planning Template ....................................... 297
Appendix E Teacher Participant Interview #2 Potential Prompts .................. 298
Appendix F Teacher Participant Interview #3 Potential Prompts .................... 301
Appendix G Question Prompts for Participants’ Summative Written Reflections ... 305
Appendix H Ethics Clearance ....................................................................... 306
# List of Tables

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Phase One Overview</td>
<td>84</td>
</tr>
<tr>
<td>2. Phase Two Overview</td>
<td>88</td>
</tr>
<tr>
<td>3. Phase Three Overview</td>
<td>94</td>
</tr>
<tr>
<td>4. Teaching Self-Efficacy</td>
<td>212</td>
</tr>
<tr>
<td>5. Literacy Orientation Survey Responses</td>
<td>214</td>
</tr>
<tr>
<td>Figure</td>
<td>Page</td>
</tr>
<tr>
<td>--------</td>
<td>------</td>
</tr>
<tr>
<td>1. The Cognitive-Affective Model of Conceptual Change</td>
<td>19</td>
</tr>
</tbody>
</table>
CHAPTER ONE: OVERVIEW AND BACKGROUND TO THE STUDY

Over the past 2 decades there has been a significant shift from a transmission to a social constructivist theoretical orientation in education (Bruning, Schraw, Norby, & Ronning, 2004; Flavell, Miller, & Miller, 2002). Consequently, new curricula have been introduced across subject areas with the intent of promoting educational improvement (Flavell et al.; Ontario Ministry of Education, 2004). As educational change requires teachers to possess in-depth understandings of the advocated programming, there has been general agreement that professional development is required to facilitate teachers’ acquisition of the knowledge and skills required for curriculum implementation (Clarke & Hollingsworth, 2002; Fullan, Hill, & Crevola, 2006; Guskey, 2002, 2003; Kelleher, 2003; Ontario Ministry of Education, 2004; Wilson & Berne, 1999). This is particularly so with respect to teachers’ early reading practices, as students’ early reading success has been identified as vital for their later academic success (Anders, Hoffman, & Duffy, 2000; Chard, 2004; National Reading Panel, 2000; Pearson, 2004; Snow, Burns, & Griffin, 1998; Snow, Griffin, & Burns, 2005; Triplett, 2007).

Following many years of contentious debates over reading curricular reform influenced in part by the shift in educational theoretical paradigms, consensus about the factors that affect students’ early reading success has begun to emerge (Anders et al. 2000; National Reading Panel, 2000; Pearson, 2004; Ruddell & Unrau, 2004; Snow et al., 1998). Specifically, students’ progress in the acquisition of early reading skills and strategies has been recognized as dependent upon teachers’ provision of responsive instruction (National Reading Panel; Ontario Ministry of Education, 2003a, 2003b; Ruddell & Unrau; Snow et al., 1998). Teachers’ abilities to provide such instruction have
been related to their abilities to collect, analyze and interpret classroom-based reading assessment data (Invernizzi, Landrum, Howell, & Warley, 2005; Paris & Hoffman, 2004), with cross-grade collaboration in this process enhancing the potential for students’ reading success (Earl, 2003; Paris & Stahl, 2005; Snow et al., 1998; Walpole, Justice, & Invernizzi, 2004). In order to facilitate collaborative use of assessment data, teachers require shared understandings of the developmental progression of reading, as well as enhanced assessment competencies (Black & Wiliam, 1998; Earl; Paris & Hoffman; Partridge, Invernizzi, Meier, & Sullivan, 2003; Snow et al., 1998). Professional development has been identified as requisite to the development of such shared understandings (Anders et al.; Black & Wiliam; Earl; Paris & Hoffman; Paris & Stahl; Snow et al., 2005; Taylor & Pearson, 2005; Walpole et al.).

The provision of effective professional development is a complex process, in part as a function of the need to address not only teachers’ knowledge and skills, but also their associated beliefs which have been recognized as potential barriers to their sustainable implementation of new practices (Anders et al., 2000; Clarke & Hollingsworth, 2002; Gregoire, 2003; Kise, 2006; Pajares, 1992; Snow et al., 1998). Consequently, to maximize the potential for long-term growth teachers’ beliefs must be explored and where necessary modified during professional development initiatives (Clarke & Hollingsworth; Gregoire; Pajares; Snow et al., 2005). The processes through which teachers change their beliefs and the ways in which models and systems of professional learning affect teachers’ conceptual change processes are not well understood (Gregoire; Guskey, 2002; Pintrich & Sinatra, 2003). This is an important area for investigation.

“Understanding how teachers’ beliefs relate to their practices as well as to student
outcomes may be the missing link between calls for school reform and teachers’ implementation of that reform” (Gregoire, p. 149).

**Problem and Rationale**

The possible constraints caused by teachers’ long-held reading beliefs are of particular relevance as the critical importance of early reading has been established and the recommended assessment and instructional practices have changed significantly in recent years (Anders et al., 2000; National Reading Panel, 2000; Ontario Ministry of Education, 2003a, 2003b; Pearson, 2004; Ruddell & Unrau, 2004; Snow et al., 1998; Snow et al., 2005). Researchers have acknowledged the complexities of supporting teachers’ abilities to modify their classroom-based reading assessment and instructional practices (Black & Wiliam, 1998; Kise, 2006; Paris & Hoffman, 2004; Shepard, 2000).

Specifically, teachers’ beliefs have been identified as potential impediments to their willingness to implement new practices and benefit from professional learning opportunities (Clarke & Hollingsworth, 2002; Ghaith & Yaghi, 1997; Gregoire, 2003; Guskey, 2002; Pajares, 1992; Shepard, 2004; Snow et al., 2005). Teachers’ willingness to embark on implementation of new practices is especially critical as changes in teachers’ beliefs have been demonstrated to follow, rather than precede changes in their practices (Clarke & Hollingsworth; Guskey). This sequence is important, as it supports the contention that experience using new methods may be integral to facilitating belief changes, the process of which begins with creating awareness or making explicit teachers’ tacit beliefs (Gregoire; Guskey; Pajares).

Furthermore, researchers have shown that changes in teachers’ beliefs may be more likely to occur when teachers are reflective and are able to attribute their students’
learning gains directly to modifications of their own teaching practices (Clarke & Hollingsworth, 2002; Guskey, 1986; 2002). Earl (2003) maintained teachers’ abilities to attribute student learning gains to their use of new assessment practices might be enhanced if they took part in professional learning within the context of supportive learning communities. Teacher research groups have been identified as one type of professional learning community that holds the potential to provide the support required to facilitate change in teachers’ assessment practices (Black & Wiliam, 1998; Butler, Lauscher, Jarvis-Selinger, & Beckingham, 2004; Grierson & Woloshyn, 2006; Hensen, 2001; Taylor & Pearson, 2005; Walpole et al., 2004).

Researchers have asserted that teachers’ willingness and abilities to implement changes promoted within professional learning communities can be enhanced by concurrent coaching in use of the selected strategies (Kise, 2006; Lyons & Pinnell, 2001; Walpole & McKenna, 2004). It follows that providing teachers with professional development that is embedded with opportunities for critical reflection within the context of a professional learning community, together with individualized support through classroom-based coaching, may promote changes in teachers’ reading practices and/or associated beliefs (Kise; Lyons & Pinnell; Snow et al., 2005; Walpole & McKenna).

The importance of responsive early reading programming and the influence of teachers’ beliefs on their implementation of evidence-based practices have been acknowledged (Kise, 2006; National Reading Panel, 2000; Ruddell & Unrau, 2004; Shepard, 2000; Snow et al., 1998; Snow et al., 2005). However, minimal research has explored the processes of changes in teachers’ beliefs and practices throughout their participation in reading-related, assessment-focused professional learning initiatives. The
need for such research is clear, as the potential of professional learning opportunities to affect teachers’ abilities to alter their practices and associated beliefs has been established, and the processes through which this occurs are not well understood (Clarke & Hollingsworth, 2002; Guskey, 2002; Snow et al., 2005).

In order to support educators’ abilities to provide effective professional learning initiatives that promote long-term growth, teachers’ conceptual change processes and the factors that promote or constrain change must be understood (Clarke & Hollingsworth, 2002; Gregoire, 2003; Pintrich & Sinatra, 2003). Within this study teachers’ reading instruction and reading assessment practices, their associated beliefs, and the processes through which these understandings evolved over time have been explored explicitly in attempts to derive such understandings.

**Research Questions**

The primary purpose of this 7-month study was to explore the ways in which participation in a professional learning initiative influenced primary-grade teachers’ reading-related beliefs and practices. I expected that participation in this professional learning community and concurrent individualized coaching sessions would enhance teachers’ awareness of their implicit reading theories or beliefs. I was interested in exploring teachers’ awareness of their beliefs about reading assessment and associated instructional practices, as well as monitoring the processes through which these beliefs and/or associated practices became explicit rather than tacit understandings and/or changed as a function of participating in this project. The following research questions formed the foundation of this inquiry:

1. Did participation in a professional learning initiative comprised of a school-
based professional learning community and individualized classroom-based coaching sessions affect teachers’ reading-related beliefs and/or practices?

2. What were participants’ beliefs about reading instruction and assessment, and what were their classroom-based reading assessment and instructional practices prior to their involvement in this professional learning initiative?

3. Did participants’ reading assessment and reading instructional beliefs and/or practices change as a function of their participation in this professional learning initiative? If so, how did these changes occur? What were the factors that constrained or promoted teachers’ conceptual change processes?

Overview of the Remainder of This Document

Chapter Two provides a review of literature that collectively provides background information to support the need for this investigation. An overview of teachers’ beliefs and theories of conceptual change are presented first to provide background for the reading instruction, assessment, and professional development literature that follows. The chapter concludes with a review of previous research that has investigated teachers’ change processes. Next follows Chapter Three where the rationale for the adoption of a qualitative case study methodological approach conducted within the theoretical framework of social constructivism (Guba & Lincoln, 1994; Schwandt, 2000), together with descriptions of the research site, procedures, data collection tools, and data analysis methods are presented. Each participant’s single-case study is then presented in Chapter Four, followed by cross-case analyses of their experiences (Merriam, 2001; Yin, 2003). In Chapter Five, participants’ experiences are related to the literature and discussed. Implications for practice, theory, and research are then provided.
CHAPTER TWO: REVIEW OF THE LITERATURE

The purpose of this chapter is to support the relevance of this investigation through review and analysis of the literature. This review is comprised of four parts. In the first part, teachers’ beliefs, social constructivism, and conceptual change are reviewed. The impacts of teachers’ beliefs on their instructional practices are outlined, and currently advocated directions in conceptual change research are described. Shifts in early reading instructional paradigms are chronicled in the second part. The role of assessment in responsive classroom programming and evidence-based early reading assessment practices are then described. Teacher professional development literature is reviewed in the third part. Models of professional development are presented, and the importance of situation-specific professional development in promoting teachers’ growth is highlighted. In the fourth part, empirical research that has investigated teacher change is explored. Finally, the rationale for this study is presented.

Teachers’ Beliefs, Social Constructivism and Conceptual Change

A review of the origins and complexities of teachers’ beliefs and an overview of the key tenets of social constructivism are presented next. This provides background information for the presentation of theories and models of conceptual change that follow.

Teachers’ Beliefs

Early philosophers and scholars defined knowledge as “true justified belief” (James, cited in Rohmann, 1999, p. 118). Today, contemporary researchers postulate that while beliefs and knowledge are similar in that both are organized in schematic networks developed through the processes of assimilation and accommodation, they are distinctly different constructs (Dole & Sinatra, 1998; Pajares, 1992). Whereas knowledge is defined
as theoretical and practical expertise and skills acquired through education or experience (Cochran-Smith & Lytle, 1999; Dole & Sinatra), beliefs are defined as the thoughts people have about attitude objects (Dole & Sinatra). “Beliefs are the building blocks of attitudes in that an attitude consists of an interrelated and interconnected set of beliefs that have a positive or negative valence for an individual” (Dole & Sinatra, p. 113). Beliefs form a perceptual lens or filter through which experiences are interpreted and assessed, and play a critical role in determining behaviour (Dole & Sinatra; Pajares).

Beliefs and knowledge are organized in schematic networks that are intertwined, and may either be held in a state of implicit or explicit awareness (Dole & Sinatra, 1998; Woolfolk Hoy & Murphy, 2001). Explicit knowledge or beliefs constitute concepts and orientations that individuals are aware they possess. Implicit or tacit understandings are those that individuals have not reflected on and thus, are unaware they possess (Pajares, 1992; Woolfolk Hoy & Murphy). As teachers’ beliefs are often held tacitly, they may be unaware of the influence of these understandings on their actions and instructional practices (Nespor, 1987; Pajares).

In attempts to differentiate between beliefs and knowledge, researchers have identified attributes that distinguish beliefs from knowledge (Nespor, 1987; Pajares, 1992; Woolfolk Hoy & Murphy, 2001). The four main factors that characterize beliefs have been identified as: (a) alterntativity, (b) affective and evaluative loading, (c) episodic structure, and (d) existential presumption—that is, unlike knowledge that requires substantiation, beliefs can be held and felt to be true without any tangible empirical evidence or support (Nespor; Pajares; Woolfolk Hoy & Murphy). This latter factor is cited as the primary distinction between beliefs and knowledge: “Belief is based on
evaluation and judgment; knowledge is based on objective fact” (Pajares, p. 313). Religious beliefs are an example of existential presumption (Pajares).

These four characteristics are intertwined and collectively manifested in teachers’ instructional decision-making and classroom practices (Dole & Sinatra, 1998; Nespor, 1987; Pajares, 1992). For example, alternativity may cause teachers to develop an ideal vision of teaching (e.g., all students have the same abilities) that affects their willingness to implement evidence-based practices (Nespor; Pajares). Affective and evaluative loading refers to teachers’ assessments of whether the benefits of a recommended practice are worth the corresponding time and effort for implementation (Nespor; Pajares). Episodic structure is of particular importance as teachers’ beliefs are often based upon personal memories of educational episodes that create vivid positive or negative impressions of classroom experiences, with these robust memories, in turn, facilitating or inhibiting teachers’ willingness to embrace change (Nespor; Pajares).

Educational researchers (Gregoire, 2003; Nespor, 1987; Pajares, 1992; Woolfolk Hoy & Murphy, 2001) have claimed that teachers’ beliefs are socially constructed and robust, with long-held beliefs those most resistant to change. This is of particular relevance here, as individuals enter teacher education programs with firmly established preconceptions about teaching—beliefs developed through an apprenticeship of observation during personal experiences as students (Lortie, 1975; Nespor; Pajares; Woolfolk Hoy & Murphy). Some of these preconceptions are representative of a transmission model of education and do not represent the constructivist-oriented methods advocated currently (Asselin, 2000; Gregoire; Pajares; Woolfolk Hoy & Murphy).

Over the past 20 years, there has been a significant shift from a transmission
theoretical orientation to a constructivist theoretical orientation in education (Bruning et al., 2004; Flavell et al., 2002; Lenski, Wham, & Griffey, 1998; Powell, 1996). Behaviourist theories of learning formed the basis of a transmission model of education where the goals of instruction were behaviours or skills and knowledge was viewed as transmitted from one person to another (Bruning et al.; Flavell et al.). Within this traditional model of education, the teacher was viewed as the source of knowledge, whose role it was to fill the students (blank slates) with information and understanding (Bruning et al.; Flavell et al.). Alternatively, a constructivist theoretical orientation holds that students learn through the process of making connections between new information and their existing networks of prior knowledge, with teachers’ roles being those of supports and guides, enhancing students’ abilities to make these connections (Bruning et al.; Flavell et al.; Vygotsky, 1986). This widespread shift in advocated educational paradigms has prompted increased attention to the role of teachers’ beliefs in impeding or enhancing their abilities to implement new methods across subject domains (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002; Kise, 2006; Lenski et al.; Pajares, 1992).

The complexities of exploring teaching beliefs have been acknowledged, with this attributed in part to the fact that they are multidimensional constructs that include epistemological beliefs, subject-matter beliefs, and efficacy beliefs (Pajares, 1992). Whereas teachers’ epistemological beliefs are their perceptions of what can be known (i.e., credible evidence of knowledge), their subject-matter beliefs are perceptions of how students learn specific subjects and therefore how teachers should instruct and assess understanding of these subjects (Pajares). Teachers’ general educational efficacy beliefs are their perceptions of the potential of education to affect students’ educational
outcomes, while their personal self-efficacy beliefs are their perceptions of their own teaching competence (Bandura, 1997; Pajares; Tschannen-Moran, Woolfolk Hoy & Hoy, 1998). Teachers’ epistemological beliefs, subject-matter beliefs, and efficacy beliefs are interrelated constructs that collectively contribute to the development of their situation-specific teaching beliefs (Gregoire, 2003; Pajares).

Whereas teachers’ subject-matter beliefs affect their subject-specific instructional decisions, teachers’ epistemological and self-efficacy beliefs have been shown to influence their willingness to embrace new instructional methods across subject domains (Alderman, 2004; Gregoire, 2003; Pajares, 1992). For example, teachers who hold behaviourist notions of teaching and learning have exhibited general resistance to embracing constructivist instructional methods (Ghaith & Yaghi, 1997; Gregoire; Guskey, 1986, 2002; Lenski et al., 1998; Pajares). Similarly, efficacy beliefs have been shown to affect teachers’ practices across all subject areas, with high-efficacy teachers placing greater value on professional learning and being more willing to implement new practices than low-efficacy teachers (Alderman; Ghaith & Yaghi; Ross, 1995; Tschannen-Moran et al., 1998). Contextual factors have also exerted significant influence on teachers’ efficacy, with teachers’ collective efficacy within school sites demonstrated to hold the potential to raise or lower each individual teacher’s self-efficacy (Bandura, 1997; Goddard & Goddard, 2001; Tschannen-Moran et al.).

Exploring teachers’ beliefs has been complicated further by the cognitive organizational structure of beliefs that enables individuals to separate and protect incompatible beliefs from one another (Nespor, 1987; Pajares, 1992; Woolfolk Hoy & Murphy, 2001). This may cause teachers to separate beliefs about instructional practices
acquired during professional development opportunities in one subject area (e.g., the importance of actively constructing mathematical knowledge) from incompatible beliefs about instructional practices in other subjects (e.g., language arts). Additionally, as beliefs may be held tacitly rather than explicitly, teachers may be unable to recognize and understand their beliefs without opportunities to explore these understandings through social dialogue (Nespor; Pajares; Woolfolk Hoy & Murphy). As teachers’ beliefs are socially constructed (Nespor; Pajares), an overview of the key tenets of social constructivism is presented next, prior to the conceptual change literature that follows.

Social Constructivism

A constructivist theoretical orientation is based on the premise that individuals learn through the process of making connections between new information and existing networks of knowledge or beliefs (Dole & Sinatra, 1998; Flavell et al., 2002; Piaget, 1975/1977, 1975/1985; Vygotsky, 1986). Rather than passively receiving and storing new information, individuals actively mediate information and use their prior understandings to build representations through which they make sense of experiences (Flavell et al.; Piaget, 1975/1985; Vygotsky). Throughout this process, individuals are engaged in adapting existing networks of prior knowledge or beliefs to obtain cognitive balance, otherwise known as equilibration (Piaget, 1975/1985). This balance is achieved using the cognitive processes of either assimilation or accommodation (Piaget, 1975/1985).

Whereas assimilation occurs when new information is accepted within existing schematic networks, accommodation occurs when new information cannot be assimilated (Piaget, 1975/1985). The process of accommodation involves changing existing cognitive
structures by creating new categories within the schematic network (Piaget). Social constructivism emphasizes the role of language, social interaction, context, and culture in the processes through which individuals' adapt and grow, as they construct representations through which they make sense of experiences (Vygotsky, 1986; Wink & Putney, 2002).

Social constructivist theorists (e.g., Bandura, 1986; Vygotsky, 1986) posited that learning is a shared process, with knowledge and beliefs collaboratively rather than individually constructed. Elaborating on the process and effects of collaboration, Vygotsky distinguished between the level of actual development at which the learner is capable of solving problems independently and the level of potential development or "zone of proximal development" at which the learner is capable of solving problems with the guidance of a more capable other (e.g., coach, teacher). Vygotsky held that learning occurs within the zone of proximal development, with one's learning potential enhanced by the support provided by more knowledgeable others.

*The Conceptual Change Process*

Conceptual change has been defined as altering old beliefs to be consistent with new information through the process of accommodation (Bendixen, 2002; Gregoire, 2003; Pajares, 1992; Piaget, 1975/1985). The process of conceptual change involves recognizing that new information is anomalous with existing beliefs, wanting to eliminate the inconsistencies among understandings, and perceiving efforts to assimilate the information as unsuccessful (Bendixen; Fang, 1996; Gregoire; Nespor, 1987; Pajares). As conceptual awareness is a precursor to change, individuals must become explicitly aware of their beliefs before they can acknowledge any limitations and/or inaccuracies and work
towards change (Fang; Gregoire; Pajares; Pintrich, Marx, & Boyle, 1993). Chinn and Brewer (1993) clarified that to promote change anomalous or discrepant data must exist in multiple forms and be perceived as credible and unambiguous. The level of clarity of initial information is also said to mediate conceptual change with this more likely to occur if one’s existing understanding was “weak, incoherent, and/or only loosely tied to one’s conception of the world” (Hynd, 2003, p. 292). Additionally, the potential for change is enhanced when new information differs moderately rather than radically from one’s existing conceptions (Hynd). Furthermore, Hynd asserted that conceptual change required several conditions including minimal incentives to retain existing beliefs, personal choice, commitment to expending the effort required for change, and the presence of foreseeable positive consequences of change together with accepting personal responsibility for those consequences.

Patrick and Pintrich (2001) maintained teachers’ abilities to accommodate new information and change conceptions were related directly to three general cognitive factors: (a) metaconceptual awareness and reflection, (b) systematic cognitive processing, and (c) general scientific thinking. Furthermore, researchers have asserted these three cognitive factors are affected by motivational beliefs including levels of interest, engagement, and self-efficacy (Gregoire, 2003; Pintrich et al., 1993; Sinatra, 2005).

Educational researchers have argued that effective professional development can promote teachers’ conceptual change processes (Clarke & Hollingsworth, 2002; Gregoire, 2003; Vosniadou, 2003). As self-awareness is crucial to initiating conceptual change, teachers must first understand their beliefs (Bendixen, 2002; Gregoire; Pajares, 1992; Patrick & Pintrich, 2001). Researchers have shown that teacher educators can
promote conceptual awareness by helping teachers to become reflective and self-conscious when presented with information that refutes their existing beliefs (Hill, 2004; Niersteimer et al., 2000; Olson & Singer, 1994; Theurer, 2002).

Since teachers’ beliefs may be resistant to change even in the face of contradictory evidence, supporting their conceptual change process has been described as an endeavor that requires sustained attention (Bendixen, 2002; Gregoire, 2003; Pajares, 1992; Patrick & Pintrich, 2001). In particular, teacher educators must direct attention to helping teachers maintain their sense of self-efficacy in order to manage the confusion and potential for diminishing self-perceptions of teaching competence created by dissatisfaction with initial conceptions (Patrick & Pintrich; Tschannen-Moran et al., 1998). Additionally, evidence of increased student learning may be required before new teaching beliefs will be accepted (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002; Tschannen-Moran et al.). Moreover, as the conceptual change process is time-consuming and taxing, teachers must be assisted on an ongoing basis to manage the recurring tensions between assimilation and accommodation they may confront repetitively (Patrick & Pintrich; Woolfolk Hoy & Murphy, 2001). In acknowledgment of the mediating effects of motivation and support, researchers have developed conceptual models that reflect the potential impact of these factors (Gregoire; Sinatra, 2005). An overview of the development of theories and models of conceptual change follows.

Conceptual Change Models and Theories

In 1957, Festinger proposed a theory of cognitive dissonance that presented belief change as a process triggered by the discomfort created by the presentation of discrepant information, with change promoted by one’s need to eliminate the resultant distress or
anxiety. Building on understandings about the role of dissonance in mediating change was Piaget’s (1975/1977) cognitive developmental theory of adaptation that presented equilibration as a desired state, with change induced by an individual’s need to achieve cognitive balance through either assimilating discrepant information into their existing schematic network or accommodating this network.

Posner, Strike, Hewson and Gertzog (1982) applied Piaget’s theory to science education, observing how students’ assimilation of new information into existing cognitive structures could impede their understanding. Posner and colleagues suggested that while dissatisfaction with current conceptions was required, it was insufficient alone to promote change. They held that in order to change conceptions individuals must also perceive new conceptions to be intelligible, plausible, and more fruitful than old conceptions, with these components collectively provoking individuals to work towards accommodation. In other words, cognitive dissonance must be accompanied by thorough understanding of the discrepant information, believing in its credibility, as well as perceiving future use of the new information as beneficial (Hynd, 2003; Posner et al.).

The work of Posner and colleagues (1982) contributed significantly to understandings of belief changes, inspiring research and instructional change (Sinatra & Pintrich, 2003). However, researchers criticized the lack of specificity with respect to how the four components identified by Posner et al. as required for change (i.e., dissatisfaction, intelligible, plausible, fruitful) were affected by the intentional cognitive processes of the learner and questioned the lack of explicit attention to factors other than dissatisfaction with current conceptions in initiating change (Gregoire, 2003; Patrick & Pintrich, 2001; Sinatra, 2005; Sinatra & Pintrich). Some argued that conceptual change
theory was overly cognitive and failed to account for the mediating effects of affective factors, or what can be referred to as “warm” factors that may affect cognitive processing of information (Patrick & Pintrich; Pintrich et al., 1993; Sinatra). To overcome these limitations, researchers suggested the integration of cognitive conceptual change theory with research on attitude change in the field of social psychology, particularly dual process theories of change (Dole & Sinatra, 1998; Gregoire; Sinatra).

Dual process theories present two possible routes for processing persuasive messages—a central route that requires systematic, effortful cognitive processing and a peripheral route that relies on heuristic, superficial processing (Gregoire, 2003; Sinatra, 2005). Whereas systematic processing requires individuals to address new information using logical, deliberate, effortful cognitive processing and is believed to have the potential to produce lasting changes in beliefs, peripheral processing requires automatic, shallow cognitive processing and is believed to produce temporary, if any, belief changes (Gregoire, Sinatra). As systematic processing is time-consuming and taxing, “there must be sufficient motivation and ability for an individual to overcome the compelling and quick response yielded by peripheral persuasion routes” (Gregoire, p. 161). The requisite motivation may be provided by dissatisfaction with current conceptions, personal relevance, together with a positive supportive social context for change (Gregoire).

Over the last decade, the role of motivation and contextual factors in mediating teachers’ conceptual change processes have been acknowledged widely (Gregoire, 2003; Hynd, 2003; Patrick & Pintrich, 2001; Pintrich & Sinatra, 2003; Sinatra, 2005). This has prompted the development of conceptual models that explicitly integrate the role of “warm factors” such motivation and self-efficacy (Sinatra). Gregoire’s Cognitive-
Affective Model of Conceptual Change (CAMCC) is a “warm” conceptual model developed to explore and explain teachers’ reactions to reform messages that challenge their subject-matter beliefs (Sinatra). In order to effect sustainable change in practices, these beliefs must be addressed; “without significant changes in subject-matter beliefs, maintaining radically new ways of instruction is almost impossible” (Gregoire, p. 149).

The CAMCC (Figure 1) depicts the cognitive processes of seeking balance or equilibration through accommodation during conceptual change as described within cognitive dissonance theory (Piaget, 1975/1977, 1975/1985; Posner et al., 1982). In this model, developed in the context of preservice mathematics education, the role of motivation (e.g., efficacy beliefs) and affective factors (e.g., stress appraisal) are acknowledged as either inhibiting or enhancing conceptual change. Additionally, the basic tenets of dual-process theories of belief or attitude change (i.e., heuristic or systematic processing) are presented as alternative routes that an individual may employ to process information when confronted with a persuasive message. The CAMCC can be used as a framework to guide the development of professional development programs that seek to acknowledge teachers’ perspectives and provide the support required to promote conceptual change (Gregoire, 2003). Embedded within the model has been an acknowledgement “that (1) cognitive processing mediates attitude change and (2) motivation and ability affect cognitive processing” (Gregoire, p. 164). The roles of personal resources (e.g., efficacy beliefs, knowledge) and situational resources (e.g., time, support) in enhancing or inhibiting conceptual change are also outlined.

Gregoire (2003) adopted the premise that teachers’ efficacy beliefs are significant mediators of whether they will appraise the stress induced by the presentation of reform
Figure 1. The cognitive-affective model of conceptual change.

messages as personally challenging or threatening, and included the role of efficacy beliefs within the CAMCC. The model presents teachers with high efficacy as those who are apt to perceive stress as presenting a personal challenge and are therefore likely to systematically process reform messages and work towards potential conceptual change. Conversely, teachers with low efficacy are depicted as likely to perceive stress as personally threatening, which may provoke them to avoid personal conflict by processing reform messages peripherally, resulting in superficial, if any, change (Gregoire).

Although the CAMCC provides insights about the role of teachers’ efficacy and motivation, it has not addressed explicitly the role of professional experimentation with new methods in supporting teachers’ conceptual change processes. Some researchers have suggested that such experimentation is critical, as changes in beliefs usually follow rather than precede changes in teachers’ instructional practices (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002). Nonetheless, in describing the model Gregoire (2003) acknowledged the importance of practice and feedback as teachers implement curricular reforms, suggesting this may affect teachers’ efficacy positively, which in turn may enhance their potential to process persuasive reform messages systematically.

Social learning theory (Bandura, 1986, 1997) highlights the importance of practice and feedback in enhancing teachers’ efficacy, with the most powerful source of efficacy information derived from mastery experiences, followed by vicarious experiences watching the methods in question modelled by another. The impact of vicarious experiences is related directly to how closely the observer identifies with the context and abilities of the individual they observe (Bandura, 1997). Teachers’ self-efficacy judgments are situation specific, or made in relation to a specific activity and
context (Bandura, 1997). As a result, teacher’s self-efficacy in one school site is often unrelated to their self-efficacy in another and their self-efficacy teaching one grade or subject area unrelated to their self-efficacy teaching a different grade or subject. It follows that contextual factors, particularly subject-specific advocated practices must be examined in order to understand the complexities of teachers’ reading-related beliefs.

**Reading Instruction, Assessment, and Teachers’ Beliefs**

In this section, the importance of early reading instruction is followed by an overview of how shifts in recommended theoretical paradigms have provoked controversies and affected teachers’ reading practices and beliefs. A review of assessment constructs and the role of assessment in the provision of responsive programming are presented next, with specific attention to classroom-based early reading assessment practices.

**Early Reading Instruction**

Snow et al. (1998) defined reading as “a cognitive and psycholinguistic activity, which requires the use of form (the written code), to obtain meaning (the message to be understood), within the context of the reader’s purpose (for learning, for enjoyment, for insight)” (p. 33). The increasing literacy demands of our technological society have led researchers and educators to conclude literacy skills are essential for academic success, with early reading success vital for later successful reading (National Reading Panel, 2000; Ontario Ministry of Education, 2003a; Ruddell & Unrau, 2004; Snow et al.).

Teaching reading is a complex task that requires the use of effective strategies to support students’ acquisition of the knowledge, skills, and motivation necessary for reading proficiency (Chard, 2004; National Reading Panel, 2000; Pearson, 2004; Snow et
al., 1998; Snow et al., 2005; Triplett, 2007). Researchers have identified three predominant approaches to early reading instruction; phonics, controlled vocabulary or word recognition, and whole language (Chall, 1967; DeFord, 1985; Flesch, 1955; Ketner, Smith, & Parnell, 1997; Pearson; Ruddell & Unrau, 2004; Snow et al., 1998). Whereas phonics is code-breaking instruction provided through systematic teaching of sound-symbol correspondences, word recognition involves teaching a hierarchy of word identification skills that students then apply through reading controlled vocabulary texts (Chall; Ruddell & Unrau). A whole language approach involves facilitating children’s construction of meaning through the provision of contexts in which reading, writing, listening, and speaking are integrated (Goodman, 1986; Pearson). Here, phonics and word attack skills are provided only as required by children in the context of reading or writing, and emphasis is placed on immersion in authentic literature and conversations, as well as independent reading of texts that children self-select (Goodman; Pearson; Pressley, Allington, Wharton-McDonald, Block, & Morrow, 2001; Ruddell & Unrau).

These instructional approaches are also referred to as “bottom-up”, beginning with code-breaking skills before progressing up to use of these skills within text, or “top-down”, beginning with the guiding role of literature before progressing down to code-breaking skills within text (M. A. Evans, Fox, Cremaso, & McKinnon, 2004; Pearson, 2004; Ruddell & Unrau, 2004; Stanovich & Stanovich, 1995). “Interactive” or “balanced” approaches to reading instruction use “top-down” immersion in oral language and literature in combination with “bottom-up” skill and strategy instruction (Evans et al.; Pressley, 2002; Ruddell & Unrau).

Over the past 2 decades contentious debates over reading instruction have
persisted amongst researchers, practitioners, and policymakers (Anders et al., 2000; Chard, 2004; Duffy & Hoffman, 1999; M. A. Evans et al., 2004; Pearson, 2004; Pressley et al., 2001). Historically, “bottom-up” code-breaking instructional approaches consistent with transmission-oriented educational practices were used predominantly (Duffy & Hoffman; Pearson; Ruddell & Unrau, 2004; Stanovich & Stanovich, 1995). In the late 1980s and throughout the 1990s, “the whole language movement, which was the centerpiece of the reading field’s foray into constructivist pedagogy” (Pearson, p. 216) became widespread. Immersion in oral language and literature-based experiences, providing integrated activities, and guiding students’ use of prior knowledge to construct meaning collectively fostered motivation for reading, and whole language practices flourished (Pearson; Pressley et al.; Stanovich & Stanovich; Wilkinson & Silliman, 2000). Teachers’ beliefs promoted or constrained their adoption of whole language practices, with some claiming that whole language was not an instructional practice but rather “a set of beliefs, a perspective” (Altwerger, Edelsky, & Flores, 1987, p. 145).

Beginning in the late 1980s, in response to the increased emphasis on literature-based programming, basal reading programs—the staple of “bottom-up” code-breaking instruction, altered their content, replacing the controlled vocabulary text in students’ readers with anthologies of authentic text and substituting the skills-based lesson plans in the accompanying teacher’s guides with comprehension questions following the story line of each selection (Pearson, 2004). Correspondingly, the accompanying student workbook activities were altered to focus on the vocabulary and/or literal comprehension of the key concepts or events presented (Allington & Cunningham, 2002; Pearson).

Although whole language practices and the use of instructional materials modified
accordingly gained momentum, this was not without opposition from some teachers, researchers, and policymakers who believed skill and strategy programming was essential for developing readers (Ruddell & Unrau, 2004; Stanovich & Stanovich, 1995). Despite ongoing debates throughout the 1990s, there emerged consensus about some components of reading instruction (Baumann, Hoffman, Moon, & Duffy-Hester, 1998; Stanovich & Stanovich). For instance, Stanovich and Stanovich found that irrespective of whether teachers were advocates and opponents of whole language instruction, most shared agreement about the importance of immersing students in authentic literature and oral language experiences. However, teachers disagreed about the necessity of providing code-breaking instruction, with their beliefs affecting the explicit teaching of these skills.

In fact, whole language oriented teachers often used little explicit instruction in decoding or comprehension, skills, and strategies (Baumann et al., 1998; Pearson, 2004; Stanovich & Stanovich, 1995). Although engagement in understanding text was a primary goal of whole language instruction, during the 1980s and 1990s this was often fostered through “discovery” or implicit teaching, with little emphasis on explicit teaching of text structure or comprehension strategies (Pearson; Ruddell & Unrau, 2004). By the late 1990s the debate over whole language practices reached a climax as research findings mounted providing support for the positive effects of explicit instruction and pedagogical approaches to instructional scaffolding, in teaching both decoding and comprehension strategies (Adams, 1990; Clay, 1998; Duffy & Hoffman, 1999; Pearson; Pressley, 2002; Pressley et al, 2001; Ruddell & Unrau; Snow et al., 1998).

In tandem with widespread acknowledgement that readers actively constructed representations of text, research into their strategic processes revealed the importance of
teachers’ scaffolding growth through enhancing students’ metacognitive awareness of their strategic reading processes (Allington & Cunningham, 2002; Pressley, 2002; Ruddell & Unrau, 2004; Snow et al., 1998; Snow et al., 2005; Woloshyn & Elliott, 1998). In particular, researchers recommended the provision of explicit instruction in text structure (i.e., story grammar, nonfiction conventions) as well as a repertoire of comprehension strategies including visualizing, questioning, summarizing, predicting, and making personal connections to text, with these strategies intended to promote inferential as well as literal comprehension (Allington & Cunningham; Harvey & Goudvis, 2000; Keene & Zimmerman, 1997; Miller, 2002; Pressley; Triplett, 2007). By the late 1990s consensus about comprehension instruction began to emerge, yet disagreement about the provision of explicit decoding instruction persisted (Cunningham & Allington, 1999; Pearson, 2004; Ruddell & Unrau; Snow et al., 1998).

In an effort to resolve the “the reading wars,” the National Reading Panel (2000) conducted a meta-analysis of the literature to identify evidence-based early reading instructional practices over which there existed controversy (Pearson, 2004). Their report and subsequent documents (e.g., Early Reading Strategy: The Report of the Expert Panel on Early Reading in Ontario, Ontario Ministry of Education, 2003a) identified the importance of providing a balanced approach to early reading that included direct instruction and instructional scaffolding in the development of phonemic awareness (i.e., the awareness of and ability to manipulate the smallest sounds of spoken language), phonics, vocabulary, reading fluency, and reading comprehension. Consequently, current curricula advocate a balanced or interactive instructional approach, focused on providing motivating experiences where, through modelling and guided practice, students move
gradually towards independent use of a growing repertoire of decoding skills and comprehension strategies (Anders et al., 2000; Cunningham, Hall, & Cunningham, 2000; Duffy, 2005; Kamil, Mosenthal, Pearson, & Barr, 2000; National Reading Panel; Ontario Ministry of Education, 2003a, 2005; Pearson; Pressley, 2002; Snow et al., 1998).

In addition to balancing the instructional components of a reading program (e.g., word recognition, comprehension), researchers have highlighted the importance of teachers’ simultaneously balancing the instructional formats (reading to, with, or by students), student groupings (individual, small-group, whole-class), materials, and methods with which to provide scaffolding for diverse learners (Cunningham & Allington, 1999; Fountas & Pinnell, 1996, 1999; Kamil et al., 2000; National Reading Panel, 2000; Ontario Ministry of Education, 2003a, 2005; Pressley, 2002; Snow et al., 1998; Snow et al., 2005; Triplett, 2007). Recommended instructional formats include: teachers reading aloud to students texts above their instructional reading levels, shared reading with students of texts at their instructional reading levels, and independent reading by students of texts they can read with word recognition accuracy at or above 95% (Fountas & Pinnell, 1999; Ontario Ministry of Education, 2003b). Additionally, the importance of balancing instructional groupings and the use fiction and nonfiction reading material appealing to students’ diverse interests and abilities has been stressed (Cunningham & Allington; Duke, 2005; Fountas & Pinnell, Ontario Ministry of Education, 2003b, Snow et al., 1998; Snow et al., 2005).

Scaffolding growth through gradually releasing responsibility for students’ independent use of reading skills and strategies has also been identified as central to the provision of enabling instruction (Clay, 1998; Cunningham & Allington, 1999; Fountas
& Pinnell, 1996; Ontario Ministry of Education, 2003b, 2005; Pressley, 2002; Snow et al., 1998; Snow et al., 2005). This is facilitated by teachers first modelling through thinking aloud, then providing students with supported practice prior to asking them to independently apply the selected skills and strategies (Clay; Cunningham & Allington; Fountas & Pinnell; Ontario Ministry of Education, 2003b, 2005). The use of visual learning aids as well as common phrases to label reading strategies have also been recommended to promote students’ awareness of and enhance their abilities to use these strategic processes with growing independence (Cunningham & Allington; Fountas & Pinnell; Harvey & Goudvis, 2000; Miller, 2002; Ontario Ministry of Education, 2003b, 2005; Pressley). Through balancing the reading program components, instructional formats, student groupings, materials, and provision of scaffolding, teachers can ensure more students are working within their zone of proximal development (Cunningham & Allington; Fountas & Pinnell; Ontario Ministry of Education, 2003b; Vygotsky, 1986).

Despite consensus on the importance of “balance” there has been no universal agreement among researchers or practitioners on any single “best” approach to achieving balance in early reading program components, materials, or instructional formats (Anders et al., 2000; Baumann et al., 1998; Chard, 2004; Duffy & Hoffman, 1999; Flippo, 1999; Hibbert & Iannacci, 2005; Pearson, 2004; Pressley, 2002; Pressley et al., 2001; Richardson, Anders, Tidwell, & Lloyd, 1991; Snow et al., 2005). Rather, researchers have continued to stress there is no “one size fits all” approach to reading instruction (Baumann et al.; Chard; Clay, 1998; Duffy, 2005; Duffy & Hoffman; Flippo; Hibbert & Iannacci; Pearson; Pressley; Pressley et al.; Richardson et al.; Snow et al., 2005; Triplett, 2007). Accordingly, to provide responsive instruction teachers must possess considerable
knowledge about the components of reading instruction, methods to provide instructional scaffolding, as well as their students’ needs and interests (Anders et al.; Baumann et al.; Chard; Clay; Duffy & Hoffman; Hibbert & Iannacci; Hoffman & Pearson, 2000; Kamil et al., 2000; Pearson; Pressley et al.; Snow et al.; Triplett).

Pressley and colleagues’ (2001) investigations of exemplary early reading teachers revealed the interconnectedness of an electric composite of skills-based and literature-based instruction, together with direct instruction and scaffolding pedagogical practices, as well as effective classroom management in providing excellent instruction. Additionally their studies highlighted how exemplary teachers focused on fostering students’ motivation for reading and self-regulated use of strategies. While some of the exemplary teachers used commercial programs, they did so flexibly, modifying the lessons in response to their students’ needs and interests. Collectively, Pressley et al.’s studies stressed the interconnectedness of teachers’ knowledge of their students, reading program components, as well as how to create a positive, supportive climate for learning.

Consequently, they and others (Anders et al., 2000; Baumann et al.1998; Chard, 2004; Duffy, 2005; Duffy & Hoffman, 1999; Grierson, Gallagher, & Woloshyn, 2007; Hibbert & Iannacci, 2005; Pearson, 2004; Pressley, 2002; Pressley et al., 2001; Snow et al., 1998; Snow et al., 2005) have emphasized the importance of teachers’ thoughtfully adaptive use of professional knowledge to implement programs tailored to meet their students’ needs. To this effect, teachers’ professional knowledge may be considered a more critical variable for student learning than program elements alone (Anders et al.; Chard; Duffy; Duffy & Hoffman; Hoffman & Pearson, 2000; Paris & Stahl, 2005; Pearson; Pressley et al.; Snow et al., 2005; Triplett, 2007).
Despite the lack of a “one-size fits all” approach to reading instruction, there is general agreement that current educational reforms are intended to be implemented within a social constructivist paradigm together with acknowledgement that teachers may approach instruction from a transmission perspective (Anders et al., 2000; Chard, 2004; Hoffman & Pearson, 2000; Kise, 2006; Ontario Ministry of Education, 2003a, 2005; Pearson, 2004; RAND Reading Study Group, 2004; Snow et al., 1998). For example, while systematic phonics instruction is recommended widely, the importance of simultaneously scaffolding children’s use of these skills in authentic reading and writing experiences has been stressed (National Reading Panel, 2000; Snow et al.). Without understanding how to integrate code-breaking instruction with related oral language, reading, and writing experiences, in keeping with social constructivist pedagogical approaches, teachers may either resist or inaccurately implement the evidence-based reforms (Anders et al.; Hoffman & Pearson; Lenski et al., 1998; Pearson; Richardson et al., 1991; Snow et al.; Triplett, 2007). If any incongruities are the result of implicit beliefs, teachers may be unaware of the theoretical conflict impeding their abilities to implement programming within the intended framework (Chard; Kise; Lenski et al.).

Researchers have documented the pervasive influence of teachers’ beliefs on their reading instructional decisions (Baumann et al., 1998; Davis, Konopak, & Readence, 1993; Davis & Wilson, 1999; Lenski, et al., 1998; Pearson, 2004; Snow et al., 2005; Stanovich & Stanovich, 1995; Toll, Nierstheimer, Lenski, & Kolloff, 2004; Vellutino & Scanlon, 1991). Consequently, the need to address teachers’ beliefs during professional development has been emphasized and researchers have cautioned that not doing so may impede teachers’ willingness to embrace evidence-based reading practices (Kise, 2006;
Lenski et al., Snow et al.), Toll et al. stressed that exploring teachers' reading-related beliefs must begin during preservice education, noting the complexities of accepting and supporting the diverse theoretical orientations and perspectives candidates may hold.

In addition to the influence of personal theoretical orientations, school and district contextual factors have been shown to affect teachers' reading practices (Davis et al., 1993; Davis & Wilson, 1999; Grisham, 2000; Triplett, 2007). Davis and colleagues used surveys, classroom observations, and interviews to investigate teachers' reading beliefs and practices, noting frequent inconsistencies and documenting how some teachers were influenced by their perceptions of school and/or district expectations. Furthermore, the influence of these factors has been shown to increase over time (Grisham).

Grisham (2000) examined teachers' evolving reading beliefs and practices by following 12 novices over a 3-year period, beginning with their preservice education year and throughout the first 2 years of their careers. Interviews, surveys, and classroom observations were used to explore teachers' reading beliefs and practices. The pervasive effects of contextual factors were documented with teachers working in schools where transmission-oriented practices were the norm, increasingly altering their constructivist practices to skills-oriented practices. As they gained experience, many novices attributed greater value to their experiential knowledge than the professional knowledge derived during preservice education. Moreover, some were unaware of the increasing inconsistencies between their beliefs and practices, with this creating a barrier to change.

Other researchers have investigated the relation between teachers' theoretical orientations to reading instruction and classroom management (Bartlett, 1994; Morrison, Wilcox, Madrigal, Roberts, & Hintze, 1999). Morrison and colleagues conducted a
quantitative study to investigate qualitative claims that teachers who adopted constructivist-oriented approaches to reading instruction where students' diverse reading interests and collaborative construction of meaning were encouraged were also those whose classroom management was humanistic, evidenced by their focus on developing positive relationships with students and encouraging students' self-control of their behaviour (Bartlett; Peterson, 1992; Routman, 1991). Analyses of the survey responses of 418 elementary teachers from across the United States demonstrated the correlation between teachers' reading and classroom management practices with those who reported use of constructivist-oriented programs, also those who reported use of humanistic rather than teacher-directed management strategies. The authors concluded these results were not surprising given the common philosophical roots of progressivism or, alternatively, behaviourism. While this study supported the relation between teachers' management and reading instructional practices, it excluded observations to corroborate self-reported data.

Researchers have also identified how teachers' theoretical orientations influence their assessment practices, with transmission-oriented teachers more likely to view assessment as the evaluation of learning rather than as a process of collecting evidence of students' evolving needs (Brookhart, 2004; Davis & Wilson, 1999; Shepard, 2000, 2004). These influences may be significant, as teachers' abilities to provide responsive reading programs are related directly to their abilities to assess their students' needs (Caldwell & Leslie, 2005; Duffy & Hoffman, 1999; Invernizzi et al., 2005; Paris & Hoffman, 2004; Paris & Stahl, 2005; Snow et al., 1998). An overview of assessment constructs is presented next, to provide background for the reading assessment literature that follows.
Assessment

Assessment is defined as the process of collecting, analyzing, and interpreting information for the purpose of decision-making and may be categorized as summative, formative, or diagnostic (Airasian, 2001; McMillan, 2004). Whereas summative assessment is conducted at the end of a unit of study to measure and report students’ performance, formative assessment is conducted to measure performance throughout a term of study and is intended to provide feedback to students to improve subsequent performance and to teachers for planning ensuing instruction (Airasian; Earl, 2003; McMillan). Diagnostic assessment is conducted prior to instruction to analyze students’ learning needs and provide insights about appropriate programming (McMillan). The intended use of results determines the type of assessment required, as well as whether standardized procedures are required (Airasian; Earl; McMillan).

“Assessment is standardized if there are established, ‘standard’ procedures for administration, scoring, and reporting of results” (McMillan, 2001, p. 103). Standardized procedures are necessary only if comparisons between students in different settings (e.g., classrooms, schools) are required (Airasian, 2001; Earl, 2003; McMillan). Airasian emphasized that standardized assessments are not necessarily superior to those that are not. Most classroom-based assessments are not standardized (Airasian; McMillan; Popham, 2003; Stiggins, 2004). Whereas standardized tests are summative assessments used to verify students’ mastery of the standards, classroom-based assessments are used to provide continuous evidence of progress towards incremental learning targets that over time lead to mastery of the standards (Stiggins).

There are many purposes of classroom-based assessments including diagnosing
problems, planning and conducting instruction, providing feedback, and judging or grading academic progress in learning (Airasian, 2001). While the value of effective classroom-based assessment practices across content areas has been well-established (Airasian; Black & Wiliam, 1998; Earl, 2003; McMillan, 2004; Paris & Stahl, 2005; Pilcher, 2001; Shepard, 2000, 2004), researchers have identified a host of endemic problems associated with teachers’ practices. These include overemphasis on summative assessment, lack of alignment of instruction and assessment, and insufficient knowledge and skill (Brookhart, 2004; Clare & Aschbacher, 2001; Earl; Mertler, 1999; Pilcher; Popham, 2003; Serafini, 2002; Shepard, 2004; Wiggins & McTigue, 1998).

Although effective formative and diagnostic assessment practices are required to inform and direct instruction (Black & Wiliam, 1998; Earl, 2003; McMillan, 2004), researchers have demonstrated that many teachers view assessment predominantly as summative measurement and evaluation of learning (Brookhart, 2004; Earl; McMillan; Pilcher, 2001; Popham, 2003; Shepard, 2000, 2004; Stiggins, 2004). Shepard (2004) noted the influence of teachers’ belief systems on their overuse of summative assessment and cautioned that these beliefs must be addressed explicitly within professional development opportunities. In order to use assessment insights to promote student learning, teachers need to be supported in conceptualizing assessment as measurement “for learning” rather than measurement “of learning” (Earl; Pilcher; Popham).

Serafini (2002) and Pilcher (2001) claimed that the dominant paradigm of classroom assessment (i.e., behaviourism) has not kept pace with the prevailing model of classroom instruction (i.e., constructivism). To facilitate change, Pilcher argued that teachers’ theoretical underpinnings of assessment need to be examined and that their
assessment practices need to be linked directly to contemporary visions of instructional pedagogy. Within a constructivist paradigm, assessment would be viewed as a process that provides "a window into students’ minds" (Shepard, 2000, p. 55). Formative and diagnostic assessment would be woven throughout instruction, informing and directing the learning process (Pilcher; Popham, 2003; Shepard, 2004; Wiggins & McTigue, 1998).

The lack of alignment of teachers’ classroom-based assessment and related instructional programming has also been problematic across educational settings (Brookhart, 2004; Glaser & Silver, 1994; Pilcher, 2001; Shepard, 2000; Wiggins & McTigue, 1998). This is a significant problem, as exemplary formative assessment has been cited as necessary for student success and an aspect of teachers’ practice that holds the potential to raise student achievement (Black & Wiliam, 1998; Clare & Aschbacher, 2001; Fullan et al., 2006; Joyce & Showers, 2002). Regrettably, teachers’ behaviourist-oriented beliefs may impede their abilities to use student assessment data to provide responsive programming, with this especially true with respect to early reading instruction (Invernizzi et al., 2005; Kise, 2006; Paris & Hoffman, 2004; Paris & Stahl, 2005; Shepard, 2004; Snow et al., 1998; Snow et al., 2005).

*Early Reading Assessment*

Educational researchers have demonstrated teachers’ abilities to assess students’ early reading skills and strategies and use this information to implement responsive programming is integral to early reading success (Fullan et al., 2006; Invernizzi et al., 2005; Joyce & Showers, 2002; Paris & Hoffman, 2004; Paris & Stahl, 2005; Salinger, 2005; Snow et al., 1998; Snow et al., 2005; Walpole et al., 2004). Moreover, researchers have cautioned that inconsistent and/or inaccurate early reading assessment practices may
ultimately threaten students’ learning potential (Fullan et al.; Invernizzi et al.; Paris & Hoffman; Paris & Stahl; Salinger; Snow et al., 1998). Specifically, primary-grade teachers need to possess expertise in the use of classroom-based assessments that are aligned with the developmental stages of reading (Clay, 2002; Depree & Iverson, 1994; Neumann, Copple, & Bredekamp, 2000; Ontario Ministry of Education, 2003b; Paris & Carpenter, 2003; Paris & Hoffman; Snow et al., 1998).

Salinger (2005) stressed the importance of teachers’ use of curriculum-embedded assessments designed to provide a profile of students’ ongoing acquisition of the skills and strategies associated with each stage of literacy development. In the primary grades these include print concepts, phonemic awareness, letter-sound identification, high frequency word identification, reading fluency, and reading comprehension (Clay, 2002; Invernizzi et. al., 2005; Ontario Ministry of Education, 2003b; Paris & Hoffman, 2004; Paris & Stahl, 2005; Salinger; Snow et al., 1998). Moreover, primary-grade teachers’ abilities to provide the most enabling reading instructional experiences have been related directly to their abilities to collect, analyze, and interpret classroom-based assessment data that reflect students’ ongoing acquisition of these skills (Caldwell & Leslie, 2005; Fullan et al., 2006; Invernizzi et al.; Paris & Carpenter, 2003; Paris & Hoffman; Ross, 2004; Walpole et al., 2004). Without understanding what their students are ready to learn next, teachers’ abilities to provide responsive reading instruction are restricted (Clay; Duffy & Hoffman, 1999; Fullan et al.; Invernizzi et al.; Ruddell & Unrau, 2004). However, assessment should inform rather than supplant instructional time and provide continuous indicators of students’ evolving growth (Clay; Depree & Iverson, 1994; Duke, 2005; Neumann et al., 2000; Invernizzi et. al., 2005; Paris & Carpenter; Paris & Stahl).
These insights may also enable teachers to illustrate students’ needs to parents and solicit their support in the provision of targeted at-home assistance (Paris & Carpenter).

While students’ foundational print concept, phonemic awareness, and letter-sound identification competencies need be assessed only until these skills are mastered, reading comprehension and fluency should be assessed throughout and beyond the primary grades (Fullan et al. 2006; Invernizzi et al., 2005; Paris, Carpenter, Paris, & Hamilton, 2005). The complexities of assessing reading comprehension have been acknowledged, particularly with respect to including insights that reflect the effects of context and students’ motivation on their abilities to derive meaning from print (Duke, 2005; Fullan et al. 2006; Paris et al.; Paris & Stahl, 2005; RAND Reading Study Group, 2004). Additionally, the importance of assessing both fiction and nonfiction text comprehension, which may vary significantly, has been cited as an often overlooked aspect of assessment (Duke; Fullan et al.). Referring to reading comprehension as a “nonunitary construct,” Duke cautioned that insights from comprehension assessments should be supported and extended by observational evidence gathered by teachers in a variety of contexts while students read diverse text forms for varied purposes. Similarly, Fullan and colleagues warned that while assessment tools such as informal reading inventories may provide a baseline from which to begin instruction, student progress should be monitored through ongoing observations, with the results used to direct responsive programming.

In addition to the importance of teachers’ knowledge of their students and the reading process, the mosaic of skills that contribute to the ability to read, together with the diverse array of instructional approaches and related assessment instruments, have complicated early reading assessment (Invernizzi et al., 2005; Paris & Hoffman, 2004;
Paris & Stahl, 2005; Salinger, 2005). In a research review of early reading assessment practices, Paris and Hoffman concluded that teachers required considerable skill to independently select and use the most effective classroom-based assessment approaches and tools—with professional development requisite to their acquisition of these skills. Researchers have shown that professional development can enhance teachers’ abilities to use reading assessment findings to direct responsive classroom programming (Hoffman, Roser, & Worthy, 1998; Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004).

Ross (2004) investigated the effects of a professional development program intended to enhance primary-grade teachers’ abilities to administer, analyze, and interpret “running records” of students’ oral reading behaviours. “Running records,” also known as reading records, are transcriptions of students’ oral reading of graded text passages (Clay, 2002). In the Ross study, teachers learned how to analyze reading transcripts to determine students’ instructional reading levels as well as the type of errors (i.e., meaning, structural, visual) students made to delineate their decoding instructional needs. These insights were then used to implement programming targeting students’ identified needs. On the basis of students’ subsequent increased performance on accountability assessments, Ross concluded that increasing teacher knowledge and skill in the use of running records affected students’ reading success positively.

In a review of reading assessment practices, researchers at the Center for the Improvement of Early Reading Achievement (CIERA) concluded that informal reading inventories that included reading records of students’ oral reading behaviours, together with their responses to comprehension questions that followed, were effective classroom-based formative and diagnostic tools with which to assess reading fluency and
comprehension (Paris & Hoffman, 2004). The use of quantitative (e.g., accuracy rate) as well as qualitative (e.g., responses to comprehension questions) data has enhanced teachers’ abilities to use informal reading inventory results to guide instruction (Clay, 2002; Depree & Iverson, 1994; Invernizzi et al., 2005; Neumann et al., 2000; Paris & Hoffman; Salinger, 2005). However, informal reading inventories have been cited as most effective when used in conjunction with classroom observations as well as assessments of students’ letter-sound awareness, phonological awareness, word recognition, and developmental spelling progression (Invernizzi et al.; Paris & Hoffman; Paris & Stahl, 2005; Salinger).

Researchers have also demonstrated that cross-grade collaboration in assessment practices has the potential to enhance students’ success (Earl, 2003; Elmore, 2002; Fullan et al, 2006; Invernizzi et al., 2005; Paris & Hoffman, 2004; Ross, 2004; Snow et al., 1998; Taylor & Pearson, 2005). Specifically, the benefits of using student assessment profiles to direct primary-grade reading programming have been recognized (Fullan et al.; Grierson & Woloshyn, 2006; Invernizzi et al.; Neumann, et al., 2000; Partridge et al., 2003; Salinger, 2005; Shellard, 2003; Walpole et al., 2004). The use of cumulative profiles to facilitate implementation of responsive reading programming has increased dramatically in recent years (Fullan et al.; Invernizzi et al.; Salinger). For instance, over a 2-year period, schools in 42 states and six countries purchased the *Phonological Awareness Literacy Screening* tool (PALS) that produces web-based cumulative profiles of students’ literacy development throughout the primary grades (Invernizzi & Meier, 2002; Invernizzi, Meier, Swank, & Juel, 2002; Partridge et al.). In examining teachers’ use of such profiles, Walpole et al. (2004) demonstrated that cumulative assessment
insights enhanced student success, concluding “early identification, ongoing and intensive intervention, and staff development provided the linchpin for success” (p. 281).

**Teacher Professional Development**

Effective teacher professional development has been cited widely as a key component of educational reform (Anders et al., 2000; Clarke & Hollingsworth, 2002; Cochran-Smith & Lytle, 1999; Duffy, 2005; Fullan et al., 2006; Guskey, 1986, 2002, 2003; Joyce & Showers, 2002; National Reading Panel, 2000; Snow et al., 2005; Wilson & Berne, 1999). In this section, the objectives and challenges inherent in implementing various formats of professional development are outlined. The section concludes with a review of research that has investigated assessment-focused professional development and the presentation of models developed to assist in the development and analysis of initiatives that seek to affect teachers’ beliefs and practices.

**Teacher Professional Learning**

There has been general agreement amongst researchers and educators that enhancing students’ success is dependent upon enhancing teachers’ knowledge and skills (Allington & Cunningham, 2002; Chard, 2004; Cochran-Smith & Lytle, 1999; Fullan et al., 2006; Guskey, 2002, 2003; Joyce & Showers, 2002; National Reading Panel, 2000; Ontario Ministry of Education, 2003a, 2005; Snow et al., 2005; Wilson & Berne, 1999). Changing views about the goals of professional development and the knowledge required to improve students’ educational outcomes have transformed understandings about how to foster teachers’ professional growth (Cochran-Smith & Lytle; Duffy, 2005; Fullan et al.; Guskey, 2002, 2003; Joyce & Showers).

Guskey (1986, 2002) identified the three major goals of professional development
as facilitating changes in teachers’ classroom practices, teachers’ beliefs, and students’ learning outcomes and stressed that all were contingent on enhancing teachers’ content and pedagogic knowledge. The literature has included recurring questions about how teacher educators can best facilitate these changes and the forms of teacher knowledge requisite to doing so (Butler et al., 2004; Clarke & Hollingsworth, 2002; Cochran-Smith & Lytle, 1999; Duffy, 2005; Dufour & Eaker, 1998; Gregoire, 2003; Guskey, 2003; Loughran, 2007; Risko, Roskos, & Vukelich, 2002, 2005; Risko, Vukelich, Roskos, & Carpenter, 2002; Russell & Loughran, 2007; Snow et al., 2005; Wilson & Berne, 1999).

Teachers’ knowledge includes declarative knowledge or understandings about what to teach; procedural knowledge or understandings about how to teach; and conceptual knowledge or understandings of why certain methods are effective (Cochran-Smith & Lytle, 1999; Flavell et al., 2002; Guskey, 1986, 2002; Snow et al., 2005). Although experts have contended that professional development must emphasize all three forms of knowledge, these opportunities have often focused primarily on declarative (what) and procedural (how) knowledge, with little attention to conceptual (why) knowledge (Butler et al., 2004; Clarke & Hollingsworth, 2002; Cochran-Smith & Lytle; Guskey, 1986, 2002; Kelleher, 2003). In part, the limited focus on conceptual knowledge has provided minimal attention to teachers’ beliefs about curricula and, where necessary, promoting change (Clarke & Hollingsworth; Guskey; Kise, 2006; Lenski et al., 1998).

Recently, researchers have claimed that in order to effect long-term change, professional learning opportunities should explore and extend teachers’ “knowledge for practice” and “knowledge of practice,” while encouraging teachers to seek “knowledge in practice” (Anders et al., 2000; Chard, 2004; Cochran-Smith & Lytle, 1999; Dufour &
Eaker, 1998; Kelleher, 2003). Whereas “knowledge for practice” includes declarative, procedural, and conceptual understandings of instructional approaches, “knowledge of practice” includes teachers’ understandings derived through reflection on their own practice and experience using their “knowledge for practice” (Chard; Cochran-Smith & Lytle). “Knowledge in practice” involves adopting an inquiry stance while teaching, reflecting critically on the relation between current practices and student learning, and continually seeking answers with respect to how to modify teaching practices to improve students’ educational outcomes (Cochran-Smith & Lytle; Duffy, 2005; Dufour & Eaker; Mueller & Skamp, 2003). The processes of “reflection-on-action” (after teaching) and “reflection-in-action” (during teaching) are central to Schön’s (1983) notion of teachers as reflective practitioners who actively seek and construct professional knowledge.

Risko and colleagues (2005) described a typology of three progressive levels of reflection anchored in the conception of teachers as reflective practitioners as described by Dewey (1933) and Schön (1983). At the lowest level of this continuum, teachers describe their problem and context; at the next they acknowledge and assume alternate perspectives. Finally, after considering diverse perspectives, teachers may move to the highest level of reflection, where they establish new ideas and take action, with this required to promote lasting change (Risko et al.).

Engaging in this form of critical reflection requires acknowledgement that teaching is a contextually driven practice where approaches may be advocated in one circumstance, yet not in another; in other words, an acceptance that as knowledge and “best practices” are relative, teachers must be reflective, responsive, and adaptive (Anders et al., 2000; Chard, 2004; Cochran-Smith & Lytle, 1999; Dewey, 1933; Duffy,

Requisite to this inquiry approach is a perception of teaching as a profession in which the exploration of problematic situations is continuously embedded, rather than one that requires the implementation of technical skills through a series of well-rehearsed routines and lesson scripts (Duffy; Hoffman & Pearson; Loughran; Schön). In order to support prospective teachers’ abilities to view education as an uncertain endeavour, Loughran advocated that teacher educators share their decision-making processes. Moreover, he cautioned that teacher educators must make their own pedagogical thought processes visible as well as problematic rather than appear to be stable or certain (Loughran).

Hoffman and Pearson (2000) supported nurturing reflective practice, while cautioning that technical training was also required to prepare future teachers. “Training as a strategy, nestled in a larger construct of teaching and learning to teach as reflective practice, is a more powerful and compelling vision for a future in which teachers are more likely to encounter change, not routine” (Hoffman & Pearson, p. 40). Although reflective problem solving may be initiated during teacher education, these abilities must be supported thereafter by encouraging teachers to continuously reflect, question, and revise their evolving knowledge for practice and knowledge of practice (Duffy, 2005; Hoffman & Pearson; Loughran, 2007; Risko et al., 2005; Russell & Loughran, 2007; Snow et al., 2005). While teachers’ adoption of an inquiry stance may offer promise for educational change, it necessitates the provision of professional learning opportunities that differ from the prevalent workshop format (Anders et al., 2000; Cochran-Smith & Lytle, 1999; Duffy; Dufour & Eaker, 1998; Fullan, 2001; Fullan et al., 2006; Hoffman & Pearson; Lyons & Pinnell, 2001; Mueller & Skamp, 2003; Truscott & Truscott, 2004).
Professional Development Challenges

Predominant views of how to foster teachers’ learning and resultant student learning, have called for reconceptualizing professional development from a behaviourist-oriented “teacher training” skills-based approach to a constructivist-oriented approach of facilitating teachers’ continuous growth and motivation for self-regulated learning (Butler et al., 2004; Chard, 2004; Clarke & Hollingsworth, 2002; Cochran-Smith & Lytle, 1999; Duffy, 2005; Guskey, 1986, 2002, 2003; Hoffman & Pearson, 2000; Loughran, 2007; Wilson & Berne, 1999; Youngs, 2001; Youngs & King, 2002). Despite the questionable effectiveness of professional development provided through “one-shot” workshops representative of a transmission mode of education, this format of learning has continued to be prevalent within educational systems (Chard; Clarke & Hollingsworth; Fullan et al., 2006; Guskey, 2002; Kelleher, 2003).

Yet, there is considerable evidence that workshop activities have been insufficient to promote sustainable change in teachers’ practices (Butler et al., 2004; Fullan, 2001; Kelleher, 2003; Kise, 2006; Patrick & Pintrich, 2001; Snow et al., 1998; Snow et al., 2005). Problems unaddressed by workshop professional development include insufficient support as teachers work towards implementing new practices (Butler et al; Duffy, 2005; Kelleher; Kise; Lyons & Pinnell, 2001) as well as the lack of attention to teachers’ beliefs associated with these practices (Clarke & Hollingsworth, 2002; Gregoire, 2003; Guskey, 1986, 2002; Kise; Lenski et al., 1998).

In order to promote sustainable change, researchers have asserted that professional development must include uncovering and where necessary, altering teachers’ beliefs about effective practices, and also provide continuous support
throughout their change processes (Butler et al., 2004; Clarke & Hollingsworth, 2002; Gregoire, 2003; Guskey, 1986, 2002; Kise, 2006; Lenski et al., 1998; Lyons & Pinnell, 2001). Although time-consuming, teacher educators have supported teachers’ conceptual change processes by encouraging critical reflection when information refuting existing beliefs is presented (Asselin, 2000; Clarke & Hollingsworth; Gregoire; Long & Stuart, 2004; Nierstheimer et al., 2000; Olson & Singer, 1994). While it is imperative to challenge teachers’ inaccurate beliefs, researchers have demonstrated such challenges alone are insufficient (Bean & Patel Stevens, 2002; Keys, 2005; Nierstheimer et al.; Patrick & Pintrich, 2001). Additionally, mechanisms must be provided to support teachers’ abilities to maintain their sense of self-efficacy and manage the confusion created by dissatisfaction with ideas during their conceptual change processes (Gregoire; Long & Stuart; Nierstheimer et al.; Patrick & Pintrich; Tschannen-Moran et al., 1998).

Highlighting the need for resources, Gregoire (2003) cautioned that while conceptual knowledge to scaffold teachers’ understandings was required, it would be insufficient unless teachers were also provided with the situation specific resources (e.g., time, support, materials) required to implement recommended changes. Davis and Wilson (1999) claimed that resources would also be insufficient without simultaneously developing positive, nontargeting relationships between teachers and their mentors.

Kise (2006) echoed Davis and Wilson’s (1999) sentiment that focusing on teachers’ beliefs during professional development required time, respect for teachers’ decision-making, and the establishment of trusting relationships where educators could speak openly and honestly with one another. Earl (2003) similarly warned that teachers’ assessment practices were unlikely to change in the absence of a supportive environment
where they were provided with explicit instruction about effective assessment and related instruction practices. Noble and Smith (1994) emphasized that as a function of teachers' diverse beliefs, practices, and dispositions, some would feel intimidated by assessment reform messages, with this presenting the imperative for contexts where all felt safe to try and actively engage in learning how to use new strategies, with the support of mentoring.

R. Evans (2001) identified a continuum of teachers' involvement during curricular reform presented as a series of prototypes individuals develop as a function of their diverse professional knowledge, experience, and dispositions. First are “key members” eager to embrace change, followed by caring “contributors” who may not seek but are willing to entertain change, followed next by “stable and stagnant” teachers who need significant motivation to change, with teachers described as “deadwood” who resist change at the end of the continuum. Tye (2000) presented a similar continuum, moving from “innovators” who suggest changes, to “early adopters” who are eager to try new methods, an “early majority” who attempt new practices after “early adopters” have found them to be effective, a “late majority” who resist change until it seems inevitable, and finally “laggards” who may sabotage change efforts. Kise (2006) claimed that with support through coaching, teachers could move along these continua closer towards becoming innovators when sufficient resources and motivation through personally relevant successful change experiences were provided.

Snow et al. (2005) stressed that as a function of the diversity in teachers' knowledge and skills effective reading professional development must be tailored to meet the unique needs of particular groups of teachers. Furthermore, Chard (2004) and Tomlinson (2005) argued that professional development opportunities must provide
differentiated instruction for teachers in order for teachers to in turn be able to implement differentiated instruction with their students. Chard described teachers’ needs as analogous to students’ needs and suggested that some required professional development that was more explicit, with intensive intervention requisite to their development of the knowledge, skills, and attitudes required to provide responsive programming. Furthermore Triplett (2007) demonstrated this was especially so with respect to enhancing teachers’ abilities to meet the needs of students who struggle with reading. Researchers have claimed that teachers’ needs may be met most effectively through professional learning that is multidimensional, research and theory based, and supported by coaching opportunities (Kise, 2006; Lyons & Pinnell, 2001; Sparks & Loucks-Horsley, 1990; Toll, 2005; Truscott & Truscott, 2004; Walpole & McKenna, 2004).

Coaching Models of Professional Development

Coaching models of professional development vary in format and content in accordance with teachers’ individual and collective needs (Kise, 2006; Lyons & Pinnell, 2001; Sparks & Loucks-Horsley, 1990; Toll, 2005; Truscott & Truscott, 2004; Walpole & McKenna, 2004). The role of a literacy coach is complex (Kise; Lyons & Pinnell; Toll), with this attributed in part to the fact that “coaching is not about telling others what to do, but rather bringing out the best in others” (Toll, p. 6). Ideally, coaches support teachers as they reflect and identify their needs, prior to working collaboratively to fulfill them (Kise; Lyons & Pinnell; Toll; Walpole & McKenna). Despite the complexity of their role, coaches often receive little preparation for facilitating the diverse forms of change required to meet teachers’ needs (Kise; Toll; Walpole & McKenna).

Toll (2005) presented six different change perspectives that districts, schools,
and/or teachers may hold, with each influencing the particular challenges of a literacy coach. These include four perspectives focused on individual teacher change, targeting (a) behaviour, (b) attitude, (c) cognition, or (d) inquiry, and two perspectives focused on promoting school-wide change through targeting (a) specific systems (e.g., reporting programs), or (b) the culture (e.g., sharing student information) of a school. Toll advocated administrative support and assistance be provided to coaches attempting to promote change focused on any of these perspectives, highlighting the pivotal role school administrators must assume in affecting either form of school-wide change.

As the needs, interests, and abilities of teachers are diverse, literacy coaching is not a standard or uniform intervention (Kise, 2006; Toll, 2005; Walpole & McKenna, 2004). The responsiveness of coaches to teacher diversity has been identified as simultaneously contributing to the effectiveness of this format of professional learning and complicating the process of delineating factors that inhibit or enhance coaches’ abilities to support teacher change (Toll; Truscott & Truscott, 2004; Walpole & McKenna). Toll (2005) distinguished between the role of a literacy coach and that of a reading specialist, highlighting that a coach focused primarily on teachers’ growth, whereas a reading specialist focused primarily on students’ growth. However to enhance teacher’ abilities to meet their students’ needs, Toll advocated coaches become familiar with students’ needs through working directly with them in the classroom context.

In order to promote teacher change, literacy coaches have assumed a variety of roles including: providing information through professional development sessions, assisting in delineating students’ needs through assessment strategies, assisting with lesson planning and modelling evidence-based practices through demonstration lessons,
observing and providing feedback to teachers on their lessons, and facilitating teachers’ abilities to be reflective about their pedagogical practices (Kise, 2006; Toll, 2005; Truscott & Truscott, 2004; Walpole & McKenna, 2004).

Toll (2005) cautioned that effective literacy coaches must be flexible, open to alternative perspectives, and willing to accept teachers’ diverse beliefs, values, and instructional approaches through acknowledging the resources each and every teacher brought forth, rather than focusing on their deficits. Similarly, Kise (2006) warned that there is no “one size fits all” approach to coaching, and advocated that coaches first develop relationships with teachers in order to determine the model and format of coaching that they may perceive as most beneficial.

Sparks and Loucks-Horsley (1990) identified five models of coaching-focused professional development. These included two individualized models: (a) a classroom-based design and implementation model where coaches assist teachers in developing and implementing programs; and (b) an observation model where teachers are observed by coaches and receive feedback about their instructional practices. Three identified small-group coaching models included: (a) a curriculum development model where teachers work with a coach to solve a specific problem; (b) a training model where a coach provides support and training to assist teachers in reaching an identified program implementation goal; and (c) an inquiry model where teachers choose an area of interest and then work with a coach to investigate it.

Walpole and McKenna (2004) suggested that all five of these models should be used in the design of effective professional development initiatives that use literacy coaches to enhance teachers’ practices and foster inquiry about program effectiveness.
A comprehensive system will include mechanisms for individual support, informed by observation and feedback, all designed to develop curriculum and to train teachers to implement it, in a context of inquiry about the effects of the total program on teachers and children. (Walpole & McKenna, p. 187)

Continuous inquiry about the effects of professional learning initiatives can contribute to building capacity for enduring change (Fullan et al., 2006).

*School Capacity Building and Professional Development*

Researchers have called for professional development that builds school capacity for long-term sustainable change (Coburn, 2005; Fullan et al., 2006; Guskey, 2002; Newmann, King, & Youngs, 2000; Youngs, 2001). School capacity can be defined as the knowledge, skills, and dispositions of individual teachers, the strength of the school’s professional community, program coherence, administrative leadership, and the quality of resources (Newmann et al.). While all five of these components are important, teachers’ knowledge, professional community, and program coherence have been shown to exert the greatest effects on promoting sustainable change (Youngs).

Program coherence and cohesion are created by rendering transparent a series of explicit links between the goals, programs, and approaches advocated between grades within school sites as well as at each level of school governance (e.g., school, district, province), with this latter process referred to as tri-level alignment (Fullan, 2001; Fullan et al., 2006; Youngs, 2001). Fullan and colleagues claimed these links must be provided explicitly and warned that inconsistent curricular reform messages would limit teacher change and capacity building.

Teachers’ abilities to be responsive to curricular reform messages and enhance their professional knowledge are also related to their needs and competencies at particular career stages (Allington & Cunningham, 2002; Fullan et al., 2006; Leithwood, 1990;
Snow et al., 2005). Leithwood identified a spectrum of the development of expertise across teachers’ careers. This is presented as beginning with novice teachers who focus on developing survival skills (e.g., classroom management), progressing next to instructional competence following the practices used widely in their school setting, then later to expanding instructional flexibility, prior to acquiring instructional expertise and finally adopting a critical reflective stance about their teaching methods. Leithwood claimed that teachers move through these stages at varying rates dependent upon their unique needs, interests, and abilities. Allington and Cunningham maintained that literacy school improvement efforts would benefit from faculty comprised of teachers across this spectrum that would be able to extend one another’s knowledge through collaboration.

The focus on capacity building through professional development acknowledges the importance of teachers’ collaboration in effecting school improvement, with collective knowledge building viewed as critical in this process (Fullan et al., 2006; Youngs, 2001). Professional learning communities have been cited as effective vehicles to promote collaboration amongst teachers (Cochran-Smith & Lytle, 1999; Duffy, 2005; Dufour & Eaker, 1998; Elmore, 2002; Fullan et al.; Hensen, 2001; Kelleher, 2003).

*Professional Learning Communities*

In recognition of the need to establish collaborative cultures of teacher inquiry, it has been recommended widely that schools work towards the formation of professional learning communities (Cochran-Smith & Lytle, 1999; Dufour & Eaker, 1998; Elmore, 2002; Fullan, 2001; Fullan et al., 2006; Hensen, 2001; Kelleher, 2003; Lyons & Pinnell, 2001; Ontario Ministry of Education, 2005). These learning communities are exemplified by collaborative reflective exploration of problems with the intent of generating and
implementing strategies that will bring about positive change for students and teachers (Dufour & Eaker; Fullan et al.; Ontario Ministry of Education).

A hallmark of teacher professional learning communities has been the adoption and use of an inquiry stance to build community and program cohesion (Dufour & Eaker, 1998; Fullan et al., 2006). Teachers engaged in school-based professional learning communities have been described as feeling empowered, less isolated, more effective, and more confident when implementing new strategies (Cochran-Smith & Lytle, 1999; Dufour & Eaker; Elmore, 2002; Fullan et al.; Ontario Ministry of Education, 2005; Taylor & Pearson, 2005). In order to monitor the ongoing effectiveness of these learning communities, Kelleher (2003) advocated that participants establish specific, measurable, attainable, results-oriented, time-bound goals to focus their efforts and determine their effectiveness in achieving their established targets. Lyons and Pinnell (2001) suggested teacher learning communities meet every 2 to 3 weeks to maintain momentum for change, while affording participants sufficient time to work towards their proximal goals.

Research groups have been identified as one type of professional learning community that has the potential to provide the support required to facilitate sustainable change in teachers’ assessment beliefs and practices (Black & Wiliam, 1998; Earl, 2003; Holloway, 2003; Noble & Smith, 1994; Paris & Stahl, 2005; Taylor & Pearson, 2005). Hensen (2001) claimed that in providing participants with opportunities to assume greater control of their decision-making, research groups were a form of professional learning community that had the potential to enhance teachers’ self-efficacy-beliefs that have been shown to influence teachers’ willingness to embrace new methods (Alderman, 2004; Ghaith & Yaghi, 1997; Ross, 1995). Hoffman and Pearson (2000) highlighted the value
of assessment-focused teacher learning communities sharing how “discussions of assessment tools lead almost inevitably to discussions of curriculum and teaching” (p. 38). Professional learning communities have provided the support required to transform teachers’ reading assessment practices (Grierson & Woloshyn, 2006; Hoffman et al., 1998; Pennington, 2001; Slack, 1999; Taylor & Pearson, 2005; Walpole et al., 2004).

Hoffman et al. (1998) worked with first grade teachers to develop a system of classroom-based reading and mathematics assessments to be used in lieu of the mandated standardized assessments. Over a one-year period they developed a performance-based assessment plan that simultaneously provided data to teachers to inform instructional decision-making and to administrators to satisfy accountability requirements. They documented the positive effects of discussing the instructional implications of these data on teachers’ abilities to provide instruction targeting their students’ identified needs.

Grierson and Woloshyn (2006) investigated teachers’ participation in an action research professional learning community focused on the development and use of literacy assessment profiles. Although this project excluded the individualized coaching that has been identified as important in effecting change (Kise, 2006; Taylor & Pearson, 2005; Walpole & McKenna, 2004), participants believed their classroom-based assessment and related instructional practices were enhanced as a function of participation in the group (Grierson & Woloshyn). Consistent with Hoffman and Pearson’s (2000) assertion discussions relative to the analyses of assessment data within the context of this group led naturally to the exploration of related instructional implications (Grierson & Woloshyn).

The 6-year study of assessment-focused curricular reform undertaken by Walpole et al. (2004) included both small-group professional learning community sessions
focused on data-driven decision-making and individualized teacher coaching in use of the recommended instructional methods. Walpole and colleagues documented increased student achievement attributable to teachers’ modifications of their reading instructional practices implemented as a function of analysis of their students’ assessments. Curricular co-ordination, assessment-based decision-making, small-group student instruction, efficient school management, knowledgeable leadership, and persistence were identified as the factors that contributed to increased student learning (Walpole et al.). Throughout this study, the importance was revealed of providing teachers with time for collaborative learning focused on one specific component of literacy instruction (e.g., comprehension, word study) over an extended period, together with the materials required to implement the recommended programming changes. The provision of the critical elements of time and materials was attributed to administrative support and assistance.

Taylor and Pearson (2005) also conducted a longitudinal study of assessment-focused reform. Participants in their CIERA School Change Project included elementary teachers in 13 schools across the United States. Teachers in each site followed an iterative process of: collecting and analyzing their students’ reading assessment data, selecting a shared focus of professional learning on the basis of these data, using study groups as a vehicle for collaborative reflection and targeted professional development, and revisiting student data after implementation of new practices to determine their effectiveness in promoting change in the area of focus. The school change efforts were supported over a 2-year period by school administrators and an external facilitator who worked in each school for a total of 8 hours per week, assisting individual teachers through coaching as well as supporting the grade-level study groups. In describing the
experiences of participants in one site, Taylor and Pearson outlined that while teachers’ focus on comprehension instruction was initiated by analyses of their students’ initial informal reading inventory results, participants highlighted the importance of ongoing evidence of student learning gathered through classroom observations and work sampling as pivotal to sustaining their commitment to this instructional focus. While the CIERA change project was effective in many sites, one third of the schools showed limited success, with this attributed to lack of internal administrative support and/or lack of a teacher leader who emerged within the school staff who was able to engender collegial support for sustaining the initiative. Summarizing their findings, Taylor and Pearson stressed that reading reform is a long-term endeavour represented by small incremental instructional changes over time, “with no quick fixes or magic bullets” (p. 253).

Although these studies all demonstrated the positive effects of assessment-focused professional learning communities, they did not investigate the processes through which participants’ beliefs and associated practices changed. In order to understand the effects of models and systems of teacher professional learning and facilitate long-term teacher growth, the processes through which such growth occurs must be examined (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002; Sinatra, 2005). Simply stated, “optimization of the outcomes of a process is facilitated by the understanding of that process” (Clarke & Hollingsworth, p. 947). Models of professional growth have provided direction in how to examine and explain the processes of teacher’s change and the impact of professional development on these changes (Clarke & Hollingsworth; Guskey).

*Conceptual Models of Teacher Professional Growth*

Guskey (1986, 2002) emphasized the importance of influencing teachers’ beliefs
in order to affect sustainable change in their practices. In 1986 he suggested that contrary to the assumption that changes in teachers’ beliefs preceded changes in their practices, teachers’ beliefs were more likely to change following fruitful changes in their classroom practices. Guskey proposed a linear model of change, beginning with professional development that first leads to changes in teachers’ practices and then may lead to changes in their beliefs, dependent on whether teachers attribute increased student learning to their instructional modifications. Clarke and Hollingsworth (2002) examined and refined Guskey’s model of teacher change.

Clarke and Hollingsworth (2002) proposed the Interconnected Model of Teacher Professional Growth (IMTPG) as a conceptual model to examine and explain the patterns of teachers’ growth over time. Similar to Guskey’s (1986, 2002) model, the IMTPG was based on the premise that while external sources of information and the mediating processes of reflection may promote conceptual awareness, changes in teachers’ beliefs may be more likely to occur when teachers attribute students’ learning gains directly to modifications of their instructional practices (Clarke & Hollingsworth). However, in contrast to the linear path outlined by Guskey, the IMTPG provides a nonlinear model that recognizes multiple pathways between four domains, with each teacher’s change depicted as a unique progression through different sequences of changes in one domain, that lead next to changes in the other domains (Clarke & Hollingsworth). Additionally, the IMTPG identified the pivotal and interconnected roles of enactment and reflection (i.e., cognitive processing) in mediating change (Clarke & Hollingsworth).

Change occurs thorough the mediating processes of “reflection” and “enactment” in four distinct domains which encompass the teacher’s world: the personal domain (teacher knowledge, beliefs and attitudes), the domain of practice (professional experimentation), the domain of consequence (salient outcomes),
and the external domain (sources of information, stimulus or support). (Clarke & Hollingsworth, p. 950)

Each of the four domains depicted in the IMTPG represents a multifaceted potential change domain, with change promoted by reflection and putting into action new practices (Clarke & Hollingsworth). Within this model, the occurrence of change in one domain that leads to a change in another domain has been referred to as a “change sequence” that may be temporary experimentation, whereas the term “growth” has been used to denote lasting change through accommodation, with this attributed to teachers’ acquisition of new understandings and applications thereof within their classroom contexts.

It is also important to note that sources of information, stimulus, or support included within the external domain of the IMTPG include not only information acquired during professional development but also that which teachers may acquire from other sources such as, for example, collegial conversations or professional publications. Additionally, the domain of consequence has been recognized as unique to each teacher: “Change in the domain of consequence is firmly tied to the teacher’s existing value system and to the inferences the teacher draws from the practices of the classroom” (Clarke & Hollingsworth, 2002, p. 953). This distinction has provided an explanation for the phenomenon of teachers’ diverse reactions to similar changes (e.g., increases in student dialogue), with some viewing such changes negatively and others positively. This in turn has provided support for the need to examine many teachers’ change processes in order to enhance understandings of the diverse paths that teachers’ growth may take. Although the IMTPG has suggested potential change sequences and growth patterns that teachers may experience, little research has related teacher change to the proposed model.
Research Investigating Teachers’ Conceptual Change Processes

In order to promote the belief changes required to affect sustainable changes in teachers’ practices, their change processes must be understood (Clarke & Hollingsworth, 2002; Gregoire, 2003; Guskey, 2002). Although minimal research has explored teachers’ conceptual change processes, methods to promote change in previous investigations have included use of refutational text, reflective journals, and dialogue focused on deconstruction of classroom teaching experiences (Asselin, 2000; Bean & Patel Stevens, 2002; Gregoire Gill, Ashton, & Algina, 2004; Hill, 2004; Long & Stuart, 2004; Nierstheimer et al., 2000).

Guzzetti and colleagues (1993) conducted a meta-analysis of research investigating use of textual scaffolding to promote students’ science-related conceptual changes. They concluded that use of refutational text and augmented activation activities were effective in fostering students’ dissatisfaction with and abilities to restructure their conceptions about science (Guzzetti, Snyder, Glass, & Gamas, 1993). Gregoire Gill and colleagues (2004) applied these understandings in an investigation exploring the use of refutational text in promoting preservice candidates’ change with respect to mathematics education. The use of traditional expository text was compared to the use of refutational text combined with augmented activation in a controlled experiment with 161 participants. Through quantitative analysis of survey data, it was demonstrated that candidates receiving the refutational text intervention demonstrated greater conceptual change than those receiving the expository text (Gregoire Gill et al.).

There have also been qualitative investigations of the effects of coursework experiences on teachers’ beliefs. Although journals are used widely to enhance preservice
candidates’ abilities to become aware of their beliefs, the extent to which written forms of reflection have altered teachers’ beliefs has been disputed (Asselin, 2000; Bean & Patel Stevens, 2002; Russell & Loughran, 2007). While Bean and Patel Stevens found that reflective journals helped teachers to articulate, but not alter their beliefs, Asselin claimed written journals were effective vehicles to alter preservice candidates’ inaccurate conceptions about language arts instructional practices.

Bean and Patel Stevens (2002) used constant comparative and critical discourse analyses to examine the written reflections and electronic dialogue of participants in two literacy courses. Dialogue between the instructor and 28 participants in an in-service course and that between the instructor and 25 participants in a preservice course were analyzed. Bean and Patel Stevens concluded that written journal reflections and electronic dialogue enabled participants to articulate, but did not provoke them to question or change their beliefs. Further research investigating how to promote teachers’ conceptual change was advocated, with case study methodology recommended.

Asselin (2000) used qualitative methods to examine conceptual change as reflected in 39 preservice candidates’ reflective journals completed as a language arts course assignment. Prior to completion of these journals, candidates participated in in-class activities that included discussing assumptions about reader response, engaging in small-group novel studies, and designing literature-based units. Analysis of their reflective journals indicated that candidates perceived their preparation of a written reflection about these in-class experiences enabled them to become aware of and alter their beliefs about the reading process and the use of constructivist-oriented activities. Specifically, candidates’ postactivity espoused beliefs reflected increased
acknowledgement that reading is an interactive process that may be enhanced best by constructivist teaching practices promoting student interest and engagement. Asselin acknowledged the impact of face-to-face dialogue, also noting the lack of pre-and postactivity written reflections as a limitation to the results of this study. Additionally, the need to enhance understandings about how these newly formed beliefs may be transferred to or altered by novice teachers’ subsequent school-based experiences was highlighted.

Researchers have also demonstrated that preservice candidates may experience conceptual change as a function of guided practice using instructional methods in conjunction with course-based reflection and dialogue (Hill, 2004; Long & Stuart, 2004; Nierstheimer et al., 2000). For example, Long and Stuart implemented an integrated preservice science and mathematics course designed around the interconnectedness of candidates’ experiences, knowledge, and beliefs. The course included field experiences interwoven with the course content with a substantial portion of course time devoted to candidates’ reflections on their field practicum experiences. Candidates explored the relation between their beliefs and experiences, examining how their experiences influenced their beliefs and vice versa. Qualitative analysis of 3 participants’ beliefs and practices as described during interviews documented their perceptions of how the course enhanced their abilities to reflect critically as well as alter their instructional beliefs and practices. Although this study documented that conceptual change was promoted, the processes through which these changes occurred were not explored. Furthermore, as participants were selected specifically on the basis of their reflective abilities, it may be reasonable to question whether the course similarly affected all teacher candidates.

Face-to-face coursework and related practicum experiences have also been
effective in promoting preservice candidates’ reading-related conceptual changes (Nierstheimer et al., 2000). Nierstheimer and colleagues conducted a qualitative investigation of 67 candidates’ beliefs about struggling readers throughout three consecutive semesters of an intensive corrective reading course with a tutoring practicum component. The course involved candidates in observing and conducting tutoring lessons, discussing these lessons with their peers and professors, and examining students’ reading performances throughout this process. After the course, many candidates shifted their beliefs from assigning responsibility for assisting struggling readers to others, to assuming responsibility for helping these students. Their abilities to change conceptions were attributed to the course structure and content that challenged candidates to become aware of their beliefs and provided them with a supported practicum. Although the findings of this study demonstrated that participants altered their conceptions, the processes through which these changes took place were not documented.

Theurer (2002) conducted a 3-month qualitative case study investigating the processes through which a preservice candidate altered her beliefs about reading instruction while taking part in “retrospective miscue analysis” (RMA) sessions. RMA involves deconstructing transcriptions of audio-recordings of oral readings, discussing any reading miscues identified, together with how they affect text comprehension (Theurer). The participant was concurrently enrolled in a reading course taught by the researcher. Four sessions were held during which the participant’s own oral readings were first audiotaped. Each session was followed by a meeting during which the researcher and participant collaboratively deconstructed a transcription of the oral reading and related the participant’s miscues to the reading process and associated course readings. Analyses of the transcripts of an initial interview and the four RMA sessions revealed how the participant gradually altered
her perception of reading from the process of reproducing and remembering text to the process of constructing meaning from text. Her beliefs about how she could provide responsive reading instruction were correspondingly altered to focus increasingly on enhancing students’ abilities to derive meaning from text rather than read fluently and accurately. Theurer concluded that RMA may be effective in promoting teachers’ conceptual change in other settings, denoting the salient features of this model as combining personal experience, relevance, and interaction, with constructing knowledge in a supportive context.

Hill (2004) conducted a mixed-methods investigation of the impact of a community-of-inquiry in a preservice education program on candidates’ abilities to deal with pedagogical complexity, engage in critical reflection, and develop a supportive management style. Participants included 175 third-year students completing an educational psychology course as part of a 4-year Bachelor of Education program that included weekly field experiences. The program attempted to foster conceptual change through a community-of-inquiry format of weekly tutorials that followed participants’ field experiences. Eighty-six students took part in collaboratively deconstructing their field experiences each week with the support of their peers and a university tutor. Eighty-nine students in the control group took part in the field experiences, but not the collaborative deconstruction thereof. Quantitative analysis of responses to questionnaires administered to both groups at the outset and conclusion of the academic year revealed modest gains in the abilities of participants in the community-of-inquiry group to adopt a reflective stance and supportive management styles. Quantitative findings were supported by qualitative interview data that revealed similar findings. While acknowledging further research investigating how these beliefs were reflected in candidates’ classroom practices was required, Hill advocated dialogue through supportive communities-of-inquiry to
enhance candidates’ abilities to work towards conceptual change with particular attention to adopting a reflective teaching stance and supportive classroom management practices.

While teacher education programs can play an important role in teachers’ conceptual change experiences, researchers have cited the need to investigate their longitudinal effects on practitioners’ beliefs and practices (Anders et al., 2000; Hoffman & Pearson, 2000; Niersteimer et al., 2000; Snow et al., 2005). In particular, there appears to be little empirical evidence documenting whether changes in teachers’ beliefs promote subsequent changes in their classroom practices.

Maloch et al. (2003) sought to extend such understandings through an investigation of the reading-related instructional decision-making of 101 novice teachers over the duration of their first year teaching. Participants included novices who graduated from three different types of teacher preparation programs—reading specialization, reading embedded, and general education programs. Seventy-three participants were graduates of programs identified by the International Reading Association (IRA) National Commission on Excellence in Elementary Teacher Preparation for Reading Instruction as excellent in reading teacher preparation; 40 of these participants had completed a reading specialization program (i.e., a major or minor in reading), while the other 33 had completed a reading embedded program. The defining features of IRA recognized programs were: extensive diversified fieldwork; tiered (i.e., gradually increasing) involvement in classroom instruction through observation, tutoring, and case study analysis, prior to student teaching; and complementary field and course work through systematic alignment with opportunities for deconstruction and reflection. The remaining 28 participants were graduates of general teacher education programs, characterized by
fewer field experiences and courses that were not necessarily integrated with fieldwork. Maloch et al. (2003) interviewed novices about their beliefs and practices in September, January, and June of their initial teaching year. Qualitative analyses of their responses documented a robust positive influence of the IRA recognized programs. Graduates of both types of IRA recognized programs reported increased understandings of the interactive reading process and adapting instruction to meet their students’ needs through the assessment-to-instruction cycle. Many general teacher education program graduates did not seem to exhibit these understandings and reported adopting the commercial reading programs used in their school settings increasingly, irrespective of congruence with their beliefs and/or the methods advocated during preservice education. Graduates of the general teacher education programs reported focusing on coverage of the curriculum materials to a greater extent than on their students’ needs as identified through assessments. Over the course of their initial teaching year, these participants’ beliefs and practices appeared to have been affected by their school context. Conversely, many graduates of the IRA recognized programs reported a critically reflective stance towards the use of commercial programs and confidence in their instructional decision-making with respect to modifying these programs in consideration of their beliefs and their students’ needs. These novices reported greater willingness to “go against the grain,” implement practices advocated during preservice education, and maintain constructivist-oriented beliefs, irrespective of the reading practices of other teachers.

While acknowledging the limitations of self-reported data, Maloch et al. (2003) concluded that graduates of the IRA recognized programs reported an increased ability to adopt a responsive stance towards the teaching of reading. As teacher preparation
programs have the potential to exert a longitudinal influence, the recommendations provided for preservice program restructuring seem warranted. However, methods to foster the growth of all teacher education graduates through in-service opportunities designed to enhance their abilities to provide responsive instruction were unaddressed.

Keys’s (2005) investigation of the beliefs and practices of in-service teachers also revealed inconsistencies. The experiences of 7 participants were studied over a 2-year period during which they were purported to be implementing a new science curriculum. Analyses of interviews, classroom observations, and artifacts in this qualitative study revealed that participants’ espoused beliefs in the efficacy of the new curriculum increased. However these beliefs were not usually demonstrated within participants’ classroom practices. While they purported to agree increasingly with the new methods, participants cited lack of time, resources, and/or ongoing support as their primary barriers to implementation. Keys expressed reservations about teachers’ articulated concerns about lack of resources, revealing that while unused, the required resources were available. Their lack of use was attributed in part to insufficient support through professional development. Keys concluded that teachers appeared to be interested in implementing the new methods, yet were unwilling or unable to make the sacrifices required to enable them to do so. Professional development with a specific focus on guided practice and critical reflection was recommended to break the cycle of teachers “talking the talk and not walking the walk” (Keys, p. 513). While Keys documented participants’ experiences, there was no attempt to intervene and support their growth during the study.

Justi and van Driel (2006) investigated the applicability of the Interconnected
Model of Teacher Professional Growth (IMTPG; Clarke & Hollingsworth, 2002) as a model to explore and explain the professional growth of 5 teachers in a one-year post-graduate teacher education program. All participants were experienced teachers in the process of acquiring formal credentials. As a course-based assignment, each participant designed an action research project investigating their use of models and modelling in science education. Data sources included: a series of individual interviews, written material outlining classroom activities, video recordings of lessons, transcriptions of meetings during which participants collaboratively deconstructed their implementation experiences, and summative research reports written by each participant. These data were analyzed through the lens of the IMTPG. Justi and van Driel documented participants’ diverse change sequences and growth patterns, with reflection appearing more important in the professional growth of some participants than others. Beginning with teachers’ initial conceptions, providing information through the formal course content, a domain of practice for professional experimentation, and engaging in collaborative reflective discussions were identified as critical to supporting participants’ growth. The authors concluded the IMTPG provided an effective model through which to analyze and interpret the idiosyncratic processes of teachers’ professional growth. Refinement of methods to delineate whether teachers’ progressions were change sequences or growth patterns was recommended, with denoting those between two domains as change sequences and those between three or more domains as growth patterns suggested.

Collectively, these empirical studies highlighted the importance of professional practice, reflection, and deconstruction of new experiences, as well as support as teachers work towards potential change. These investigations also supported the need for further
research to extend and determine the extent to which existing understandings of teachers’ conceptual change processes are domain general or specific (Clarke & Hollingsworth, 2002; Gregoire, 2003; Pintrich & Sinatra, 2003; Sinatra, 2005).

**Rationale for the Study**

This qualitative case study explored teachers’ conceptual change processes throughout their participation in a reading-focused professional development initiative. Although the literature has identified the benefits of concurrent small-group and related individualized support through coaching (Kise, 2006; Lyons & Pinnell, 2001; Taylor & Pearson, 2005; Walpole & McKenna, 2004), little, if any, research has explored in-service teachers’ change processes throughout their participation in such initiatives.

By including both inquiry-based group sessions and individualized coaching, this professional development initiative endeavored to meet participants’ collective needs as well as their unique individual needs (Kise, 2006; Lyons & Pinnell, 2001; Walpole & McKenna, 2004). Throughout this study, participants’ change sequences, growth patterns, and conceptual change processes were investigated as they explored primary-grade reading assessment and instruction. This investigation explored if, and how if so how, participants’ changed their reading-related practices and associated beliefs.

The secondary purpose of this study was to determine the applicability of conceptual models proposed to examine teacher change. While the CAMCC (Gregoire, 2003) and the IMTPG (Clarke & Hollingsworth, 2002) were developed in the context of mathematics instruction, it has been suggested that they may also apply to teachers’ change processes in other subject areas. However, the applicability of these models to teacher change in the area of early reading did not appear to have been investigated.
This study sought to answer the research question, how does participation in a professional development initiative comprised of a school-based professional learning community and associated individualized classroom-based coaching sessions affect primary-grade teachers’ reading-related beliefs and practices. Specific attention was directed to how change occurred as well as the factors that inhibited or promoted teachers’ conceptual change processes.
CHAPTER THREE: METHODOLOGY

Within this chapter the methodological approach and design of the study are described. This qualitative interpretive case study was conducted within the theoretical framework of social constructivism characterized by the existence of multiple truths rather than a universal single truth (Guba & Lincoln, 1994; Schwandt, 2000). The rationale for the methodology and the methodological procedures are outlined next.

Rationale

Interpretative research is based on the social construction of reality, which requires the researcher to study individuals in the setting in which they construct their understandings of the phenomena that are being investigated (Denzin & Lincoln, 2000). Qualitative research methods were used to provide a rich, thick description of human behaviour (Guba & Lincoln, 1994) and elucidate understandings of participants’ evolving reading beliefs and practices. In keeping with the basic tenets of qualitative inquiry, these understandings were developed through in-depth, direct, personal experiences with participants (Denzin & Lincoln; Schram, 2003). As this study was undertaken within a social constructivist research paradigm, the researcher and each participant were linked interactively in the process of collaboratively constructing meaning in an attempt to distill an informed consensus of each participant’s knowledge and beliefs, and the processes through which they were constructed (Guba & Lincoln).

Conceptual Framework

Gregoire’s (2003) Cognitive-Affective Model of Conceptual Change (CAMCC) and Clarke and Hollingsworth’s (2002) Interconnected Model of Teacher Professional Growth (IMTPG) were used to guide this inquiry. The key tenets of these social
constructivist models of teacher change were used throughout the development and implementation of the professional learning community activities as well as during the classroom-based coaching provided to the 3 participants throughout this study.

The CAMCC is a framework that can be used to guide the development of professional development initiatives that seek to acknowledge teachers’ perspectives and provide them with the support required to facilitate changes in their subject-matter beliefs (Gregoire, 2003). The dual process model of cognition presented in the CAMCC addresses factors including teachers’ motivation, efficacy, and knowledge that may affect their abilities to systematically process curricular reform persuasive messages. The IMTPG (Clarke & Hollingsworth, 2002) focuses on factors not addressed explicitly by the CAMCC, most notably the role of professional experimentation and student-learning gains that teachers attribute to their use of new practices. As such, the IMTPG was used in conjunction with the CAMCC to guide this investigation.

Case Study Methodology

Case study methods were used to capture and describe the complexity of participants’ experiences and illuminate understandings through exploring the “interaction of significant factors characteristic of the phenomenon [the case]” (Merriam, 2001, p. 29). As teachers’ beliefs and conceptual change processes are influenced by contextual factors (Bandura, 1997; Goddard & Goddard, 2001; Tschannen-Moran et al., 1998), case study methodology was intended to support the researcher’s ability to capture the interactions between contextual factors that influenced how participants developed explicit understandings and/or changed their reading-related conceptions. Creswell (1998) described the impetus for case studies as the lack of in-depth understandings of
phenomena that are unique or unusual, together with the desire to see unexplored details that will provide a picture to inform practice. Although it is acknowledged that teachers’ beliefs have a pervasive influence on their practices (Fullan et al. 2006; Guskey, 2002; Kise, 2006; Snow et al., 1998; Snow et al., 2005), existing understandings with respect to the processes of teachers’ conceptual changes during professional learning opportunities inhibit optimization of this process (Clarke & Hollingsworth, 2002; Gregoire, 2003). Case study research was conducted in attempts to derive insights that may enhance understandings of how to support teachers’ conceptual change processes (Sinatra, 2005).

Defining the boundaries or parameters of the object of study is central to conducting case study research (Merriam, 2001; Yin, 2003). These boundaries delineate the specific foci, or units of analysis to be explored (Yin). This study explored two units of analyses: (a) participants’ beliefs about reading assessment and reading instruction and (b) participants’ reading assessment and reading instructional practices.

Data collected from each of the 3 participants were analyzed first as a single-case study (Merriam, 2001; Yin, 2003). This was followed by cross-case analyses during which the findings of each case study were compared and contrasted with the findings in the other two cases. The use of a multiple-case design provided the opportunity to explore patterns or trends between and amongst the three case studies that collectively formed this inquiry (Merriam; Yin).

Researcher Interests

The interests and background experiences of a qualitative researcher affect the way in which meaning is constructed and interpreted throughout an investigation (Creswell, 1998, 2002; Gay & Airasian, 2003). It is therefore important to acknowledge
the influence of my prior experiences on the methodological design of this study (Creswell; Gay & Airasian).

I engaged in this research after over 20 years experience as an elementary school teacher. I began teaching when skills-based programming was conventional wisdom and taught throughout the duration of the “reading wars” (Pearson, 2004). While I came to embrace whole language beliefs, in the mid-1990s, in an attempt to meet the needs of struggling students, I began using a commercial phonics program “behind closed doors,” as such programs were opposed by the school board curriculum department. Students’ resultant increased achievement provoked me to question my beliefs. However, rather than alter my constructivist-oriented beliefs, I resolved my dissonance by accommodating the phonics program through the creation of related reading experiences (Grierson, 2000).

This experience promoted an interest in teachers’ beliefs that increased throughout the last 4 years I was employed by a school board, during which I provided system-level literacy-related teacher professional development on a full-time basis. This role entailed the provision of individualized classroom-based coaching as well as small-group and large-group professional development sessions. Over the duration of this time, I came to appreciate the importance of meeting teachers at their point of need, with this often revealed by examining their students’ work. Reading assessment was an area where teachers reiteratively questioned their practices.

Teachers’ recurring questions about classroom-based reading assessment were the catalyst for the formation of an action-research group that I co-ordinated during the final 2 years of my tenure as a literacy support teacher. Driven by the desire to streamline assessment practices and provide responsive programming, the action research group
investigated the development and use of primary-grade literacy assessment portfolios (Grierson & Woloshyn, 2006). Facilitating this group led me to believe that teacher research groups held enormous potential as a vehicle to promote educational change.

Concurrent with commencing doctoral studies, I began teaching preservice language arts courses at an Ontario Faculty of Education. As I explored conceptual change during doctoral studies, I altered my preservice instructional practices to include activities focused on candidates’ evolving conceptions of advocated instructional methods. My perception that these explorations may enhance the development of reflective practitioners propelled me to do so increasingly (Grierson, 2007).

In the present study, I used understandings developed during my experiences supporting teacher candidates’ reflective practice, providing in-service professional development, and facilitating the action research project, together with information from the literature, when planning and implementing the professional learning opportunities. For instance, I used knowledge acquired during the action research project with respect to the benefits of providing teachers with time to discuss their students’ assessment results and relate them to instructional strategies, as well as ensure teachers were supported in developing confidence with new assessment protocols (Grierson & Woloshyn, 2006).

This investigation extended the support provided to teachers during the action research project significantly by including collaborative reflection and individualized coaching in the administration and analysis of reading assessments, as well as in the implementation of related instructional strategies. Additionally, and of primary importance, in-depth, ongoing interactions with participants in their school setting throughout this investigation, together with the collection of multiple forms of data,
enabled me to explore participants’ conceptual change processes, unexamined in the school board action research project.

I believed that my prior experiences facilitating a teacher research group as well as providing support to individuals through classroom-based coaching would enhance my abilities to support teacher change throughout this project. As I was concerned that existing relationships with participants might bias this inquiry (Gay & Airasian, 2003), I conducted this investigation at an independent school where I had no prior personal or professional relationships or affiliations.

**Methodology**

This 7-month study was comprised of a three-phase methodology, with collaborative small-group professional learning community sessions and individualized teacher support through coaching provided in each phase. Throughout this inquiry I adopted Toll’s (2005) definition of a literacy coach, that is:

One who helps teachers to recognize what they know and can do, assists teachers as they strengthen their ability to make more effective use of what they know and do, and supports teachers as they learn more and do more. (Toll, p. 4)

As such, I focused on collaboration, reflection, inquiry, and support rather than directing teachers in a predetermined path (Kise, 2006; Toll; Walpole & McKenna, 2004).

An emergent research design was used (Creswell, 2002; Gay & Airasian, 2003), with the focus of each semimonthly professional learning community session building on participants’ needs as identified in the previous sessions. In the following section, the research site and participants, procedures, data collection methods and tools, and data analysis methods are outlined. Additionally, the methodological limitations of this study, researcher’s role, and ethical considerations are reviewed.
Research Site and Participants

The research site was an Ontario independent elementary school that followed a curriculum based on the Ontario curriculum expectations. Although many independent schools follow curriculum based on the provincial expectations, their staff do not take part in Ministry-provided professional development. As the cohesion of messages affects teachers’ abilities to implement practices that are promoted (Fullan et al., 2006; Youngs & King, 2002), conducting this study in a site where other reading-related professional learning opportunities were not occurring concurrently was intended to help to ensure the presentation of consistent messages and reduce the need to explore the mitigating effects of external reading-related professional development on participants’ change processes.

As this study necessitated extensive, ongoing interactions with participants and comprehensive observations of classroom practices, an interested independent school site in close geographic proximity to the researcher was selected. The research site was chosen on the basis of accessibility, use of a curriculum based on the Ontario Language Curriculum, administrative support, and, of primary importance, the interest of the primary division teachers in exploring reading assessment and instruction. The description of the research site that follows is supported by data obtained during an interview with the school administrator (Appendix A), who member-checked the interview transcript and the conclusions based on it (Creswell, 2002; Merriam, 2001).

Research site. Located in an urban area of Ontario, the independent school served approximately 200 elementary students of predominantly European Canadian origin who had a mosaic of needs and abilities. Throughout its existence, the parental community provided extensive school support through tuition, charitable donations, and time. "$[We
have a very strong parental community that supports the school with time and financial resources, not because they are wealthy, but because they are willing to give for their kids” (Administrator Interview, December 16).

The administrator outlined the positive working relationships within this school community and the expectations of collegial collaboration between staff members.

It is part of working in the community, as a member of the learning community, to share together. They [teachers] are all willing to share, but some are more willing to ask for help than others are, if they need it. The grade 2/3 teacher is new to the [primary] team, but everyone has just been supporting her very much. It is an understood code of conduct. (Administrator Interview, December 16)

She described the positive relationships between parents and staff as well as the low staff turnover. Two primary division teachers had recently retired after many years of service. These teachers and the reading programs they provided were regarded highly by the school community, particularly by new teachers joining the primary division staff.

That [long-term service] had advantages; they did not become stale and were continually developing the program, but it had some disadvantages too, in that any of the new staff members that came there felt a little intimidated. They thought, “Okay these two have it [the program] well in hand. How am I ever going to measure up?” So there was some insecurity when new people started to join [the primary division]. (Administrator Interview, December 16)

Parents and administration shared the confidence exhibited by new teachers in the abilities of these long-standing teachers and the programs they provided, particularly with respect to teaching basic skills. “We [parents and administration] knew that they [previous teachers] were doing a very good job of teaching the basic skills, especially” (Administrator Interview, December 16). These retired teachers remained committed to the school as evident in their provision of regular volunteer assistance to the current primary-grade teachers. The administrator expressed some uncertainty over how this may be affecting teachers’ comfort deviating from the programs implemented previously.
Well, especially now since they are still both coming in regularly a morning a week, I still wonder. I am hoping, that the current staff will be willing to say [they are changing the program]. And I hope that the other two, the retired people, will be willing to say, “Okay, they are standing on my shoulders and doing it even better.” Not that “what I did was not good enough and so they need to change it.” But I’m not sure that is going to happen. (Administrator Interview, December 16)

In appreciation of the influence of the retired teachers, I inquired about inviting them to participate in the professional learning community sessions. However, as a function of the administrator’s concern that their involvement may limit the abilities of the current teachers to question the existing reading programs, I chose not to do so.

Pressure to keep things the same way [may be the result of inviting the retired teachers to participate]. I would prefer not to have them in a group now, because they both have strong personalities. Give the [current] staff a chance to be willing to say, “You know, I always wondered what it was like to do that, and if that was really the right way to do it or not.” (Administrator Interview, December 16)

The school curriculum was developed by an association of independent schools, based on the expectations in the Ontario provincial curriculum. While this school also had the provincial curriculum and related exemplars, professional development provided to publicly funded school teachers to support the use of these resources was unavailable.

We basically have nothing from the government, nothing. We are not in the loop. We would love to be recipients [of professional development]. Yes, exemplars, yes, these [curriculum documents and exemplars] we get. So [without professional development] I can give this to teachers and they go, “What? You think we have time to read all of this?” (Administrator Interview, December 16)

Teachers followed commercial reading programs selected by a school-based curriculum review committee comprised of the vice principal and primary division teachers. The most recent review occurred 3 years ago. After considering alternatives, the committee decided to continue with the existing basal series published a decade and a half earlier. Their decision was influenced in part by teachers’ perception of the time required to implement a new program.
The decision to stick with our present basal series, I think partly was because, at that time, we were in the transition from the old staff to the new. The new staff were going “Oh, don’t throw me into a new curriculum now! I’m just starting.” And they were fairly happy with it, because they had developed so many supplemental materials. It was their choice, the educators’ choice. The [basal] curriculum is not what runs the [reading] program. It is only a tool. (Administrator Interview, December 16)

The professional decision-making of these teachers was supported on an ongoing basis. For instance, it was a teacher’s suggestion that the school become this research site.

It was “her thing.” It was the grade 1 teacher’s [idea]. So, she thought that [participating in this study] would be good and said [to me] “I have a friend, who knows a friend, who is doing a doctoral dissertation and they might like to use our school as a study,” and my red flags were up already, and I said, “Okay, have her give me a call, and we’ll talk.” All these red flags go up, and you have to realize that [is] because we have been out of the loop. So, there was a trust factor at first I think but with the initial contact [with the grade 1 teacher]; it was on the soccer field. (Administrator Interview, December 16)

After meeting with me to discuss the project, the administrator met with the primary division teachers and shared a written overview of the proposed study. She then allowed them to decide whether to embark on this project.

And then [after meeting with you] I went to the other staff, once I had some of the material [describing the study], and said, “I don’t want you to feel forced into doing anything. So, please read the material and give me your two cents.” (Administrator Interview, December 16)

These educators respected the professional judgment of one another. For instance, although some potential participants held initial reservations, they placed their trust in their administrator’s perception of my intentions and persona.

They were a little “Oh, I don’t want somebody coming in my classroom all of the time.” Yes I said, I have met Arlene, I have a very good feeling. She is very nonthreatening, very eager to help. I think they said, “Okay, we will do it,” with a little fear and trepidation, but they seemed to kind of trust my assessment of you as a person, I think and they decided, “Okay we will give it a try.” (Administrator Interview, December 16)

The administrator’s respect for the primary division staff was also evident as she shared
her perception that their greatest challenge during this initiative would be time, followed potentially by professional knowledge, rather than commitment to student learning.

It [their challenge] is not going to be commitment, because they are committed to that [student learning]. I think it is time. Knowledge [may also be a challenge] at a certain point, depending on how much they can learn along this process. But, they are generally go-getters. (Administrator Interview, December 16)

Teachers throughout the primary division followed the balanced Four Blocks Literacy Framework (i.e., designated guided reading, word study, independent reading, and writing periods [Cunningham & Allington, 1999; Cunningham et al., 2000]). An introduction to this framework was the only recent reading-focused, site-based professional learning initiative.

[Have teachers taken part in professional development] to understand the reading process? No. They [teachers] had an introduction to the Four Blocks, but there’s nothing to that. It is a framework. But have they [teachers] taken courses in [supporting students in] learning how to read? No, most of them probably haven’t since their Bachelors days. (Administrator Interview, December 16)

With the exception of a standardized test administered in grade 3, there were no established reading assessment measures used in the primary grades. Consequently, the assessment focus of this study was of particular interest to the administrator and teachers.

In reading [assessment], that was why I was so excited about this [initiative]. We don’t have any standardized assessments for this [primary-grade reading]. That is what the new teachers wonder too, “How do I know what the standards are that I need to meet?” Especially for grade 1 and 2 reading abilities, grade 3 [students] take the Canadian Test of Basic Skills. (Administrator Interview, December 16)

Participants. The individuals invited to participate in this study included the four primary-grade teachers (kindergarten through grade 3). Three individuals, the primary-grade teachers from grades 1 through 3, chose to participate. The school principal was also invited to participate, as administrative participation in teacher professional development has been shown to positively affect teachers’ abilities to modify their
practices (Coburn, 2005; Ross, 2004; Youngs & King, 2002). Although she elected to do so and took part in an initial interview to provide insights about the school context (Appendix A), as a function of other commitments she was unable to participate in any of the professional learning community group sessions.

The participants whose experiences are described herein include Emma (pseudonym) who taught grade 1, Judy (pseudonym) who taught a combined grade 2 and grade 3, and Violet (pseudonym) who taught grade 3. Detailed descriptions of participants are provided within their individual case studies presented in Chapter Four.

Although the kindergarten teacher did not elect to take participate in this study, concurrent with it, she refined her reading assessment practices and developed procedures to document students’ ongoing growth in the development of print concepts, phonemic awareness, and letter-sound correspondence skills. Together we developed a profile of students’ emergent literacy skills as well as a process of sharing these insights with the first grade teacher. The procedures followed throughout this study with the 3 primary-grade teacher participants are outlined next.

Procedures and Data Collection Methods

While there was considerable overlap of focus throughout this 7-month inquiry, there was a primary focus of each of the three phases. The first phase focused on reading assessment, the second on instructional methods, and the third on participants’ continued collection and use assessment insights. An overview of the general procedures followed throughout this inquiry precedes detailed descriptions of those used in each phase.

Overview. The most recent Ontario Ministry of Education reading instruction and assessment teacher support documents (e.g., A Guide to Effective Instruction in Reading:
Kindergarten to Grade 3, Ontario Ministry of Education, 2003b) were used as the primary resources for the professional learning community sessions throughout this study. While these resources have been provided to teachers in publicly funded schools to support implementation of programs designed to meet curriculum expectations, participants here had not received these documents.

Upon formation of the professional learning community, participants began attending semimonthly meetings, one of which occurred during instructional time for a duration of 3 to 4 hours, with the other an after-school session of between 1 and 2 hours. Sessions were usually scheduled between 2 and 3 weeks apart to afford sufficient time for participants to achieve goals established at one session prior to the next, while also maintaining momentum by meeting regularly (Kelleher, 2003; Lyons & Pinnell, 2001).

In addition to planning and facilitating the professional learning community sessions, throughout the duration of this study I spent a minimum of three mornings each week at the school site working directly with individual participants and/or their students. As the facilitator of the professional learning community group as well as throughout the individualized coaching, I attempted to enhance teachers’ motivation for change through the creation of a supportive social context, within which personally relevant reading practices were explored (Kise, 2006; Toll, 2005; Walpole & McKenna, 2004).

Throughout this study dissonance was at times created by presenting practices that were inconsistent with participants’ current practices and/or beliefs. Attempting to support teachers’ change processes necessitated guiding participants to consider alternative perspectives and work towards acknowledging any “limitations” of their existing beliefs (Gregoire, 2003; Risko et al., 2005). Using pedagogical tools such as
collaborative reflection and case study of their students’ work and behaviours (Gregoire; Long & Stuart, 2004; Nierstheimer et al., 2000; Risko et al.; Toll, 2005), I attempted to support teachers’ development of a knowledge base that was consistent with evidence-based reading assessment and instructional practices (e.g., National Reading Panel, 2000; Ontario Ministry of Education, 2003a, 2003b). Through addressing teachers’ beliefs and practices within the context of a professional learning community group in conjunction with individualized coaching, I attempted to provide the social support required for change, consistent with the cognitive and affective processes required for conceptual change (Alderman, 2004; Gregoire; Nierstheimer et al.; Patrick & Pintrich, 2001).

During the first phase of this inquiry, attention was devoted to developing the positive relationships required for an effective professional learning initiative (Dufour & Eaker, 1998; Kelleher, 2003; Kise, 2006; Toll, 2005). Additionally, we worked towards developing a shared understanding of the reading process, the developmental progression of early reading, together with assessment strategies that could be used to provide insights about students’ acquisition of the associated skills and strategies. In the second phase, these assessment insights were used to delineate instructional modifications that participants chose to explore in attempts to meet their students’ identified needs. Additionally, participants used their shared understandings to develop a cumulative profile of students’ reading progress. The third phase was devoted to determining how to use the student assessment profiles and associated instructional implications on an ongoing basis in addition to exploring the effects of this initiative on participants’ reading practices and associated beliefs. Organized by phase, detailed procedures and an introduction to the data collection methods used in each are outlined next.
Phase one. During the initial group session, we explored the objectives of the professional learning community and associated classroom-based coaching sessions in attempts to begin to establish a comfort level for the group, the facilitator, and the associated group processes. The collaborative development of group procedures, rights, and responsibilities was focused on explicitly, in order to maximize the potential for members to achieve their goals (Dufour & Eaker, 1998; Lyons & Pinnell, 2001; Stringer, 2004). The difference between a professional development program and a professional learning community was discussed, with the latter focusing on collaborative exploration of issues or problems of relevance to participants (Dufour & Eaker; Fullan et al., 2006). I encouraged participants to adopt an inquiry stance and clarified that my role as the professional learning community facilitator and literacy coach would be to follow their lead and attempt to provide the information, support, and/or resources they required.

Participants were then introduced to the initial interview protocol (Appendix B), teacher participant survey (Appendix C), semimonthly classroom observation procedures, and goal-setting practices (Appendix D) to be followed at the conclusion of each professional learning community session. Initial survey completion, individual interviews, scheduled classroom observations, and collection of observational field notes and informal interview data during coaching interactions commenced following this session. Field notes were gathered during the initial group session, with all subsequent professional learning community sessions audiotaped and transcribed for later analysis.

Over the 3 weeks that followed, data with respect to participants’ reading-related interests and concerns were obtained through interviews (Appendix B), surveys (Appendix C), and classroom observations. These data provided a baseline from which to
determine the focus for the second professional learning community session. Table 1 provides an overview of the phase one timelines and group session foci.

Prior to the second group session, I gathered data with participants’ students to provide the assessment insights about which teachers had expressed interest. Individual and class profiles of students’ developmental spelling progression (Bear, Invernizzi, Templeton, & Johnston, 2000) were prepared to illustrate their spelling skills, as well as the instructional value of skill profiles. I also used components of the Qualitative Reading Inventory-4 (Leslie & Caldwell, 2006) to assess five grade 2 students of varying abilities. I selected grade 2 students, as I perceived that all 3 participants would be familiar with the needs and abilities of students in this grade. After using graded word lists to assess students’ word recognition skills, I used the results to delineate graded passages with which to conduct running records of their oral reading behaviours. Following each oral reading, I recorded students’ responses to the ensuing literal and inferential comprehension questions about the selected texts.

At the outset of the second professional learning community session, participants were provided with copies of A Guide to Effective Instruction in Reading: Kindergarten to Grade 3 (Ontario Ministry of Education, 2003b). We began the session reviewing the importance of early reading success for later academic success and the components (e.g., word study, comprehension) of reading instruction. Next, we examined developmental spelling profiles indicating their students’ strengths and needs. We then explored the goals of reading instruction (i.e., to foster reading motivation and proficiency) and the interconnectedness of oral language, reading, and writing (Snow et al. 1998). After reviewing the interactive reading process, we explored how running records of students’
Table 1

*Phase One Overview*

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Professional learning community session content</th>
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<tbody>
<tr>
<td>Session 1, November 20</td>
<td>Goals and objectives of the initiative</td>
</tr>
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<td></td>
<td>Roles, responsibilities, and procedures</td>
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<td>Participants’ concerns and questions</td>
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<tr>
<td>Session 2, December 13</td>
<td>Importance of primary-grade reading instruction</td>
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<td>Components of primary-grade reading instruction</td>
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<td>Developmental spelling progression profiles</td>
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<td></td>
<td>The reading process</td>
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<td></td>
<td>Deconstruction of informal reading inventory results</td>
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<tr>
<td>Session 3, January 9</td>
<td>Professional development in the use of an informal</td>
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<td>reading inventory to conduct running records and assess</td>
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<td></td>
<td>reading fluency and comprehension</td>
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<tr>
<td>Session 4, January 17</td>
<td>Review of reading instructional components (e.g., word</td>
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<tr>
<td></td>
<td>study, comprehension) and instructional formats (e.g., shared, guided, independent reading)</td>
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<tr>
<td></td>
<td>Relating prior assessment practices and informal reading inventory results to developmental progression of reading</td>
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<tr>
<td>Session 5, February 8</td>
<td>Use of informal reading inventory assessment results</td>
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<tr>
<td></td>
<td>during parent-teacher conferences</td>
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<tr>
<td></td>
<td>Analyzing instructional implications of assessment results</td>
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oral reading behaviours could provide insights about their use of the semantic, syntactic, and visual cuing systems (Clay, 1998, 2002). Next, the running records of oral reading behaviours that I had completed with grade 2 students were deconstructed collaboratively by participants to illustrate how this assessment practice could provide insights about the reading process. Additionally, students’ responses to the questions that followed each reading were reviewed to illustrate how they provided insights about literal and inferential comprehension. Participants decided to explore informal reading inventory assessment protocols further during the next group session and requested the opportunity to explore an informal reading inventory used widely by their public school colleagues.

During the third group session, participants were provided with an introduction to and supported practice in the use of the informal reading inventory PM Benchmark Kit: An Assessment Resource (Randell, Smith, & Giles, 2001). After previewing the resource and associated assessment protocols, they conducted running records of the oral reading behaviours of students on video cases, used the rubrics provided to assess their fluency, and discussed students’ responses to the comprehension questions. Each participant then decided to use this tool to assess one or two of their students who were “average” readers, with these completed assessments intended to provide a focus for the next group session.

Participants first shared their assessment experiences and students’ results during the fourth group session. Next, we reviewed the developmental progression of early reading skills and associated instructional components (e.g., word study, comprehension) and instructional formats (e.g., shared, guided, independent reading), as outlined in the document, A Guide to Effective Instruction in Reading: Kindergarten to Grade 3, (Ontario Ministry of Education, 2003b). Each participant then related their current
assessment practices and tools as well as the results obtained by use of the informal reading inventory to the indicators of reading progression on the developmental continuum. As a function of enhanced understandings of students’ reading strengths and needs revealed through their use of the informal reading inventory, participants expressed interest in obtaining these insights with more of their students. With my support, these results were then gathered using the informal reading inventory. Class profiles were compiled that illustrated students’ independent reading levels as well as whether their reading fluency and comprehension were limited, moderate, thorough, or extensive.

In addition to sharing class profiles of their students’ results during the fifth group session, participants recounted their experiences presenting their students’ informal reading inventory results during recent parent-teacher conferences. The instructional insights they provided promoted participants’ continued interest in this assessment practice, as well as exploring how to support the common instructional needs their students’ results revealed. Specifically, the assessment results of students in all 3 participants’ classrooms illustrated their need for differentiated reading materials as well as comprehension instruction. These instructional implications were then addressed during the second phase of this inquiry.

At the conclusion of the second and each subsequent professional learning community session, participants collaboratively determined the focus for the ensuing group session. Additionally, each participant completed an individual goal-setting sheet (Appendix D) intended to promote higher levels of reflection by provoking them to consider alternatives and establish new directions (Risko et al., 2005). Participants established individual goals for the ensuing 2 to 3 weeks, and indicated the support they
believed would be required to achieve their objectives. Their experiences working towards achieving these goals were then discussed during the following group session.

During the first phase of this study, the form of support participants requested was predominantly in developing expertise with the use of the informal reading inventory to collect, analyze, and interpret evidence of their students’ reading strengths and needs. In providing this support, I first modelled the assessment protocols with participants’ students. Next, participants were supported through guided practice in using the targeted assessment practices and tools. Finally, I taught each participant’s class for three to six periods to provide release time for their independent completion of assessments.

The first phase of this study continued for approximately 3 months, until participants had developed a shared understanding of how to assess students’ acquisition of the early reading skills and strategies as outlined in the provincial curricular support documents (e.g., *A Guide to Effective Instruction in Reading: Kindergarten to Grade 3*, Ontario Ministry of Education, 2003b). The study then progressed to the second phase, during which participants explored how to meet their students’ identified needs.

*Phase two.* The second phase of this study was approximately 3 months duration and focused primarily on aligning participants’ instruction with the needs revealed by analysis and interpretation of their students’ informal reading inventory assessments. Specifically, participants focused on comprehension instruction in attempts to meet their students’ collective needs and on modifying their independent reading practices in attempts to provide differentiated reading opportunities. Table 2 provides an overview of the phase two timelines and professional learning community session foci. Descriptions of sessions 6 through 10 that formed the second phase of this inquiry are provided next.
<table>
<thead>
<tr>
<th>Timeline</th>
<th>Professional learning community session content</th>
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<tbody>
<tr>
<td>Session 6, February 20</td>
<td>The characteristics of proficient readers</td>
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<td>Text structure</td>
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<td>Comprehension instruction</td>
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<td>Session 7, March 25</td>
<td>Participants’ comprehension instructional modification experiences</td>
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<td>Making personal connections to text</td>
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<td>Questioning strategies to foster critical thinking</td>
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<td>Session 8, April 7</td>
<td>Creating and using a levelled book collection</td>
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<td>Building motivation through independent reading</td>
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<td>Independent reading instructional practices</td>
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<tr>
<td>Session 9, April 20</td>
<td>Developing a cumulative profile of reading development</td>
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<td></td>
<td>Tracking procedures to monitor ongoing reading progress</td>
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<td></td>
<td>Participants’ comprehension and independent reading</td>
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<td></td>
<td>instructional modification experiences</td>
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<tr>
<td>Session 10, May 8</td>
<td>Participants’ comprehension and independent reading</td>
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<tr>
<td></td>
<td>instructional modification experiences</td>
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<tr>
<td></td>
<td>Nonfiction text structure</td>
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<td>Independent reading conferencing procedures</td>
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We began the sixth group session reviewing the characteristics of proficient readers, with particular attention to their perception of reading as the process of deriving meaning from text, in contrast with struggling readers, who may perceive reading to be a mechanical process of decoding text (Snow et al., 1998). Next, we reviewed text structure (e.g., story elements) as well as comprehension strategy instruction. The recommended strategies presented included questioning, visualizing, making personal connections to text, predicting, and summarizing (Harvey & Goudvis, 2000; Keene & Zimmerman, 1997; Miller, 2002; Ontario Ministry of Education, 2003b; Pressley, 2002). Sample lesson plans for each of these strategies were reviewed together with corresponding student activities. Participants viewed video segments illustrating primary-grade comprehension strategy instruction and discussed their personal experiences using the targeted strategies. The use of consistent language to label each strategy and the provision of visual prompts to support students’ growth towards independent use of these strategies were also reviewed (Harvey & Goudvis; Miller; Pressley). Participants were each provided with a set of strategy visual prompts for classroom display that included pictorial cues and a corresponding phrase to label each strategy. Additionally, the importance of teaching these strategies through reading aloud to develop listening comprehension was reviewed, as well as providing students with practice using these strategies while reading text at their independent reading levels (Fountas & Pinnell, 1996, 1999; Miller; Ontario Ministry of Education). At the end of this session participants decided to implement a comprehension lesson prior to the next group session. As a function of their limited access to levelled reading material, they also expressed interest in later learning how to create and use a levelled book collection.
Participants' experiences implementing comprehension lessons were then reviewed at the outset of the seventh session. As a function of their interests, we focused explicitly on exploring questioning strategies to promote higher level inferential thinking, as well as how to enhance students' abilities to make "text-to-text," "text-to-self," and/or "text-to-world" personal connections (Harvey & Goudvis, 2000; Miller, 2002; Ontario Ministry of Education, 2003b). Participants decided to sustain their focus on implementing comprehension lessons prior to the next group session. Continued concerns about limited levelled reading material available for independent reading led participants to decide to focus our next group session on creating a levelled book collection.

Our eighth session was an after-school workshop addressing the criteria for book levelling together with procedures that could be used to develop and use a levelled book collection (Fountas & Pinell, 1996, 1999). Participants were provided with an overview of the features that contribute to textual scaffolding (Fountas & Pinell, 1996, 1999) and supported practice in determining the reading levels of books at primary-grade levels. An overview of independent reading practices that could be used to support students' reading motivation and confidence as recommended within the Four Blocks Literacy Framework (Cunningham & Allington, 1999) was also provided. At the end of this session participants established individual goals related to independent reading and/or comprehension lesson modifications and expressed collective interest in developing a cumulative profile of students' reading growth in the primary grades.

At the outset of our ninth group session, we reviewed their objectives in creating a cumulative assessment profile to facilitate the provision of ongoing responsive programming. The developmental continua of early reading and associated instructional
strategies as outlined in the document, *A Guide to Effective Instruction in Reading: Kindergarten to Grade 3* (Ontario Ministry of Education, 2003b) was then used to delineate the targeted skills and strategies at each grade level. Participants collaboratively decided to collect evidence of students' growth in reading comprehension and fluency through use of the informal reading inventory once per term. Additionally, they chose to include students' developmental spelling results to provide ongoing evidence of their acquisition of phonemic awareness and letter-sound correspondence skills, as well as students' grade-specific sight word recognition results. These assessments were also to be completed once per term. I offered to create tracking sheets as a system for monitoring students' cumulative progress for participants' review and approval after they had determined the assessments that would meet their needs. The final segment of this session was devoted to reviewing participants' comprehension lesson and independent reading modifications experiences. They then decided to explore nonfiction text structure and independent reading conferencing procedures during our next group session.

We began our 10th session reviewing participants' independent reading session modifications and recent comprehension lesson experiences. The focus of this session moved next to nonfiction text structure, during which Judy shared an overview of the nonfiction unit that she was about to implement. We also examined a nonfiction text conventions notebook protocol developed by Miller (2002) that could be used to enhance primary-grade students' abilities to understand nonfiction text. Next, we explored independent reading procedures as advocated within the Four Blocks Literacy Framework (Cunningham & Allington, 1999), with specific attention to teacher-student conferencing procedures. During the final segment of this session, participants
collaboratively modified draft tracking sheets that I had developed for their cumulative assessment profiles. I recommended that the final phase of this inquiry be devoted to consolidation of understandings. Participants agreed to explore methods to foster sustainable change in their practices and requested that our next session be devoted to exploring methods to facilitate their independent collection of third term assessment data.

During the second phase of this study, participants continued to request support in achieving their individual proximal goals. The support requested was predominantly in developing expertise with planning for comprehension instruction as well as the creation and use of a levelled text collection. While the specific strategies focused on during individualized coaching varied, I assisted each participant with lesson planning, modelling evidence-based practices through demonstration lessons, as well as providing feedback and support as participants independently implemented comprehension instruction lessons. Additionally, each participant was supported in creating a levelled text collection, through modelling, followed by guided practice with book levelling.

Primary phase two data sources included scheduled observations gathered semimonthly during reading lessons in each participant’s class, individual interviews (Appendix E), field notes collected during all individual coaching interactions, transcriptions of and field notes from all professional learning community sessions, as well as participants’ goal-setting sheets (Appendix D) as completed at the end of each group session. Artifacts (e.g., lessons plans, assessment tools) were also collected as supplementary sources throughout phase two to corroborate data collected through the primary sources. Field notes were also gathered during unscheduled informal lesson observations in each participant’s classroom each week throughout phase two to
corroborate participants’ self-reported changes in practices (Gay & Airasian, 2003).

*Phase three.* The final phase of this study focused primarily on developing procedures for participants’ independent collection and collaborative use of reading assessment data. Additionally, the effects of this initiative on their reading-related beliefs and practices were explored. Professional learning community sessions and individualized coaching continued during this final phase that was approximately one month’s duration. Table 3 provides an overview of the phase three timelines and foci for group sessions 11 through 15 that are described next.

Our 11th session began with participants sharing their comprehension instruction and independent reading programming modification experiences and any related concerns. The focus of this session moved next to developing procedures for participants to sustain their reformed reading assessment practices. Of particular importance was determining how they could collect their third term assessment data without my provision of release time. Consequently, the primary focus of this session was determining ways that participants might organize instructional time to facilitate this process. Participants debated methods to support one another, and I shared strategies that other teachers had found effective in doing so (e.g., combining classes for a special event). While I offered to continue to assist participants in planning and/or deconstructing lessons or their students’ assessment results, I shared my perception of the importance of their development of internal support structures, without which continued collection and use these data may be unsustainable. After considering alternatives, participants developed action plans to facilitate collection of their third term assessment data, with their progress in doing so the designated focus of our next group session. Participants also expressed
Table 3

*Phase Three Overview*

<table>
<thead>
<tr>
<th>Timeline</th>
<th>Professional learning community session content</th>
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<tbody>
<tr>
<td>Session 11, May 25</td>
<td>Participants’ comprehension and independent reading</td>
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<td></td>
<td>instructional modification experiences</td>
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<td></td>
<td>Establishing plans for collection of third term assessment</td>
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<td>data without the provision of release time</td>
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<tr>
<td>Session 12, June 5</td>
<td>Participants’ comprehension and independent reading</td>
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<td></td>
<td>instructional modification experiences</td>
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<td></td>
<td>Participants’ needs with respect to collection of third term assessment data</td>
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<tr>
<td></td>
<td>collaborative use of results</td>
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<td></td>
<td>Establishing plans for guided observations</td>
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<tr>
<td>Session 13, June 12</td>
<td>Half-day observations in public school mentor teachers’ classrooms</td>
</tr>
<tr>
<td>Session 14, June 25</td>
<td>Collaborative review of student assessment profiles</td>
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<td></td>
<td>Planning how to use the results to implement responsive programs during the forthcoming school year (e.g.,</td>
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<td></td>
<td>delineating students’ needs, securing support and materials)</td>
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<tr>
<td>Session 15, June 27</td>
<td>Celebrating the accomplishments of the group</td>
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interest in observing the reading practices of public school teachers.

After sharing their continued experiences modifying their independent reading and comprehension instruction practices during our 12th session, participants next discussed their progress collecting assessment data, together with their need for time to collaboratively review their incoming students’ results in order to plan for responsive programming. In addition to establishing plans for this collaborative review, we established plans for participants to visit public school classrooms to observe the reading program at their assigned grade level. These visitations were in response to requests to be able to compare their current practices to those implemented by public school teachers.

The 13th session of this inquiry consisted of half-day guided observations that included viewing the guided reading lessons and independent reading sessions as implemented in public school mentor teachers’ classrooms. The observation sites were selected on the recommendation of the literacy consultant for the public school board and I accompanied each participant in order to deconstruct their experiences subsequently and relate their observations to their current instructional practices and future goals.

The final formal half-day group session of this study included the 3 participants as well as the fourth grade and kindergarten teachers. The objective of this session was to collaboratively deconstruct students’ assessment profiles and determine how they could be used to implement responsive programming for the ensuing school year. Participants worked to determine the individual and collective needs of students to be placed in their class for the forthcoming school year as well as how their needs could be met best. Particular attention was devoted to the instructional strategies and materials that would be required as well as identifying students in need of additional support.
At the conclusion of this inquiry, participants and I took part in a celebratory luncheon, during which they shared their successes, challenges, and future goals. Participants also explored ways in which their focus on reading assessment and instruction could be sustained over the forthcoming school year.

As in previous phases, participants completed goal-setting sheets at the end of each group session and I continued to provide the support requested. During this final phase this support was predominantly the provision of resources that would enable participants to continue to develop their skills planning for comprehension instruction and/or modifying their independent reading practices with increasing independence.

At the conclusion of the study, the effects of participation in this professional learning community and associated individualized coaching on teachers' classroom-based reading beliefs and practices were examined. Primary data sources included interviews (Appendix F), field notes and transcriptions of professional learning community sessions, semimonthly formal classroom observations and field notes gathered during post observation discussions, field notes gathered during all coaching interactions, goal-setting sheets (Appendix D), as well as summative written reflections (Appendix G) completed by participants.

Supplementary phase three data sources included survey questionnaires (Appendix C), as well as artifacts (i.e., lessons plans, assessment tools). Field notes were also collected as supplementary data during unscheduled lesson observations in each participant’s classroom each week throughout phase three to corroborate all self-reported changes (Creswell, 2002; Gay & Airasian, 2003).

Summary of data collection methods. Following data collection techniques
associated with case study methodologies (Creswell, 2002; Merriam, 2001; Yin, 2003), multiple forms of evidence were gathered during each of the three phases of this inquiry. The use of many primary and supplementary data collection methods provided for triangulation of evidence to promote the credibility of the research findings (Creswell; Gay & Airasian, 2003; Merriam; Miles & Huberman, 1994; Yin).

Primary data collection methods included the following six sources:

1. participants' responses to three semistructured individual interviews conducted at the outset (Appendix B), during the second phase (Appendix E) and upon conclusion of this study (Appendix F);

2. field notes and transcriptions of all semimonthly professional learning community group sessions;

3. 40-minute scheduled formal observations gathered a minimum of twice each month during reading lessons in each participant’s classroom, together with field notes and informal interview data collected with participants following these observations;

4. participants’ individual goal-setting sheets (Appendix D) as completed at the conclusion of each semimonthly professional learning community session;

5. field notes and informal interview data collected with participants during all individual classroom-based coaching interactions; and

6. participants’ final written reflections (Appendix G) about their experiences including their perceptions of changes in their reading-related beliefs and practices, together with factors they believed affected these changes.

Supplementary data sources included individual participant survey questionnaires
completed at the beginning and conclusion of the study (Appendix C) as well as field notes gathered during informal classroom observations in each participant’s classroom each week throughout the second and third phases of this study, and artifacts (e.g., lesson plans, reading assessment tools) collected from participants throughout the duration of the study. These surveys, field notes, and artifacts were used to corroborate and support teachers’ beliefs and practices as defined through the six primary data sources. Detailed descriptions of the primary and supplementary data collection tools, together with the rationale for their use, are provided next.

Data collection tools. Participants took part in three individual semistructured interviews, with each lasting between 1 and 2 hours. Interviews were scheduled at a time and place of convenience for participants. Preliminary interviews were held following the introductory professional learning community session and completion of initial survey questionnaires (Appendix C).

The initial interviews (Appendix B) gathered demographic and school contextual information in addition to participants’ perceptions of the ideal, as well as their own current, reading instructional and assessment practices. Participants’ demographic information (e.g., teaching experience), self-perceptions of teaching competence (e.g., teaching strengths, challenges), and school contextual information (e.g., community support, collaborative working relationships) provided insights into their self-efficacy beliefs and perceptions of the effects of the school context on their efficacy and instructional practices. This information, together with participants’ current reading assessment and instructional practices as well as their perceptions of ideal reading practices and the specific practices they were interested in exploring, provided a baseline
from which to develop the foci of the small-group professional learning community and individualized coaching sessions.

The second interviews (Appendix E) were conducted early in phase two, with the final interviews (Appendix F) held at the end of the study. These two interviews were intended to solicit participants' evolving perceptions of the effects of this professional development initiative on their reading practices and associated beliefs as well as on the school context (e.g., collaborative relationships). Questions addressed participants' perceptions of their strengths and weaknesses, ideal practices, current practices, and the factors they believed affected their abilities to alter their practices and associated beliefs. As part of their final interviews, participants were also asked to elaborate on specific changes in their practices that had been defined through preliminary data analysis and discuss factors they believed constrained or promoted these changes (Gay & Airasian, 2003; Miles & Huberman, 1994; Yin, 2003).

Additionally, prior to their final interviews, participants prepared written reflections (Appendix G) about their experiences throughout this initiative, with attention to describing any changes in their reading-related beliefs and practices throughout the duration thereof, as well as the factors they believed affected their change processes. These written reflections ranged between two and three pages in length. Prior to their final interview, participants also completed individual survey questionnaires (Appendix C). Participants’ final surveys and summative written reflections were collected during their final interviews and used to corroborate the views they expressed.

All semimonthly professional learning community sessions, with the exception of the introductory session, were audio-recorded and transcribed for later analysis.
Additionally, researcher field notes were gathered during each session, and participants completed individual goal-setting sheets (Appendix D) at the conclusion of each of these sessions. These planning tools were intended to enhance participants’ abilities to relate their current practices to those advocated during each session as well as enhance their abilities to reflect critically, establish new directions, and achieve personally relevant goals (Kelleher, 2003; Risko et al., 2005).

Teachers’ self-reported information (e.g., espoused practices) during all phases of this study were corroborated by researcher’s field notes gathered a minimum of twice each month during 40-minute scheduled formal observations of reading lessons in each participant’s classroom together with informal interviews following these observations. To ensure these observations were multifaceted, an adaptation of the CIERA observation scheme (Taylor, Pearson, Peterson, & Rodriguez, 2005) was used. Each observation included the following five dimensions of teachers’ practices: (a) instructional grouping (e.g., whole class, partners); (b) literacy focus (e.g., vocabulary, comprehension strategy, word recognition); (c) instructional material (e.g., narrative or nonfiction trade book, basal reader); (d) teacher interaction style (e.g., telling, modelling, reading aloud); and (e) expected pupil response (e.g., reading, listening, orally responding). In keeping with Pressley and Hilden’s (2005) recommendation, as qualitative rather than quantitative analyses were intended, these observations were recorded in longer segments than the 5-minute protocol followed by the CIERA group. Specifically, the observations were recorded in natural lesson segments (e.g., before, during, and after reading activities).

Field notes and informal interview data were also collected each week prior to, during, and following all individualized classroom-based coaching sessions throughout
this study. Additionally, supplementary data collection methods included informal observations gathered through field notes collected each week throughout the second and third phases of this inquiry during unscheduled observations in each participant’s classroom. These observations were intended to control for observer effects during scheduled formal observations and were used to corroborate participants’ espoused practices as expressed during professional learning community sessions and individual interviews (Gay & Airasian, 2003).

Additionally, supplementary data collection methods included individual participant surveys (Appendix C) completed twice during this study. Immediately prior to their initial individual interview as well as prior to their final interview, participants completed survey questionnaires exploring their theoretical orientations to reading instruction as well as their self-efficacy beliefs. Completing these surveys immediately prior to their interviews was intended to activate participants’ prior knowledge about reading instruction and enhance their metaconceptual awareness of their related beliefs.

The participant survey (Appendix C) included items modified from the Literacy Orientation Survey (Lenski et al., 1998) developed to explore the congruence between teachers’ literacy beliefs and practices. Lenski and colleagues used classroom observations of 42 teachers to establish the face and ecological validity of this tool, highlighting how it could be used to enhance teachers’ awareness of their practices and associated beliefs. The participant survey (Appendix C) also included the Teachers’ Sense of Efficacy Scale (Tschanne-Moran & Woolfolk Hoy, 2001), a widely used instrument developed to measure teachers’ self-efficacy for student engagement, classroom management, and instructional strategies. Participants were asked to rate each
of the survey items on a Likert ordinal scale. These data were used as supplementary sources to corroborate the findings obtained through qualitative interview, professional learning community group, participant goal-setting, classroom observation, field note, and written reflection data with respect to the effect of participation in this initiative on teachers’ self-efficacy and reading beliefs and practices.

As teachers’ beliefs are an elusive construct, the use of survey instruments in capturing these understandings was intended to provide for triangulation of evidence to promote the credibility of findings with respect to the effects of this professional development initiative on teachers’ reading and self-efficacy beliefs (Lenski et al., 1998; Tschannen-Moran & Woolfolk Hoy, 2001). As part of their final interview, each participant was provided with their completed surveys and asked to comment on any changes they noted on their pre-and postinitiative responses together with their perception of the factors that affected any changes.

Additionally, artifacts (e.g., reading lesson plans, assessment tools, assessment-tracking sheets) were collected as supplementary data sources throughout the duration of this study. These artifacts were compiled chronologically to document participants’ changes in reading practices and corroborate data obtained through the primary sources.

Data Analysis Procedures

Multiple levels of data analysis were used to explore the layers and complexities of change experienced by participants throughout this study. Data collected from each participant were analyzed first as a single-case study, followed by cross-case analysis (Merriam, 2001; Yin, 2003). Briefly, primary data analysis consisted of coding and categorizing as described by Creswell (2002), Merriam, and Yin. Additionally,
descriptive statistics gathered from survey data were used as supplementary data. Secondary data analysis involved comparison of the patterns identifying each participant’s change process with the sequences outlined in the CAMCC (Gregoire, 2003) and the IMTPG (Clarke & Hollingsworth, 2002).

Primary data analyses. Primary analysis of qualitative data (i.e., interview transcripts, group session transcripts, classroom observations and field notes, coaching field notes and informal interview data, goal-setting sheets, written reflections) involved coding and categorizing as described by Creswell (2002), Merriam (2001), and Yin (2003). All individual interviews and professional learning community group sessions were transcribed and compiled chronologically. To ensure the accuracy of all transcriptions as completed by a professional transcriber, the researcher listened to each tape following transcription, tracking and revising the completed transcriptions prior to forwarding each to the participants for member-checking (Tilley & Powick, 2002).

As a constructive case study, data analyses were an iterative, ongoing process throughout the study (Creswell, 2002; Yin, 2003). Participants were provided with written transcripts of their individual interviews, field notes, and classroom observations gathered during interactions with them, as well as transcriptions of all group sessions. Participants were invited to clarify, qualify, edit, and/or elaborate on their responses and comments as well as any conclusions based on them (Creswell; Miles & Huberman, 1994). In this way, data validation and verification were enhanced through the process of ongoing participant member-checking (Creswell; Gay & Airasian, 2003; Miles & Huberman). Participants verified their individual interview, field note, and classroom observation data throughout the duration of this study. However, upon receipt of the
transcription of the second professional learning community group session of over 100 pages in length, each participant elected to verify their comments and interactions as selected from these session transcripts rather than review each in its entirety.

Data collected from each participant were compiled chronologically as a single case. Initial analysis consisted of obtaining a holistic view of each participant's experiences through multiple readings of the data collected on an ongoing basis throughout this initiative (Creswell, 2002; Gay & Airasian, 2003; Merriam, 2001; Yin, 2003). This preliminary exploratory analysis was documented through memos or notes written following each interaction (e.g., interview, observation, coaching session, professional learning community session), with these notes documenting initial ideas or concepts that appeared to be emerging in the data (Creswell; Gay & Airasian; Merriam). This iterative process provided opportunities for the researcher to ask participants to clarify or qualify their beliefs and practices in subsequent interactions, with this particularly so during their final interviews, at which time they were asked to elaborate on their change processes throughout the duration of this initiative as defined through preliminary analyses (Creswell; Gay & Airasian; Merriam; Miles & Huberman, 1994).

Following final interviews, data compiled from each participant were analyzed through coding and categorizing as described by Creswell (2002), Merriam (2001), and Yin (2003). Each participant’s interview, professional learning community group, field note, classroom observation, goal-setting, and written reflection data were coded into idea units representing each of the two units of analysis, that is, (a) their reading-related beliefs and (b) their reading-related practices (Yin). Whereas all interview and professional learning community session data were coded electronically using the
highlighter function of a word processing program, all field note, classroom observation, written reflection, and goal-setting data were coded manually with coloured highlighters.

All espoused changes were corroborated between sources of evidence. Here particular attention was devoted to verifying all participants’ self-reported changes in reading practices, through corroboration with observed changes as reflected in data collected during the researcher’s scheduled classroom observations, with these corroborated further by reviewing data gathered during informal, unscheduled classroom observations. Data with respect to the latter were gathered each week during the final two phases of this inquiry to control for observer effects and determine whether participants’ instructional modifications were temporary changes enacted primarily during scheduled observations or alternatively, were implemented irrespective of whether participants were being formally observed (Creswell, 2002; Gay & Airasian, 2003).

Each participant’s reading-related beliefs and practices as defined through initial coding were then analyzed for negative cases, or discrepant data (Gay & Airasian, 2003; Merriam, 2001). Through this process, all data were reanalyzed, locating any data that contradicted an emerging pattern, thereby negating the researcher’s initial impression or interpretation, with these discrepant events then noted within each participant’s case study or the initial interpretations thereof revised according (Gay & Airasian; Merriam).

The coded units as revised were then used to compile a thick, descriptive chronology of each participant’s changes in reading-related beliefs and practices (Merriam, 2001; Yin, 2003). Each description was organized around the key events or components of the participant’s experiences within their classroom setting and/or the professional learning initiative that affected their change processes (Gay & Airasian,
2003; Yin). These descriptions included an overview of the participant’s classroom organizational practices, their initial reading assessment and instructional practices, followed by their changes in each of these areas. In order to contextualize participants’ change patterns, their interactions with their students, one another, and the researcher were included in these descriptions (Gay & Airasian; Merriam; Yin).

Participants’ individual case studies were then compiled and summarized in descriptive narratives organized around the key components and events. To enhance construct validity, each participant was provided with a copy of their completed case study as presented in Chapter Four and invited to clarify, qualify, edit, and/or revise any aspect thereof (Gay & Airasian, 2003; Miles & Huberman, 1994; Yin, 2003). Two participants suggested minor changes, after which their case studies were modified accordingly. This process was intended to promote the credibility of the findings by involving participants in collaboratively constructing meaning and interpreting their experiences (Creswell, 2002; Guba & Lincoln, 1994; Miles & Huberman; Yin).

Each participant’s case study was then reanalyzed for emerging patterns and trends following coding and categorizing as described by Creswell (2002), Merriam (2001), and Yin (2003). Specifically, each single case was analyzed for idea units representing factors that had affected participants’ changes in reading-related beliefs and reading-related practices. Each of the identified idea units or factors (e.g., guided practice using new methods) was then collapsed into categorical clusters (e.g., support), with these categorical clusters then collapsed to form general patterns (e.g., resources) or themes (Creswell; Miles & Huberman; 1994; Yin). In order to verify the credibility of these findings, a trained research assistant with expertise in reading instruction and
professional development was employed as a second rater who independently coded and
categorized the data presented in each case study (Creswell; Gay & Airasian, 2003). The
two researchers then compared their independently coded units, with any disagreements
resolved through discussion until consensus on the most appropriate code was reached
(Creswell). Next, participants were invited to clarify, qualify, or edit the researchers’
interpretations of the factors that affected their change processes (Creswell; Miles &
Huberman; Yin). Participants did not suggest any modifications to the identified factors.

Cross-case analysis followed next, during which the experiences of each
participant were compared and contrasted with those of the other two participants.
Following cross-case analysis procedures described by Creswell (2002), Merriam (2001),
and Yin (2003), data were entered into a matrix organized around the themes (e.g.,
resources) identified through analysis of each participant’s single-case study. Each theme
was subdivided to include each of the idea units (e.g., guided practice using new
methods) identified in each participant’s case. Presenting the data in this matrix provided
the opportunity to compare and contrast the role of each specific idea unit as well as each
theme (i.e., factor) in each participant’s change processes (Merriam; Yin).

Descriptive statistics were used to analyze participants’ Likert ordinal scale
responses from the survey questionnaires (Appendix C). These data were used as
supplementary sources to corroborate the coded units. Similarly, artifacts (e.g., lesson
plans, assessment tools), field notes, and informal classroom observations gathered
throughout the study were used as supplementary sources to corroborate the findings.

Secondary data analyses. Secondary analysis consisted of inductive coding,
during which each participant’s experiences were first compared to the change sequences
and growth patterns outlined in the IMTPG (Clarke & Hollingsworth, 2002). Next, each participant's experiences were compared to the dual process model of conceptual change represented by the CAMCC (Gregoire, 2003). During each of these secondary analysis processes, the patterns explored were those related to the four primary aspects of teachers' practices focused on during this study. These included: (a) use of an informal reading inventory, (b) comprehension instruction, (c) independent reading practices, and (d) cumulative reading assessment portfolio development and use.

Inductive coding using the IMTPG (Clarke & Hollingsworth, 2002) began with identifying and chronologically categorizing teachers' knowledge and beliefs with respect to each of the four aspects of their practices focused on during this study. Teachers' initial understandings with respect to each of these aspects were coded as their personal domain (PD), from which relationship one, their first change sequence, was established. Next, within each of the four subsets for each individual teacher, the data were connected chronologically to change sequences progressing between the four domains of the IMTPG. These included the external domain (ED; e.g., information provided during professional learning community sessions, coaching); domain of practice (DP; e.g., classroom activities, interactions with parents); and domain of consequence (DC; e.g., teachers' professional confidence, students' learning gains). To characterize each teacher's personal change sequences and growth patterns, the sequential relationships between the four domains were determined for each of the four identified aspects of their practices. Of particular interest was the role of professional experimentation and student-learning gains that teachers attributed to use of new practices, together with the incremental steps taken during their change processes.
Next followed inductive coding using the progressions depicted within the CAMCC (Gregoire, 2003) developed to explore and explain teachers' belief change processes in response to persuasive curricular reform messages. Participants' reactions were first analyzed when the initial persuasive message for each of the four major suggestions for change (i.e., use of informal reading inventories, comprehension instruction, modification of independent reading practices, cumulative assessment portfolios) was presented. For example, participants' reactions to the use of an informal reading inventory were first analyzed as expressed during the professional learning community session in December, when such tools were recommended. Their reactions to suggestions for comprehension instruction lesson modifications were first analyzed as expressed during the group session in February, when these practices were proposed. The effects of stress appraisal, motivation, efficacy, and the availability of sufficient resources (e.g., time, materials, knowledge) on teachers' change processes as outlined in the CAMCC were related to participants' experiences. Next, this process was repeated, analyzing participants' responses to the reintroduction of each of these messages during subsequent group sessions, once again comparing participants' actions and reactions to the progression of the CAMCC. Particular attention was devoted to if and how the factors outlined in the model (e.g., stress appraisal, motivation, ability) changed over time and affected participants' abilities to systematically process the reform messages presented.

Methodological Limitations

The small sample population and context-specific needs, interests, and abilities of participants in this study may render it difficult to generalize the findings to a larger population. However, the purpose of case study research is to illuminate understandings
through capturing the complex interaction between factors that affect participants’ experiences in the exploration of a phenomenon that is unique or unusual rather than to test a hypothesis and generalize findings (Merriam, 2001; Yin, 2003). The insights derived from this study will add to the existing literature and enhance understandings about teachers’ beliefs, the relation of these understandings to teachers’ practices, and the processes through which teachers may change their reading-related conceptions.

As beliefs are an elusive construct (Tschannen-Moran & Woolfolk Hoy, 2001), it may be difficult to determine whether the beliefs expressed throughout this study were participants’ actual or espoused beliefs. In keeping with Pajares’s (1992) assertion that “if reasonable inferences about beliefs require assessments of what individuals say, intend, and do, then teachers' verbal expressions, predispositions to action, and teaching behaviours must all be included in assessments of beliefs” (p. 327), the use of multiple forms of data collected over an extended time period enhanced the potential to capture teachers’ actual beliefs (Creswell, 2002; Gay & Airasian, 2003 Miles & Huberman, 1994). Additionally, the relatively short duration of this study may have limited the potential to promote change (Clarke & Hollingsworth, 2002; Gregoire, 2003; Pajares).

**Researcher’s Role and Potential Ethical Issues**

During this study, I assumed the roles of interviewer, professional learning community group facilitator, mentor, coach, and participant-observer. As a participant-observer, there existed the potential for observer bias, particularly in the collection of field notes (Creswell, 2002; Gay & Airasian, 2003). Additionally, there was the potential for a halo effect, whereby interactions with a participant in one encounter affected subsequent interpretations of interactions with that participant (Gay & Airasian). There
also existed the potential for observer effects, whereby participants altered their behaviours, interactions, or responses because they were being observed or interviewed (Gay & Airasian). That is, participants may have conducted lessons or provided responses that were those they presumed I would like them to provide, and/or my interpretations of participants’ responses to have been affected by my other interactions with them. Prolonged engagement, the collection of multiple sources of evidence over time, together with the inclusion of both formal scheduled and informal unscheduled classroom observations were intended to reduce the potential for observer effects (Creswell; Gay & Airasian; Merriam, 2001; Miles & Huberman; Yin, 2003).

Despite the limitations associated with assuming multiple roles, doing so acknowledged the potential to acquire in-depth insights that may otherwise have been unattainable (Creswell, 2002; Gay & Airasian, 2003; Yin, 2003). Multiple data collection methods, member-checking procedures, together with an independent second rater during data analysis, were intended to diminish the potential for bias and promote the credibility of findings (Creswell; Gay & Airasian; Miles & Huberman, 1994; Yin).

**Ethical Review**

This study followed the conventions for ethical research outlined in the Tri-Council Policy Statement on Ethical Conduct for Research Involving Humans, August 1998. Brock University Research Ethics Board (Appendix H) and the Board of Directors of the independent school approved this research. Embedded within the Brock University ethics documents were procedures to ensure participants’ voluntary involvement, informed consent, privacy, confidentiality, as well as participants’ verification of the accuracy of data collected and the researchers’ interpretations of this information.
CHAPTER FOUR: FINDINGS

This inquiry used case study methodology to investigate the conceptual change processes of 3 primary-grade teachers, Emma, Judy, and Violet, throughout their participation in a 7-month professional learning initiative focused on reading assessment and instruction. In this chapter the experiences of each individual are presented first as a single case represented in the format of a descriptive narrative chronicling their change processes, with the three single cases followed next by cross-case analyses.

Within each single-case study, background information about the participant, their students, classroom organization, and management, precedes an overview of their initial practices and rationale for participating in this study. Next follows their experiences modifying their reading assessment practices and using these insights to modify their instructional practices. Each case study concludes with the participant’s perceptions of their personal accomplishments and the factors that affected their change processes. While each single case focuses on the experiences of one individual, their interactions with other participants, their students, and the researcher during the professional learning initiative have been included to contextualize their experiences.

Through coding and categorizing as described by Creswell (2002), Merriam (2001), and Yin (2003) six factors were identified as affecting the change processes of each individual. These included: (a) motivation for change, (b) professional knowledge, (c) professional beliefs, (d) resources, (e) uncontrollable influences, and (f) differentiated professional learning opportunities. Following the presentation of the three single-case studies, a cross-case analysis is presented where the role of each of these factors in the three participants’ change processes are compared and contrasted.
Emma: Nurturing the Whole Child

Emma completed her teacher education nearly 20 years ago. Having taught grade 1 or grade 2 for 10 years in independent schools across Ontario, Emma was confident in her ability to be responsive to her students’ needs. She presented herself as a nurturing individual who credited her teaching abilities to her formal education, teaching experiences, as well as insights she had gleaned as a mother.

When you have your own children you realize, “well if somebody is yawning a lot, I am probably not going to get as much through to that person.” I have had my own kids and I know. It [having children] changes you because you think, “I want every teacher that has my child to love them.” (Emma Interview 1, November 29)

After teaching for 5 years, Emma temporarily left the profession for over 10 years to raise her own children. This was her fifth year of teaching following this absence, and Emma juggled her time in order to balance her ability to meet the needs of her students with the demands of her active family life. She believed that teaching grade 1 required considerable positive energy and patience, with these attributes affected by personal circumstances. Emma acknowledged that when her home life was hectic, her patience for her young students was lower, as were her abilities to interact with them positively.

I think my family life is quite busy as my children get older. I wasn’t teaching when they were younger, and when I was tired, it didn’t affect anybody else. But now, if the evening before has been really crazy hairy busy and then I come to school, I’m not as patient as I would like myself to be. (Emma Interview 1, November 29)

Emma was appreciative of the positive relationships between staff, administration, and parents in this school community. She highlighted how the majority of her students came from supportive homes that provided them with the resources required for learning. “By and large academically they [my students] are ready to learn. I don’t want to say they are really smart because that’s not always the case. But I think
they have the advantage of having family support” (Emma, Interview 1, November 29).

*The Learning Environment*

Each day, the sounds of students enthusiastically sharing their ideas resonated in Emma’s grade 1 classroom. The 21 students eagerly shared their thoughts with one another and their teacher and seemed to find a way to relate their personal anecdotes to each day’s lessons. Although these interjections were at times profuse, Emma’s belief that oral language experiences are critical building blocks to early literacy prompted her to promote these interchanges. “Well, what they need is a strong vocabulary, they can talk well” (Emma Interview 1, November 29). Emma encouraged all students’ responses, irrespective of whether or not they were on topic. When students provided incorrect responses, Emma rephrased their statements in order to validate their responses while simultaneously maintaining the focus of her questions.

After reviewing the basal reader story *Yuk Soup*, Emma asked, “What is your favourite soup?” When a student responded, “I like spaghetti and meatballs,” Emma inquired, “Do you mean you like meatball soup?” The student smiled and said “yes.” (Researcher’s Field Notes, December 1)

Emma wanted her students to enjoy school and believed that this was contingent, in part, on her ability to develop positive relationships with them. She described her abilities to enjoy and relate to her young students as her greatest strengths as a primary-grade teacher.

I think I have a good sense of humour, which helps me to be able to have fun with the children. I am hoping that they love to come to school because we have fun and they are eager to see their teacher. Just getting through certain situations where a student is driving you crazy, I make light of it and get them to see how silly they are. I think that helps me to be effective. (Emma, Interview 1, November 29)

Emma’s belief in the importance of creating a positive climate for learning affected her
classroom management, which was calm, kind, and preventative. The students in her class appeared eager to please their teacher, and Emma capitalized on this by affirming students who were exhibiting appropriate classroom behaviours. She seemed to be particularly attentive to “catching students being good,” especially with those students who were not always so inclined.

When two students did not sit down promptly on the carpet, Emma ignored their behaviour and praised those who followed the routines. She made specific mention of a student who at times did not follow the guidelines consistently, saying, “I like the way Brett [pseudonym] is sitting so nicely and ready to start.” (Researcher’s Field Notes, December 15)

Emma actively engaged her students in her lessons and rarely, if ever, raised her voice or visibly lost her patience. When she needed to refocus her class, Emma began a series of hand-clapping patterns that her students echoed in unison.

The grade 1 high frequency word wall was at the front of Emma’s classroom in clear view of all students. Sharing this prominent place were visual displays of word family charts, decoding strategy prompts, and sentence strip activities arranged in a pocket chart for ongoing use in reading lessons. Students’ work also occupied a place of prominence in the room. Colourful displays of student work that adorned the walls and windows were changed regularly. Desk arrangements were also changed frequently, with configurations including groupings of four to six students, partners, and a horseshoe “U.” Students’ placements within these arrangements were determined with attention to creating harmonious working groups that would optimize learning experiences and provide peer support. Students’ desks were located close to the front of the room, providing sufficient space for a large carpeted meeting area at the back.

Emma was ever mindful of the potential effects of her curricular decisions on her
young students’ self-esteem and motivation for learning. The students in her class had a wide range of abilities, with some able to read far in excess of the grade 1 expectations and others lacking critical building blocks for early reading (e.g., phonemic awareness, letter/sound correspondence). Emma wanted all students to feel as successful and capable as their peers. In an attempt to foster an “I can” attitude and de-emphasize attention to differing abilities, Emma avoided ability grouping and provided predominantly large-group instruction.

I used to break my students up into groups, and I haven’t done that in the last couple of years because then right away, certain kids thought, “Oh, I think that means I’m slow” no matter what you called it [the groups], bird groups or whatever. They figured it out. So, I pulled back from that [small-group instruction], because the ones that can read well, their self-esteem is okay. And the ones whose self-esteem is a little on the edge, I think they don’t need that [overt acknowledgment of their abilities]. (Emma, Interview 1, November 29)

While Emma’s students completed related seatwork activities following her whole-group lessons, she circulated amongst them and provided one-on-one assistance as required.

Initial Reading Program

At the outset of this project, the primary focus of Emma’s reading program was on the development of students’ vocabulary, background knowledge, decoding skills, and motivation for reading. Emma used an eclectic composite of activities from the commercial basal reading and phonics programs used throughout the primary grades, and activities she had developed to immerse her students in oral language and authentic text.

Over the course of the 7-month initiative, Emma altered her instructional practices to include an increased emphasis on comprehension instruction, story grammar, and levelled text. The predictable sequence of Emma’s reading lessons, however, remained consistent throughout the year, with familiar routines enabling her students to transition
from one activity to the next with minimal loss of instructional time.

Each day began with a one-sentence secret message written on the blackboard, where one word was covered by a piece of paper. Emma used an enthusiastic tone of voice to engage her students in reading the printed sentence orally in unison, after which they used the context of the sentence to generate a list of potential “secret words.” Once several possibilities including the “secret word” had been recorded on the blackboard, Emma provided students with other clues about the missing word designed to encourage their use of phonics and word identification skills (e.g., it has two vowels). The class worked co-operatively to eliminate word choices inconsistent with her clues until the missing word was determined from the list. The “secret word” in the sentence was then uncovered and the sentence read-aloud by a selected student.

Next, the students moved to the large carpeted meeting area where they engaged in activities designed to build calendar and other early math skills such as counting by 2s, 5s or 10s. This was followed by sharing time where a designated group of five students shared personal anecdotes or objects, with their peers asking questions following each oral presentation. At the conclusion of this 10-to15-minute interval, the students returned to their desks to begin their daily “sentence in a bag” language experience activity.

Students opened their bags and took out their pictures under which the sentences they dictated earlier in the week were printed. They then matched each word from the duplicate copy of this dictated sentence to the identical word printed under their picture. As they finished this one-to-one correspondence activity, they read their sentence to their teacher, who circulated amongst students encouraging and assisting them as required. Students then glued the second copy of each of these words to their sheets and placed their completed sheets in their cubbies to take home. They then selected a trade book to read as they waited for their classmates to finish this activity. (Researcher’s Field Notes, December 1)

Once the daily language experience activity was completed, the designated helper
passed out the materials for the word wall instructional activities. These included the
unison recitation (cheering) of the spelling of five new sight words to be added to the
word wall that week, printing the words and then using them and other high frequency
word wall words in short games or simple sentences. As soon as students finished these
teacher-led activities, they placed their books on the side table for marking and moved to
the carpeted area. Within 2 or 3 minutes, the guided reading lesson began.

At the outset of this initiative, Emma relied on the structure and content of a basal
reading program, although she supplemented each program lesson with authentic text. At
the beginning of each lesson, Emma built her students’ background knowledge through
discussion and reading authentic text, the topic of which related to the basal selection.

I talk to them about the story. When the name of the story is, What Do You Like?,
we talk about things we like, and then we talk specifically about food, because
that is the thrust of the [basal reader] story. Then, I have books from the library
that we read, [for example] Bread and Jam for Francis, books that relate to that
story. (Emma, Interview 1, November 29)

Emma read expressively and engaged her students in anticipating what would happen
next in stories. She paused frequently to discuss new or unusual words, ensuring that all
her students understood the key ideas conveyed within text.

Emma read the trade book Mary Was a Little Lamb aloud with expression and
excitement. When reading she paused to discuss each word in the story that she
thought may be unfamiliar to some children. She asked her students, “Do you
know what abandoned means?” and “Do you know what dilapidated means?”
(Researcher’s Field Notes, January 19)

The reading of authentic text was followed by an introduction of the basal reader story
and relating the key ideas or concepts to those previously contained in the authentic text.
These whole group sessions often included choral or shared reading, with selected groups
of students tracking print as they read designated passages in unison.
Emma stated, “Now we are going to read the story in our reader and see how they are a little bit different and a little bit the same. Boys, can you read the title for me; you need to point to the words as you read for me.” (Researcher’s Field Notes, January 19)

Each reading lesson concluded with students completing related seatwork (e.g., word study or story sequencing worksheets) or dramatic activities (e.g., retelling with props). Emma circulated and provided students with individual assistance as required throughout completion of these activities. Her time here was spent predominantly with the students who struggled with reading. These students often required considerable support, and at times completed their seatwork with little understanding.

When the lesson is above their [struggling students’] heads I don’t want to say, “Oh well just forget it [you don’t need to complete this activity]!” And then I just end up telling them what to write, and so they don’t really know [understand] what they are writing. (Emma, Interview 1, November 29)

Many of Emma’s students appeared to complete these follow-up activities with ease and moved quickly to individual activities of their choice such as completing SRA reading cards or file folder games designed to reinforce phonics or word attack skills.

Daily independent reading was also a central component of Emma’s reading program. At the beginning of the school year, she divided her students into four heterogeneous ability groups and assigned each to a “browsing bin” of children’s literature that she borrowed from the public library. Students looked through the books in these bins after lunch each day. These sessions were intended to enhance their reading motivation, and many of Emma’s first grade students engaged in role-play reading rather than decoding these authentic texts. During these 20-minute periods, Emma encouraged her students’ reading interests and listened to selected students reread passages from their basal readers. Emma’s reading program also included structured phonics lessons two or
three times each week, taught through a commercial workbook program.

*Initial Reading Assessment Practices*

Emma believed that over her years of teaching she had developed a strong intuitive sense of her students’ reading abilities and instructional needs. Observation was her primary assessment strategy. She explained how she reviewed the progress of the children she worked with each day and filed “mental notes” about their progress. At the end of each term, Emma reflected carefully about each student’s skills and progress and used her mental notes to complete a strategy checklist from the teacher’s manual of the basal reading series.

This checklist was comprised of three segments: (a) listening and speaking, (b) reading and writing, and (c) viewing and representing. Items in the reading and writing section included phonemic awareness skills (e.g., rhyming, recognition of initial consonant sounds), print concept skills (e.g., matching speech to print, rebuilding text), and reading strategies (e.g., using picture or context cues to decode unknown words, rereading to confirm meaning). As an additional assessment, Emma’s students completed a teacher-made “word recognition test” that was administered by a retired teacher.

What I do is I make up sentences using my word wall [sight words] and words that were in [basal reader] stories that we’ve read and then I have my helper [volunteer] read though the sentences [with each student] and she either underlines all the words that they know or don’t know. It is fluency. I’ve never asked the helper whether they understood what they read. (Emma, Professional Learning Community Session, January 17)

Emma then used the strategy checklist, the results of the word recognition task, and her written anecdotal notes to complete her students’ end-of-term report cards.

It is a lot of my “gut-feeling.” I have these strategy checklists that I do, but a lot of it is just when I do these different activities, I think I am pretty keen on knowing who struggles with what. I have anecdotal [notes], but a lot of it is just up there
[in my head] from my experiences of working with them. (Emma, Interview 1, November 29)

When students struggled with the reading process, Emma communicated with their parents on an ongoing basis through telephone conversations and face-to-face meetings. Over the years, she had established trusting relationships with parents, and they had never questioned her assessments of their children’s needs, progress, or abilities. Nonetheless, Emma was aware that her reading assessment practices left her vulnerable to parental questioning and difficulties justifying her summative evaluations.

One principal I had said that every teacher should have [evidence], so that if a parent challenged you on a certain mark, you would be able to say, “Well this is why I did that,” and I don’t always [have evidence to support my evaluations]. (Emma, Interview 1, November 29)

Emma also knew that maintaining a “mental file” of her students’ needs and abilities had the potential to be problematic should she be called away unexpectedly from her teaching position. “If all of a sudden I had to leave for a medical reason how would they [substitute teachers] know where each child is at [level of reading development]?” (Emma, Interview 1, November 29).

Desire for Professional Growth

Although we had no prior personal or professional relationship, Emma suggested to her school administrator that she and her colleagues consider becoming the research site for this study. The reading assessment focus of this research project was of particular interest to Emma. While she was confident in her overall intuitive sense of her students’ reading abilities, Emma was less definitive about the needs and abilities of her “average” students. “I know who my strong readers are and I know who my weak ones [readers] are, but the ones in the middle, they tend to be a bit fuzzy as far as where are they
[strengths and needs]” (Emma, Interview 1, November 29).

Emma had been introduced to a variety of reading assessment tools including running records at a professional development workshop several years ago but perceived these tools to be unmanageable and, as a result, did not attempt to use them. Although she was aware that many public school teachers used running records and informal reading inventories, Emma speculated that the reading programming decisions made by public schools were not always supported by research. As a result, while she hoped to enhance her reading assessment competencies during this initiative, she was wary of jumping on an assessment “bandwagon.”

I am hoping to become a better teacher, to learn to assess better and maybe learn a little bit more about the running records and see if it is something that we should be looking at implementing or whether it [use of running records] is a “bandwagon” thing. Because it seems like whole language was the way to go with the public boards, while we still taught phonics. We thought children needed to learn how to sound out words. (Emma, Interview 1, November 29)

While Emma was confident of her ability to teach reading decoding strategies, she grappled with how to foster critical thinking skills. “How do we teach them to think instead of waiting to be spoon-fed, instead of them just sitting there, waiting for you to tell them what to think” (Emma, Interview 1, November 29).

*Initial Impressions of the Benefits and Complexities of Reading Assessment*

Emma was motivated to learn more about reading assessment. Nonetheless, she initially found the insights provided by profiles of students’ assessment results to be both insightful and overwhelming. For example, during our first half-day professional learning community session when I shared class profiles of the grade 2 and grade 3 students’ spelling development, Emma commented that a class skill profile could be used to delineate students’ needs.
You see what you need to work on for sure and who is struggling almost right across the board. You know which ones [students struggle], those are the ones you pull your hair out trying to think of how can you help them. (Emma, Professional Learning Community Session, December 13)

Later during the same group session, we reviewed running oral reading records that I had completed with a small number of grade 2 students of varying abilities to illustrate how this assessment practice could provide insights about the reading process. The teachers worked together to deconstruct the completed assessments and determine students’ reading strengths and needs. While acknowledging the in-depth understandings of students’ reading abilities provided, Emma was overwhelmed by the demands of the individualized student programming she perceived these assessment findings denoted.

To me it [this assessment information] is almost daunting just because well it helps you to know what you can do [to assist students] but then you are just stretched so thin that you’re feeling you can’t meet anybody’s needs anymore because you are trying to teach this child one thing and that child something else. (Emma, Professional Learning Community Session, December 13)

More positively, Emma concurred with the grade 2/3 teacher, Judy’s suggestion that using reading assessment tools such as those explored during this session could enhance their abilities to document students’ reading trajectories over time. “I would like to have assessments so that we can show the parents the progress they have made and that [collecting reading assessment data] would help us to know if they are progressing or not” (Emma, Professional Learning Community Session, December 13).

During this session, Emma expressed concern about five of her students who were struggling with reading. She was uncertain about the early reading skills they lacked and was aware that her inability to delineate their instructional needs impeded her ability to provide them with the support they required. Emma described these students as “lost” during the completion of the seatwork activities that followed her reading lessons. In
attempts to assist Emma in determining these students’ strengths and needs, I offered to
assess their emergent literacy skills and deconstruct the assessment results with her.

The following week I assessed these five students’ phonemic awareness, print
concepts, and letter-sound correspondence skills. Emma and I then reviewed the
assessment results and prepared a small-group profile to illustrate their strengths and
needs. All five students had phonemic awareness and letter-sound skill voids, particularly
with respect to blending, segmenting, and vowel sounds. Emma recognized the need to
focus on these identified skill voids, yet wondered how to accomplish this in the context
of her classroom instruction, that is, how she could provide these students with such
remedial instruction while simultaneously meeting the needs of the rest of her students
who had acquired these emergent literacy skills.

Emma and I met to discuss ways that she might infuse these skills more explicitly
throughout her reading program (e.g., daily secret message, word wall activities). I also
provided her with resources that she could use as part of her instruction for these targeted
skills. Emma then began implementing some of these suggestions. For example, she
included more focused attention to phonics and phonemic awareness skills throughout
her morning routines. “Well what we’re starting in our morning routines, I’ll say a word
and then whatever vowel they [students] hear [in that word] they need to make the
actions [for that vowel]” (Emma, Professional Learning Community Session January 17).
Emma also engaged her volunteers in providing one-to-one withdrawal support to these
students daily through activities targeting their identified skill voids. As Emma
questioned whether volunteer assistance and her increased emphasis on these skills would
be sufficient, we discussed potential methods to provide these students with additional
support at home and at school. In late January, after Emma and I met with the special education resource teacher to review these students’ assessment results, he obtained parental approval to provide them with daily small-group remedial programming.

Emma’s initial experiences using students’ assessment results to delineate instructional priorities fostered her continued interests in learning about reading assessment in general and informal reading inventories in particular. Following an after-school professional learning community session in early January focused on the administration and analysis of running records, Emma and her colleagues each decided to assess one or two average readers in their class using an informal reading inventory that included a series of graded texts, with related follow-up comprehension questions, and a reading fluency rubric. Emma brought her student’s completed assessment to the professional learning community session held the following week during which she shared how it enabled her to determine her student’s independent reading level and reflected about how this information may help her respond to parental inquiries. “With the stronger readers, the parents will say where do you think they’re really at [independent reading level]? And it’s really hard [to respond] because I don’t test that [independent reading levels]” (Emma, Professional Learning Community Session, January 17). Although she was interested in conducting this type of assessment with more of her students, Emma expressed concerns about her ability to balance time for the assessment process with time for instruction.

Well, I would love to do it [this assessment] with each one, because then you have made yourself take the time to listen to each individual child read and really figure out where they are [strengths and needs]. I find that so hard to do because I do a lot of whole group work. My concern is time because even when I did this [assessment] with Billy [pseudonym] and you think you’ve got everything all set so they [the other students] can just work quietly on their own something happens,
and you’re saying, “okay just a minute Billy” [interrupting the assessment process]. (Emma, Professional Learning Community Session, January 17)

Initially, Emma’s lack of familiarity with the assessment materials and protocols together with the ongoing needs of her students rendered it difficult for her to conduct these assessments during instructional time. As she was eager to embark on this process and perceived time as the primary barrier to doing so, I offered to teach Emma’s class for several periods in order to provide her with the uninterrupted time required to conduct these one-on-one assessments. Emma enthusiastically embraced this solution, and we scheduled release periods during which she assessed her students’ reading using the informal reading inventory. This tool included a series of levelled texts, together with text transcriptions, a fluency rubric, and a series of comprehension questions to be asked following each story.

Emma provided each student with a levelled text she selected based on her prior knowledge of their word recognition skills. As students read the selected texts, Emma completed running records, recorded students’ reading behaviours, observed their reading fluency, and recorded their responses to literal and inferential reading comprehension questions. In order to provide ongoing guidance and support, Emma and I met regularly as she completed these assessments. These meetings provided opportunities to address Emma’s questions and concerns related to the assessment protocol (e.g., miscue analyses), as well as discuss resulting instructional implications.

Assessment Insights

Emma shared the insights she had gleaned from the completed assessments as part of the parent-teacher conferences held near the end of January. Inadvertently, she found that this process enhanced her sense of professionalism. Being more definitive about her
students’ needs enabled Emma to enlist the support of their parents in meeting these needs. She was able to provide parents with targeted suggestions rather than generalities for assisting their children. “We could really pinpoint it [student’s area of need], and then the parents could help in that regard, whether it was the short vowels or with the rhyming words or whatever” (Emma, Professional Learning Community Session, February 8).

As she continued to assess her students using the informal reading inventory, Emma was encouraged that the results often confirmed her perceptions of her students’ overall reading abilities. Analysis of these assessments also provided her with in-depth understandings of students’ decoding needs. For instance, Emma was able to determine which of the three cuing systems (i.e., semantic, syntactic, visual) students used or misused, their abilities to monitor their reading and self-correct, and their independent reading levels. “When it [the text] said ‘big’ he said ‘dog,’ and then he self-corrected himself. So I thought, oh good he’s thinking about it [his reading]” (Emma, Professional Learning Community Session, February 8).

Throughout February, as she completed these assessments with all of her students, Emma came to realize that she was also acquiring new insights about her students’ needs. For instance, many of her students experienced difficulties retelling stories, making personal connections to text, and answering inferential comprehension questions. Emma was surprised to learn that the majority of her students experienced such difficulties, even those who were able to decode text above grade level expectations. As this trend was evident across all 3 participants’ classrooms, we decided to devote our next professional learning community session to examining reading comprehension instruction.
Comprehension Strategy Instruction

During a half-day session in February, we explored the characteristics of proficient readers, text structure, story grammar (e.g., characters, setting, problem, solution), together with how comprehension strategy instruction could be used to enhance students’ abilities to derive meaning from text. After viewing a video that illustrated comprehension instruction in a grade 1, Emma shared her rationale for focusing on decoding rather than comprehension instruction.

I don’t tend to do [teach] all of those comprehension strategies. Like the ones [strategy visual prompts] that I have hanging up [in the classroom] are the ones [reading strategies] that I focus on, like “looking for little words inside the big words” or those kinds of [decoding] strategies, but these ones [comprehension strategies], I don’t, I must admit I don’t. I’ve kind of thought that is above them. (Emma, Professional Learning Community Session, February 20)

Emma continued to express concern about her weakest students and questioned whether comprehension strategy instruction might further limit rather than enhance her ability to meet their instructional needs.

The thing is it’s hard now if we want to change our [teaching] strategies, how are we going to do this to be honest with you because I think I want to change my strategies so that the weaker ones catch on [learning to read]. So, it’s almost like I want to teach to the weaker ones because I want them to catch on. (Emma, Professional Learning Community Session, February 20)

After I explained how listening comprehension was a precursor to reading comprehension and outlined how teachers could provide comprehension strategy instruction through modelling and think-aloud procedures, Emma expressed reservations about whether this type of instruction would foster her students’ enjoyment of the literature. Classroom management was also of concern.

Well I’m wondering does this kill the story? Overkill? I think of my poetry units in high school and you’d read the poem a couple times and then go to analyzing. And I just sat there going, “Oh I used to like this poem and now I don’t” and it
also depends on the class [behaviours] because part of me looks at the current grade 1 and I think when a teacher tries to talk too much then they are all over the place. And I find I need to keep going and going and going, because the minute they have just a little bit [of unengaged time], then you’re pulling certain kids in all the time. (Emma, Professional Learning Community Session, February 20)

Although Emma was apprehensive, she agreed to think about implementing a comprehension strategy lesson.

But for the most part, it would definitely be either be an aside or perhaps instead of doing the [basal] reading on the odd day we could sort of delve into a [trade] book and use some of this to focus on. (Emma, Professional Learning Community Session, February 20)

Emma decided to attempt a lesson focusing on the strategy of questioning. She prepared a set of question word cards (i.e., who, what, when, where, why, how). Before she read a trade book, Emma’s students each chose one of these cards and used the word on it as a prompt to formulate and share one question about the book. Her students then listened for the answers to their questions as Emma read the text, pausing to discuss students’ insights during and after the reading. The engagement and understanding her students’ displayed during this lesson encouraged Emma to attempt another lesson on questioning, which provided further affirmation.

After accessing and building her students’ prior knowledge about “ants,” Emma showed them the front cover of the book Two Bad Ants and asked them to think of questions they could ask about the book. As Emma’s student helper of the day showed her students each question word card (who, what, where, when, why), students thought of questions beginning with that word. Emma recorded their questions on a chart. Before reading, Emma read all of the questions on the chart and asked her students to listen carefully to the story for the answers to their questions. After reading the text, she read each question and engaged her students in discussion about whether it was answered in the text, as well as where and how. The final question “Why are they bad?” addressed the underlying theme of the book, “the ants were greedy.” (Researcher’s Field Notes, March 2)

During our discussion after this second lesson, Emma marveled at the inferential thinking some of her students displayed. She was especially impressed with the insights provided
by one student who struggled with decoding. Emma also expressed her appreciation of
our work together and confessed that she felt I would have been disappointed if she was
unwilling to attempt any comprehension strategy lessons. In essence, our working
relationship was, in part, an impetus for her to attempt this type of instruction. A few
weeks later Emma read an article in a teaching magazine that provided further
affirmation that strategy instruction would enhance her students’ reading comprehension.
She shared the article, together with her positive feelings about attempting this
instructional focus at our next professional learning community session.

Although Emma perceived her comprehension lessons to be effective and
engaging, breaking away from the consistent use of a commercial reading program was
difficult. Preparing these lessons initially took considerably more time than using the
basal lessons for which she had a plethora of prepared follow-up activities.

Well I think the greatest challenge is to change, because we [my colleagues and I]
are comfortable with the ways things [reading programs] have been done for a
long time [at this school]. The [retired] teachers that we took over from have day
one, day two, day three, nice days laid out [planned lessons] for each story. And
so it became very easy just to pull it out and do that [lesson]. (Emma, Interview 2,
March 7)

As Emma and her colleagues perceived there to be benefits and drawbacks associated
with their existing practices, they collectively decided to reduce their use of the basal
series lessons and allocate some instructional time for comprehension lessons.

To plug this [comprehension instruction] in then is time-consuming. You know,
as a group [primary teachers] we’re sitting around in the staff room and then we
talk too, we are [deciding] we’re not necessarily going to ditch the whole theme
that we had [with the basal reader], but we are going to substitute. Instead of
spending 5 days on a certain story, what we’re going to do is we’ll do it [the basal
story] maybe for 3. And then, like I did the other day, we’ll just take a book
[authentic text] and we’ll do something to show how “good readers ask questions”
and then do that (Emma, Interview 2, March 7)
Over time, Emma began to rely less on the basal lessons. In attempts to enhance her students’ abilities to derive meaning from text, she began to make increased use of authentic text to promote students’ use of the comprehension strategies of questioning and visualizing as well as story grammar. The understanding her students exhibited during these lessons affirmed her instructional focus, and Emma’s confidence in her professional judgment escalated.

I find that I am not as far in my reader as I have been in other years [at this time of the school year] but I don’t care because I really feel that they have learned a lot more than they would have if I had stuck to that, really. (Emma, Professional Learning Community Session, May 22)

As she gained confidence teaching her students story grammar and comprehension strategies, Emma’s use of prepared worksheet activities decreased, and she became adept at creating generic open-ended reading response activities.

I didn’t find it [teaching comprehension strategies] as hard as I thought [it would be]. Over time, I thought you don’t always need a worksheet. You didn’t need to have a worksheet with everything at all. I knew I was making them think and challenging them. They [comprehension strategies] are key strategies, and when you start pulling it [comprehension instruction] all together, they pick it all up [comprehension of text]. (Emma, Interview 3, June 28)

At the end of the school year as she reflected on the effects of her comprehension lessons, Emma marveled at her own growth and that of her students.

I would never have even thought about talking about the problem or the setting. At the beginning [teaching story elements through read-alouds] it [the lesson] is longer, but then it is faster and they get it [understand]. They would listen to me, and it is amazing how I have changed just being able to put out good questions when I read. My questioning strategies bore more fruit. I think that the questioning strategies that I use [now], they have to think. It is harder to teach a child to think critically instead of just being spoon-fed. (Emma, Interview 3, June 28)

Through many years of teaching Emma had developed a comfortable ease in using the language of decoding strategies and was able to make her students
metacognitively aware of these strategies by instinctively using consistent phrases (e.g., find little words in big words) to label them. Conversely, Emma’s lack of experience teaching comprehension strategies made using this language effortful and challenging.

With increased use, Emma gained comfort using consistent language to label strategies that she had not taught previously (e.g., questioning, visualizing). “When I said [before reading a story] let’s think of questions we can ask because good readers always ask questions, he [a student] said ‘why do you always say that’? [I responded] it’s a reading strategy” (Emma, Professional Learning Community Session, May 22). Interestingly, using consistent language to label strategies she had used in the past without explicitly naming them (e.g., making connections, predicting) was something she found more difficult. Not surprisingly, given her belief in the importance of oral language, Emma regarded the common language that may be developed through a cohesive approach to strategy instruction across the primary grades as particularly beneficial for students.

[Teachers] using the same “lingo” [strategy language] from year to year [is important], because that way [when they change grades] the students really think “oh I know that, oh I can do this, I understand what she is saying,” and that helps them to have better learning. (Emma, Interview 2, March 7)

Use of Levelled Text

Although Emma believed her students’ self-perceptions of competence were of utmost importance and initially overrode their needs for differentiated reading materials, she also questioned whether her whole-group lessons were meeting all students’ needs.

I have five girls that I bet you they could read all the grade 2 stuff [reading material], maybe even grade 3, and maybe not necessarily understand it, I don’t know. I’m really struggling with those five girls, because I’ve got so many weak boys that I feel like I’m teaching down all the time. (Emma, Professional Learning Community Session, January 17)

In the context of a discussion about how reading levelled text may enhance students’
reading confidence and competence, Emma lamented about her struggling readers’ off-task behaviour during independent reading and began to consider use of levelled text.

Because right now it is the same ones that are walking around [during independent reading], and when you’re busy working with somebody and you look up, they [struggling students] are not immersed in the book, they’re not, because they can’t read it. I think I may need to think about having a bin of books that they can read, so that they can. (Emma, Professional Learning Community Session, January 17)

When Emma later completed informal reading inventories with her proficient readers, she observed how reading text at their independent reading levels provided them with challenges they enjoyed.

One of my higher students did a [text at] level 15, *Skip Goes to the Rescue* and she had a bit of a harder time with that [than with reading the basal reader], and it was interesting to see her reaction when she read this one [text at her reading level]. She felt like, “Okay, this is challenging for me,” and she likes to be challenged. (Emma, Professional Learning Community Session, February 8)

In attempts to meet her students’ diverse needs, Emma began to think about methods of increasing her students’ exposure to text at their independent reading levels.

While Emma’s assessment results denoted her students’ independent reading levels, the basal readers were the only levelled text to which she had access. Very few of the books in her classroom were levelled, and she was unfamiliar with book levelling criteria. As the needs of her struggling students were Emma’s primary concern, I offered to peruse her classroom library to select and level books at the lower reading levels. During independent reading periods Emma then began listening to her struggling students read texts from this collection, commenting subsequently that they appeared to enjoy reading these levelled texts and be more motivated to read when doing so.

This positive experience prompted Emma to explore use of levelled text with all of her students. However, the lack of levelled reading material available in the school
posed a significant barrier. During a professional learning community session in March, Emma and her colleagues agreed that an after-school workshop addressing how to establish and use a levelled book collection would be beneficial. Immediately after this workshop that I facilitated shortly thereafter, Emma undertook the task of levelling the books in her classroom library with the assistance of a cadre of volunteers, two of whom attended the workshop with her.

As she developed her collection, Emma used her informal reading inventory assessment results to determine the levelled text bin she would assign to each of her students for use during independent reading and had a volunteer verify these placements.

I was having him just read a bunch [of books] first with a volunteer so that he could see [that] he could read these books, and now he can go to that [levelled text bin] and pick a book from there. I hesitated to make it [assigned text level] too high of a level, because it [text] can’t be at a frustrational level, or instructional. It has to be [at the student’s] independent [reading level]. (Emma, Professional Learning Community Session, April 17)

Emma continued to agonize about whether overt acknowledgement of her struggling students’ reading abilities would diminish their reading confidence. In April when her students all began using levelled text during independent reading periods, Emma was encouraged by their lack of focus on one another’s abilities. Over time, her concerns about the effects of students’ perceptions about their differing abilities lessened.

Yesterday afternoon I had them read [levelled text independently] to their parents because we had so many [parents] there [at school for parents day], and it was great. The ones in the lower [reading] levels, they seemed just as proud as the ones in the upper levels [when] reading to their parents, and their parents seemed just as excited to hear them read. Maybe it is not as much of an issue as I thought it would be, as far as feeling that they are not as successful because they are not in as high of a level as others. (Emma, Professional Learning Community Session, May 10)

After using levelled text for several months, Emma came to believe that providing
successful reading experiences nurtured all of her students’ self-esteem. “I feel that building confidence in these little ones is the key, and having text available for them to read at their [independent reading] level helped them to gain this confidence” (Emma, Written Reflections, June 28). She credited her ability to provide her students with such responsive instruction to her use of insights gained from assessments.

I don’t know what I did before I used the levelled text. I think that a big part of it [meeting students’ needs] is knowing what to do with the running records [results], [such as] levelling the readers so that the children can feel “I can read.” I think everyone walked out of that room [at the end of the school year] feeling “I can read,” and that is huge. (Emma, Interview 3, June 28)

**Cumulative Reading Assessment Portfolios**

Initially, accumulating students’ reading assessment information was a “double-edged sword” for Emma. While she acknowledged that these tools provided useful information for programming, Emma wondered if Judy’s suggestion that she and her colleagues share their assessment results might negatively affect future teachers’ perceptions of students’ learning potentials.

That [knowing students’ needs] is good, I think, but sometimes they get plugged into a certain spot and then it becomes a self-fulfilling prophecy. The next year the teacher thinks they are weak. On the other hand it is good for the teacher to know so that it’s not kind of where we fumble along until we finally pin-point it [students’ needs], that [way] not every teacher has to go through that. So I am torn as to what is the best way, I really don’t know. (Emma, Professional Learning Community Session, February 8)

Over time, as their appreciation of the importance of assessment insights grew, Emma and her colleagues began to explore methods to track their students’ cumulative reading progress and growth trajectories throughout the primary grades. Although she held initial reservations, Emma later supported this direction. “Well, I think it would be good to start some kind of a portfolio [of reading assessments], definitely” (Emma, Professional...
Learning Community Session April 17).

The steep learning curve Emma encountered learning to use an informal reading inventory initially precluded her consideration of using any other reading assessment tools. “I’m thinking, we [teachers] can’t even find the time to do this [assessment], so how would we do any more testing?” (Emma, Professional Learning Community Session, February 8). However, insights Emma derived from analysis of some students’ reading of graded texts in the informal reading inventory, later caused her to become concerned about their sight word recognition skills and explore the collection and use of these data. “For a couple of the students that are weaker … I was really surprised that so many of the sight words in the story [they read] they didn’t get [decode correctly], that concerns me” (Emma, Interview 2, March 7).

In response to Emma’s concern, I assessed these students’ word recognition skills using three first grade high frequency word lists comprised primarily of her word wall words. Emma and I then discussed her students’ results and instructional implications for classroom programming, as well as additional assistance her volunteers and the students’ parents could provide. Emma implemented these suggestions and noted her students’ steady progress learning the core words on each of these three lists, which then enhanced her perception of the value of administering graded sight word recognition assessments.

I think sight word [assessments] are good to have, even broken down by list one, list two, list three, because that tells you a lot. Even what [word list] they’re at, like if they get a lot [of words correct] on list one, a lot on list two, but very few [words correct] on list three, you can know what [sight words] to teach. (Emma, Professional Learning Community Session, April 17)

Emma and her colleagues developed summary sheets to track students’ ongoing reading progress throughout the primary grades. These included students’ independent
reading grade level performance on the informal reading inventory graded texts, developmental spelling inventory results to provide insights about their phonemic awareness and phonics skills, as well as sight word assessments. Although she was committed to completing the one-on-one informal reading inventory assessments at the end of the school year, Emma wondered how she would accomplish this while meeting her students’ needs in the classroom context.

During a professional learning community session in May, we explored ways these teachers could support one another and manage collecting these data without the provision of release time. Emma decided to conduct her assessments during quiet classroom times such as independent reading periods as well as during her lunch break and preparation periods. Additionally, she and her colleagues grouped their classes for a “primary sing” period each week. As Judy required little support to complete her assessments, she volunteered to supervise “primary sing” in order to provide release time for both Emma and her colleague Violet, who taught grade 3. The significance that Emma assigned to the insights she derived from the results of these assessments enhanced her dedication to completing them.

That was a little tougher doing it [assessments] without support [release time]. Ideally, we would have a little more [release] time. It is hard to figure out when to do [assess] the weaker ones. I did some of the weaker ones during “primary sing” because it [the classroom] was quieter. We had to “tweak” out our own time. Without [release time] coverage the first time, I think I would have given up [completing the assessments]. Over time, you realize the importance of this and want to do it [complete the assessments]. Having the time to initially learn to do the running records was important. The second time [I assessed students] was so much easier so it made better use of both of our [students’ and teacher’s] time. Writing up the report cards is so much easier with these [results]. (Emma, Interview 3, June 28)

Ultimately, the value Emma assigned to the ongoing accumulation of students’
reading assessment data superseded her concerns about “labeling.” “I think it is very
important to know [students’ strengths and needs]. I think as a teacher it is important to
not label them, but you want to challenge them with something [reading activities] that
they can handle” (Emma Interview 3, June 28). Through her experiences using
assessment results to inform her instruction, Emma concluded that the acquisition of
these data was a precursor to her ability as well as the abilities of students’ subsequent
teachers to provide responsive reading programming.

*Personal Accomplishments and Future Directions*

Emma perceived her increased ability to meet her students’ diverse instructional
needs as her greatest accomplishment throughout this project. “I always felt that I was a
decent reading teacher, but now I am better able to teach all students regardless of their
abilities” (Emma, Written Reflections, June 28). Her greatest challenges were finding the
time and developing the confidence to deviate from her existing program which she
believed was engaging and effective.

Well initially I was kind of nervous because I thought, oh you know, we have a
pretty good reading program, there’s a lot of “hands on” stuff [active learning
experiences] for the students, sentence strips and words and all that I worked hard
on putting in place. So I was hesitant, and I was kind of thinking well yeah, okay,
well I’m willing to change but I’m not sure how much, it’s work, right. And yes it
was work, [but] it was rewarding work. And, so initially I was not interested in
changing a whole lot, I thought okay well maybe we’ll do this maybe once a
week, but I’ll still keep going with my [basal] program. But I didn’t end up really
doing that. You know, I used the other program less and less. (Emma, Interview
3, June 28)

As she reviewed the teacher efficacy scales she completed pre-and postinitiative,
Emma confirmed that her efficacy for student engagement, classroom management, and
instructional strategies all increased over the duration of the school year as a function of
implementing program modifications she attributed to her increased professional
knowledge. “I attribute the changes to being guided in how to be more effective in the classroom. I don’t know if I have ever had a class that was so engaged” (Emma, Interview 3, June 28).

Emma credited her students’ increased engagement in part to her focus on teaching comprehension strategies through reading aloud. “Maybe because my weaker readers were so into it [teacher read-aloud] too, I really enjoyed this time [comprehension instruction during reading aloud] because it was their [weaker students’] time to shine.” (Emma, Interview 3, June 28). Her ability to meet a wider mosaic of her students’ needs through use of levelled text also enhanced Emma’s self-efficacy.

I felt like I was better able to use the [instructional] time with all students, like silent reading was not “a filler,” and [it was nice] to see their enthusiasm [during independent reading] they were excited, so I was excited. (Emma, Interview 3, June 28)

When reviewing her responses to the pre-and postinitiative literacy orientation surveys, Emma was surprised by some of her initial responses, especially her initial perception that the primary purpose of reading instruction was to enhance students’ abilities to decode rather than derive meaning from print. Emma attributed her changes to increased understandings of how to provide responsive reading programming.

Well by the end [of the initiative] I knew more. I changed some of my beliefs because of knowledge that was imparted to me. Because I am more informed I knew how to meet their needs more and I see where I am going [to meet students’ needs]. To see some of these changes I think, “Wow I actually thought that before?” (Emma, Interview 3, June 28)

As a function of the increased student learning and engagement that she attributed to the changes she implemented throughout the year, Emma became more reflective and self-assured in her professional decision-making. “I just felt more confident in being able to help all the kids, so when I reevaluated how to teach them all, I felt more confident
[developing lessons to meet their needs]” (Emma, Interview 3, June 28). This confidence enabled Emma to trust her professional judgment, which in turn decreased her reliance on commercial reading programs. She hoped to acquire more levelled text for use during independent reading as well as big books for shared reading sessions and felt confident in her ability to recommend instructional resources.

Reflecting on her changes, Emma highlighted the importance of ongoing professional support. “I don’t know if I would have been willing to make this big of a change if I didn’t have your guidance throughout [the initiative]” (Emma, Interview 3, June 28). Additionally Emma credited her continued motivation for change to successful implementation of small changes over time.

Every time [I tried something new] my confidence would be okay, [because] I did it and it worked. The steps were little, and yet when I look back I see that I have made a big step. But it was all the little steps that got me to that point, manageable steps. (Emma, Interview 3, June 28)

Throughout this initiative, Emma recognized the impact of collaboration with her colleagues. “We’re bouncing back ideas [with one another]. If Violet said she was trying this [strategy], it made me think ‘oh yeah, I can try that too’” (Emma, Interview 2, March 7). This enabled Emma and her colleagues to scaffold one another’s understandings and created a supportive climate as well as collective momentum for change.

The initial catalysts for Emma’s changes were her desire to provide her students with the most enabling learning experiences, coupled with increased understandings of her students’ strengths and needs. However, Emma shared these catalysts alone were insufficient. She attributed her changes to the effects of this initiative on her increased ability to interpret students’ assessment results and use these insights to implement responsive reading programming. “I had attended workshops on how to do running
records before, but I never knew what to do with these records. Now I have learned what to do [with the results] and more importantly ‘how’ to do it” (Emma, Written Reflections, June 28). Emma was energized by her students’ resultant growth and looked forward to continuing these practices during the coming school year. “I was very excited when it [programming changes] all fell into place, and I am excited to do this [type of reading instruction] next year” (Emma, Interview 3, June 28).

**Judy: Surviving “the Splits”**

Judy’s long-held desire to become a teacher increased during her 9-year tenure as an educational assistant. Upon completion of her Bachelor of Education degree 4 years ago, she accepted a part-time teaching position at this independent school where she had assumed responsibilities for different grades and subjects each year. “I’ve been [taught] everywhere [all grades]” (Judy, Interview 1, November 30).

Judy held a particular affinity for the primary grades. “I find the material in this age a lot of fun, everything about it [teaching primary] and the excitement of it. I really enjoy that [teaching primary] more than [teaching] the upper grades” (Judy, Interview 1, November 30). Consequently, although she had previously elected to teach part-time, Judy altered her plans when a full-time primary-grade position became available.

I have young children so I chose to work part-time, and then in September when the grade 2/3 [teaching position] became available, I thought if I didn’t take it now I didn’t know when it [a full-time primary-grade position] might be available again, so I took it. (Judy, Interview 1, November 30)

Devoting time to her own children was also important to Judy, who attempted to balance her home and school responsibilities by prioritizing. “You know it’s [a choice I have to make] do I want to spend time with my [own] kids or do I want to spend 4 extra hours doing this [planning and marking]” (Judy, Interview 2, March 7).
Although she eagerly embraced her new position, Judy found it challenging to meet her students’ needs on her first experiences teaching a combined grade and teaching grades 2 or 3.

It [my primary challenge] is the split grade and just trying to find the time for the ones that need it. I am especially finding that there is no one-on-one time or small-group time for me to do those kinds of things [provide additional support] without feeling that I am missing somebody or something and this is two years of new curriculum, grade 2 and grade 3. (Judy, Interview 1, November 30)

She managed her curriculum challenges by relying on the previous grade 2 teacher’s lesson plans and the assistance of her colleague Violet who taught grade 3.

I am struggling with the split and getting it [the curriculum] done and people are spoon-feeding me. The teacher that retired [last year], she had wonderful plans [that she has given me], and the grade 3 teacher, Violet, is helping [me] too. (Judy, Interview 1, November 30)

Judy appreciated the positive relationships between all stakeholders in this school community, particularly those between herself and parents. She believed her students’ parents were dedicated to enhancing their children’s learning, appreciated the support they provided, and attributed any limitations in this assistance to knowledge voids rather than indifference.

I think it’s a very strong parental community. If I send work home to be done, mostly all of them come back with it done. Not necessarily all parents are involved in that [providing extra at-home support], and I think perhaps that is a knowledge and awareness thing [knowing how they should do so] rather than a lack of commitment. (Judy, Interview 1, November 30)

The Learning Environment

The tone in Judy’s quiet classroom was positive and productive. Her students began and completed their work with little discussion. Daily schedules were posted providing sequential lists of subjects (e.g., reading, gym) to be taught each period, “bell-work” to be completed upon arrival, and activities after completion of all assigned work.
These schedules together with firmly established routines enabled Judy to maximize instructional time as her students transitioned seamlessly from one lesson to the next. For instance, “Judy sang “Bonjour Mes Amis” to signal the onset of her French lesson. Without any other cues, the children all took out their books and were ready to begin within seconds” (Researcher’s Field Notes, December 1).

Positive behaviour management appeared to be Judy’s forte. She used a firm, kind tone of voice when she needed to redirect students and seemed to be particularly adept at focusing on “behaviours” rather than “students,” as well as, enhancing her students’ awareness of why they should adhere to her expectations.

When students engaged in quiet conversations before she had completed delivering instructions, Judy stated, “There are many little conversations going on and I am waiting for people to stop talking. I need you to listen [to me] so that you will know what you need to do [next].” (Researcher’s Field Notes, May 24)

Consistent expectations and routines fostering students’ abilities to work independently enabled Judy to teach lessons to students in one grade while those in the other grade worked with minimal distraction. Students required few reminders to adhere to Judy’s high behavioural expectations, and she rarely, if ever, raised her voice or visibly lost patience with them.

Throughout her lessons, Judy used movement to enhance her students’ focus. In addition to the balance of active (e.g., standing and doing actions while singing) and quiet (e.g., seatwork) activities in her daily routines, Judy responded to her students’ nonverbal cues by infusing an active energizer whenever she noticed their attention waning.

Judy paused during her lesson and said, “We’ve been sitting for a while, let’s stretch a bit.” Her students then stood and replicated each action Judy modelled. She led them through a 2-minute series of movements including pretending to pick apples and swim the back crawl, after which the lesson resumed. (Researcher’s Field Notes, May 24)
In part, to support her students' abilities to remain focused during their completion of independent activities, Judy arranged her students' desks in forward-facing rows of two-by-two and three-by-three groupings, with students in alternate grades seated beside one another. This seating arrangement not only reduced distractions during grade-specific tasks but also provided grade 2 students with access to the support of a grade 3 student during combined grade activities. Students’ desks were located behind an open carpeted meeting area in the front of the room that was the venue for many grade-specific and whole-class lessons.

Students’ instructional materials were in labeled subject bins (e.g., reading folders, phonics workbooks), readily accessible to the designated helpers who distributed them as required. All students’ work was marked promptly, in part due to the assistance provided by two retired teachers who volunteered in Judy’s classroom each week. These volunteers also changed Judy’s thematic bulletin boards, prepared student activity booklets, and read with individuals. One volunteer was the previous grade 2 teacher, and Judy found her help with lesson preparation especially beneficial. “One [volunteer] is actually [the teacher] who taught [this grade] last year, and she knows everything [about the program] and where everything is [located]” (Judy, Interview 1, November 30).

Expediency was important in managing two grades, and Judy’s efficient style of “use it, clean it, put it away” enabled her to keep the materials she used each day organized and ready for subsequent use. “As students began their assigned seatwork, Judy removed the lesson notes she had written on the laminated character web and returned the poster to the reading folder” (Researcher’s Field Notes, April 25). While most instructional materials were removed immediately after Judy’s lessons, a high
frequency word wall was on permanent display, located on a side bulletin board in clear view of all students.

Judy’s class initially included 16 grade 2 students and 8 grade 3 students, some of whom were not the most independent workers.

But because this grade 2 class is so small, there’s 16 of them, I have them all. So I have a full grade 2 and 8 grade 3 students. They [my grade 3 students] are not the most independent students, because those kids [who were most independent] were in a split class last year, so they had to go in a straight [grade 3] class this year.
(Judy, Interview 1, November 30)

In February, a grade 2 student identified with special education needs joined Judy’s class, together with an educational assistant who provided this student with one-to-one support each morning. Judy provided this support during the afternoons.

*Initial Reading Program*

Judy followed the commercial reading programs used throughout the primary division. These included basal reading, spelling, and phonics programs as well as a “daily language review” workbook. The basal lesson plans that Judy used were developed by the previous grade 2 and grade 3 teachers based on their interpretations of activities presented in the program teacher’s guides. Judy recognized that her self-confidence was a mediating factor affecting her ability to deviate from these lessons and the advice of the retired teachers who developed them.

I am not too concerned about what others [retired teachers] think about what I am doing for the most part, as long as I am confident about what I am doing. It is when I am not confident, then they [retired teachers] suggest something and I kind of go, “uhm, you know, maybe [I should do that].” (Judy, Interview 1, November 30)

Judy used a variety of instructional approaches and supplemented her grade-specific basal lessons with shared poetry reading with students in both grades combined, as well
as daily independent reading sessions. She described her program as “one level” and expressed interest in differentiating instruction.

That [the basal series] is primarily what we [primary teachers] use for our reading program. We also use the Four Blocks [literacy framework], so phonics [through activities like “Making Words”] plus a structured phonics workbook, self-selected [independent] reading, we do a shared reading with the basal series and teacher read-aloud every day. It [the program] is pretty much one level right now not really as multilevel as I would like it to be. (Judy, Interview 1, November 30)

While the schedule varied, each day Judy’s program included grade-specific basal reading and word study (spelling or phonics) lessons. She also provided daily independent reading sessions as well as daily read-aloud sessions during which she read a portion of a novel or a picture book to both grades combined. Throughout this initiative, Judy altered her instructional practices to include increased emphasis on story grammar, nonfiction text structure, and levelled text. The sequencing of her reading lessons however remained relatively consistent.

As Judy’s students entered the class each day, they quietly began the “bell-work” outlined on the blackboard, often “daily language review,” “daily math review,” or phonics workbook pages. While students completed these activities, Judy circulated, providing one-on-one assistance as required. At the end of this 15-minute period, students placed their completed work on the back table for marking and moved to the carpeted meeting area, where they sang three or four familiar songs.

Calendar activities and shared reading of the “poem of the month” and one or two familiar selections followed. Judy modelled fluent reading as she tracked the print on prepared charts of these poems. Next, four or five students shared personal anecdotes or objects, and their peers asked one or two questions following each oral presentation. Positive communication characterized these briskly paced presentations. “During the
sharing session Judy said ‘Let’s have an ‘I like’ comment for Brenda’ [pseudonym]’” (Researcher’s Field Notes, April 24).

Judy’s daily read-aloud using authentic text followed next. She read expressively, pausing occasionally to model her use of decoding strategies or introduce unfamiliar vocabulary. “As she read the picture book *Wolves* by Gail Gibbons, Judy paused, saying ‘There’s a word I am unfamiliar with oh I see the little word ‘an’ inside it’” (Researcher’s Field Notes, December 4). The unison recitation (cheering) spelling of the five new high frequency words to be added to the word wall that week for each grade followed the daily read-aloud. While students in one grade recited the spelling of their new words, those in the other grade printed their words and vice versa. Grade-specific basal lessons followed.

At the outset of each reading lesson, Judy assigned seatwork (e.g., journal writing, SRA reading cards) to be completed independently by students in one grade while she conducted the basal lesson with the other grade. At the beginning of each grade-specific lesson, Judy built students’ background knowledge through discussing the key concepts to be presented in the basal story. She then previewed the selection with her students and engaged one or two students in predicting its content, after which students confirmed or rejected these predictions by listening to the story. Judy read the selections expressively as her students tracked the print in their individual readers. Shared reading of the selection followed. The readers were then collected and related seatwork explained, often basal workbook pages that included questions related to vocabulary or key concepts in the stories. As students in one grade returned to their desks to complete these activities, those in the other grade moved to the carpeted area for their reading lesson that followed a similar format.
The majority of Judy’s students completed their seatwork activities with ease and continued with SRA reading cards or journal writing. In order to support her two struggling students, Judy discreetly modified the seatwork activity expectations (e.g., reducing the number of questions or length of answers required). The demands of teaching two grades made it difficult for her to provide one-on-one support as her students completed seatwork, and Judy was particularly concerned about one struggling student who frequently copied his classmates’ work during these activities. “He copies almost everything [assigned work] now, and it’s really a problem because some of them [other students] aren’t [pleased about this]” (Judy, Professional Learning Community Session, December 13).

Daily independent reading was also a central component of Judy’s reading program. Each afternoon her students silently read authentic text that they selected from her classroom library. These 20-minute sessions were intended to provide students with opportunities to independently apply their reading skills and strategies. Structured spelling and phonics lessons taught through commercial programs also occurred several times each week.

*Initial Reading Assessment Practices*

Judy’s initial assessment practices were primarily focused anecdotal observations intended to provide insights about students’ reading fluency and accuracy. “Well the things that are on the report card are the things that I am looking for, so accuracy, fluency, word attack, and expression” (Judy, Interview 1, November 30). With the assistance of her retired teacher volunteers, Judy obtained this information at the end of each term through anecdotal notes gathered as each student read a basal passage. At the
end of each reporting period Judy’s volunteers also administered a graded word recognition assessment Judy obtained from a colleague who taught at a public school. Judy assessed her students’ reading comprehension by reviewing their responses to SRA reading cards. “For that [comprehension] I look at their SRA [reading] so I’ll go through what [level cards] they’re reading and [note] how many mistakes they are making [on the follow-up questions]” (Judy, Professional Learning Community Session, January 17).

Judy described her students as primarily “strong” readers. “Generally my students are quite good readers. I have two struggling readers, but even they are not doing too badly for a grade 2 level” (Judy, Interview 1, November 30). When students struggled with the reading process, Judy communicated this to their parents through telephone conversations and face-to-face meetings. She suggested strategies for at-home support to parents of struggling students as well as in response to other specific requests. “Yes, [I suggest strategies for home assistance] if they ask or if the child is struggling. If they don’t and their child is doing fine, I haven’t been [providing home programming suggestions]” (Judy, Interview 1, November 30).

Although Judy was confident of her volunteers’ assessment competencies, she lamented that time constraints limited her ability to gain first-hand insights about her students’ reading.

If I had more time to have them read with me, I would know what kind of skills they’re using and what kind of strategies they’re using to decode words, but again I find that really hard to do myself this year. (Judy, Interview 1, November 30)

As an educational assistant, Judy had witnessed teachers using running records of students’ oral reading behaviours, and she believed this assessment practice would enhance her understandings of her students’ strengths and needs. “The running records
are great because then you can see the kind of mistakes [reading miscues] they are making” (Judy, Interview 1, November 30). However, she was concerned about the manageability of this practice. “I’d love to sit [with each student] and do a running record, and I can’t fathom how I’d do that with my 24 kids” (Judy, Interview 1, November 30).

Desire for Professional Growth

As a relatively recent graduate, Judy was confident that she possessed a lot of knowledge about reading instruction and recognized that there was more she could gain, particularly with respect to how to meet students’ individual needs.

My greatest strength is that I have a variety of [teaching] strategies. I feel that I have learned a fair bit, because I am not that long [since I graduated] out of teachers’ college. My weakness is that I just don’t [feel that I] know enough, I’d like to know more. I’d love more knowledge about the whole [reading] process and how to get kids [reading] at their level[s]. (Judy, Interview 1, November 30)

She had attended a professional development workshop that advocated the use of levelled material to differentiate students’ independent and small-group reading instruction. These practices intrigued Judy and she was particularly interested in investigating their use.

I would love to do more levelled reading [with my students]. I don’t know how it all works, but I think it is fascinating, and I think it would be effective if it’s done well but I am not totally sold because I haven’t seen it done. I would like to look into the levelled [independent] reading and small-group [guided] reading. (Judy, Interview 1, November 30)

While Judy was initially confident of her ability to teach decoding skills, she believed her knowledge of reading strategy instruction was incomplete and sought to enhance this aspect of her instruction. “I tend to fall under [teach] the same ones [strategies] all the time; it’s ‘predict and look at the cover.’ I know there are more [strategies], but I just don’t know what they are” (Judy, Professional Learning
Community Session, December 13).

Judy also sought to enhance her reading assessment practices. As an educational assistant working in publicly funded schools, Judy had observed teachers’ use of informal reading inventories. She perceived these tools to be effective in monitoring students’ reading progress over time.

You know when I was at the school board we started using the benchmarks [informal reading inventory], and [we could see] here is where they are at in term one and [by reassessing in] term two [we could see] if they had progressed. (Judy, Interview 1, November 30)

The potential to explore the use of informal reading inventories during this research project was especially appealing to Judy. “I’d love to do benchmarks [informal reading inventory], or at least look into that [type of tool]” (Judy, Interview 1, November 30).

Initial Impressions of the Benefits and Complexities of Reading Assessment

Judy welcomed my offer to assess the reading skills of a small number of her students of varying abilities with an informal reading inventory, as well as the spelling needs of her class with a developmental spelling inventory. These completed assessments then provided a focus for our first half-day professional learning community session.

When she reviewed the profile of her students’ spelling skills during the ensuing group session, Judy was impressed with the potential of class profiles to delineate students’ needs and instantly inquired about recommended instructional resources.

You see what you need to work on. [I] loved it. I haven’t used these [class profiles] at all. Okay [I see that] I have two [students who are] weak in short vowel sounds what kinds of things [instructional activities] do I do [to address that void]? (Judy, Professional Learning Community Session, December 13)

Later during the same session, after reviewing the reading process, Judy and her colleagues worked together to deconstruct running records of students’ oral reading
behaviours that I had completed with a small number of grade 2 students. When Emma asked whether these results affirmed Judy’s “gut feelings” about her students’ reading strengths and needs, Judy highlighted the additional insights miscue analysis provided and reiterated her interest in using running records.

They were well where I basically thought they were, although not, you know, I thought he was a little stronger than that [assessment illustrated]. But I don’t think “your gut” tells you the kinds of mistakes and miscues they are making. So I would love to get my hands on some running records and do them [with students] in my class. (Judy, Professional Learning Community Session, December 13)

Judy’s perception of the value of using assessment tools like informal reading inventories provided her with the confidence to encourage her colleagues to do so. For instance, during a discussion about the complexities of using these tools Judy was pragmatic, suggesting ways to acquire students’ word recognition skills to delineate the level of graded text with which to begin these assessments, and how to allocate time to assessments while students were engaged in activities requiring minimal supervision.

You can get your helper [volunteer] to do the word inventory to give you a starting spot [initial text for the assessment]. And then, I can envision myself doing it [assessing] during silent reading time. If you really wanted to get it [this assessment] done you could always do a title page for socials [social studies] and that gives you 25 minutes or more [to work on assessments]. (Judy, Professional Learning Community Session, December 13)

As her colleagues continued to discuss the feasibility of completing these assessments, Judy provided further support for their use, pointing out that this may not be an additional task per se, as it would provide reporting information currently collected through other assessment practices.

I don’t know how time-consuming this is, but let’s just think this [assessment] gives you fluency, so just think [about how we are] getting the information to put onto our report cards [now] that [assessment] is time-consuming too. When you’re doing this you’re getting it [reporting information] all in one package. (Judy, Professional Learning Community Session, December 13)
The potential to use insights from these assessments to enhance parents’ understandings of how to assist their children was apparent to Judy, who suggested these results might be particularly beneficial during forthcoming parent-teacher conferences. This prompted her to consider beginning these assessments immediately.

I was thinking about parent-teacher conferences at the end of January [and wondering] if we would like to show running records [of students’ reading to parents] then, you know that [profile of strengths and needs] might be nice to have for our next set of interviews. (Judy, Professional Learning Community Session, December 13)

However, the approaching 2-week school break meant timelines were short. Moreover, Judy and her colleagues had few if any prior experiences using this assessment practice. As such, I offered to assess the students in Judy’s class that she was most concerned about and deconstruct their results with her prior to the parent-teacher interviews.

Judy was particularly interested in acquiring insights about her two struggling students, both of whose parents had rejected the provision of remedial reading assistance. “I had two [students] that I recommended remedial [reading programming]. Their parents didn’t want that” (Judy, Interview 1, November 30). The following week I assessed these students’ phonemic awareness, word attack, and sight word skills. I also completed running records of their oral reading behaviours using an informal reading inventory that included a series of graded passages, fluency rubric and comprehension questions.

When Judy and I met to review and discuss the assessment results, she was surprised to learn that both of her struggling students were reading at a mid grade 1 level. Although they had acquired phonemic awareness skills and were developing word attack skills, their lack of fluency with word recognition impeded their comprehension of text. Judy expressed concern about her ability to provide the remedial assistance these students
required within her classroom context.

We discussed ways Judy’s volunteers might provide additional assistance, and I provided resources that they could use to do so. We also met with the special education resource teacher to explore potential provision of remedial assistance. Judy, her administrator, and the special education teacher later met with these students’ parents. One student’s parents continued to express concerns about the social stigma associated with remedial assistance and rejected this form of support. Although the other student’s parents then approved remedial programming, his family relocated shortly thereafter. In essence, although these results affirmed Judy’s perception these students required remedial reading assistance they did not enable her to secure this support.

Following an after-school session in early January focused on the administration and analysis of running records, Judy and her colleagues each decided to assess one or two average readers in their class using an informal reading inventory that included a series of graded texts, with related comprehension questions, and a fluency rubric. They then brought these completed assessments to the professional learning community session held the following week. As she shared her student’s results, Judy highlighted how they illustrated reading fluency as a growth area as well as how these insights would enhance her abilities and those of her students’ parents to provide targeted assistance.

I would love to do it [this assessment] on every child and have a hard copy of it [their results] to share [with parents]. You know [with this assessment] you can go back and say [to parents] they need help with fluency, or whatever it [their need] is. (Judy, Professional Learning Community Session, January 17)

Throughout January, as I continued to assess those students about whom Judy was most concerned, we met regularly to review her students’ reading strengths and needs, discuss classroom instructional implications (e.g., increased peer support through
dialogue), as well as how parents might provide additional assistance. In reviewing these assessments, Judy became increasingly aware of her students’ diverse independent reading levels. As part of these discussions, we explored how parents could provide assistance through both reading to their children and encouraging their children to read independently. While Judy sought to provide parents with text suggestions at each reading level, her lack of experience with levelled text made this difficult. To assist her I gathered a sampling of authentic texts from her classroom library at each reading level that she could show parents during the interviews. I also prepared a list of popular children’s books at each reading level that Judy could provide to her students’ parents and explained the features that affected the reading difficulty of each book listed.

Assessment Insights

Judy shared the insights she had gleaned from the completed assessments together with programming suggestions as part of the parent-teacher conferences held near the end of January. She found that her students’ parents were appreciative of and interested in the assessment insights and related home reading suggestions she provided. Being knowledgeable about how parents could assist their children enhanced Judy’s sense of professional credibility.

I think it [the information] was well received [by parents]. It was good [for me] to have a piece of paper [with students’ results] and my own thoughts too, to recall exactly where they were [strengths and needs]. I also liked sounding smart. Someone said, “Oh! The Mitten [text], I’m surprised [at the high reading level],” and I said, “Well, that’s up there because there are two stories running [in the text] at once.” (Judy, Professional Learning Community Session, February 8)

Throughout February, Judy and her colleagues used an informal reading inventory to collect data with respect to all of their students’ reading fluency, comprehension, and independent reading levels. As they perceived time as the principal barrier to the
collection of these data, I offered to teach each of their classes for several periods to provide release time. Judy also subsequently obtained administrative approval to have her retired teacher volunteers instruct during spelling lessons, while she completed these assessments. “I ran it [retired teachers instructing spelling] by [the administrator] Debbie [pseudonym]. I said it is just reading instructions to them and she [administrator] was fine with that” (Judy, Professional Learning Community Session, May 22). In order to provide ongoing guidance and support, Judy and I met regularly as she completed these assessments to address her questions related to the assessment protocol (e.g., miscue analyses), as well as discuss resulting instructional implications.

As she completed the assessments, Judy came to realize that while the majority of her students’ decoding abilities were at or above grade level, most experienced difficulties retelling stories, making personal connections, and answering inferential comprehension questions, with expository text particularly challenging.

I found it [the area of need] is more comprehension. I’d say they are average to strong readers with decoding but not comprehension. The nonfiction was more difficult [than narrative text] with the comprehension too, so working on nonfiction [text] and working on comprehension, I think would be goals for my class. (Judy, Professional Learning Community Session, February 8)

As this trend was evident across all 3 participants’ classrooms, we decided to devote our next professional learning community session to examining comprehension instruction.

*Comprehension Instruction*

We began a half-day reading comprehension session reviewing the characteristics of proficient readers. As we discussed how struggling readers may view the purpose of reading to be that of decoding rather than understanding text, Judy questioned whether this was attributable primarily to students’ home reading experiences or cognitive
abilities. “But don’t you think the majority of that lack [of understanding] is home environment, or there are developmental issues involved?” (Judy, Professional Learning Community Session, February 20). After I clarified that irrespective of prior experiences and/or cognitive abilities, students’ abilities to view reading as a “meaning-making” rather than “word-calling” process could be fostered at school, Judy inquired, “so then it can be taught?” (Judy, Professional Learning Community Session, February 20).

Understanding that proficient reading required both decoding and comprehension was new to Judy, who sought clarification. “So can you have someone who’s really good at listening [comprehension] but not good at reading [decoding]?” (Judy, Professional Learning Community Session, February 20). After I explained that this was characteristic of students with decoding skill voids, who may have excellent listening comprehension, Judy then questioned whether listening comprehension supported most students’ development of decoding. “Okay, your typical learner if they’re good at listening [comprehension] strategies, they’ll also be good at reading alone [decoding]?” (Judy, Professional Learning Community Session, February 20). We then reviewed the reading process, highlighting how deriving meaning from text required interactive use of both decoding and comprehension skills and strategies.

The focus of this session moved next to reviewing text structure, story grammar, together with how comprehension strategy instruction could enhance students’ abilities to derive meaning from text. Judy appeared inundated with information she found difficult to relate to her existing reading instructional practices. “I’m now just trying to get my head around not just one thing but the big picture, so now my head is [spinning] ahh, what do I do and how am I going to do this all?” (Judy, Professional Learning
Community Session, February 20).

As we reviewed sample lesson activities for each of the comprehension strategies, I highlighted that Judy was currently using some of these strategies, such as activating students’ prior knowledge and engaging them in predicting. Nonetheless, near the end of this session, Judy appeared to be overwhelmed by the plethora of new information. “When will I understand this?” (Judy, Professional Learning Community Session, February 20). I encouraged her to review the session handouts, offered to meet with her to provide clarification, and reiterated the importance of making small, thoughtful changes over time.

Over the next few weeks, Judy borrowed several instructional resources to clarify her understandings and established a goal of modifying her basal lessons to place increased emphasis on comprehension instruction.

So for me, like I said [my goals are using] the levelled text and working with all the [comprehension] strategies working them into my current reading program, doing a little taking [activities] out here and a little adding in there, and working with the nonfiction too. I have to work that all in. (Judy, Interview 2, March 7)

Many extra responsibilities subsequently demanded Judy’s immediate attention. The resultant time constraints made it difficult for her to plan for comprehension instruction. “But there were report cards, science fair, Mexican Fiesta, interviews. I just wish I had more time to do this. I know what I want to do, I just need to do it, and it is finding the time” (Judy, Professional Learning Community Session, March 27).

As Judy thought about how to alter her reading lessons, she began using the most tangible aspects of the comprehension session, the student activity masters. For instance, she used the story grammar frames and found these activities engaged her students for longer than did some of the workbook activities she used previously. “I have done some
[lesson adaptations] with the [basal] stories, with different graphic organizers, more because it is a nice time filler, especially for my grade 3s, [having them identify] setting, characters, problem” (Judy, Professional Learning Community Session, March 27).

During a discussion focused on Judy’s and her colleagues’ recent comprehension instruction experiences, we reviewed their progress meeting students’ needs, particularly their difficulties making personal connections to texts. Judy empathized with her students’ struggles making connections to texts, sharing how challenging she perceived this to be for students who lacked experiences similar to those presented in these texts.

I don’t know, some of them [stories read] I just found really hard to make a [personal] connection [to], and I wouldn’t be able to do that either that’s horrible. Especially if they don’t have [the experience], like what if they say “No, I have never done that.” (Judy, Professional Learning Community Session March 27)

After we then explored how students’ comprehension could be enhanced by making personal connections to story elements (e.g., characters, setting, problem), as well as making “text-to-text” and/or “text-to-world” connections, Judy recognized that students’ connections need not be as literal as she initially perceived. “So we need to work around that [literal connections] and more on just not necessarily [connections to] the experience but part [elements] of the story” (Judy, Professional Learning Community Session, March 27). These thought-provoking conversations were pivotal in clarifying Judy’s understandings and enabling her to begin to think about modifications to her practices.

In addition to the need for time for reflection before moving forward, time limitations associated with teaching a combined-grade class rendered it particularly difficult for Judy to determine how to modify her basal lessons. The suggested format for these strategy lessons included modelling through teachers’ thinking aloud as well as student discussion prior to their independent application of these strategies. These
process-oriented lessons required time to implement, and Judy wondered how she could accomplish this while conducting two different reading lessons in one 40-minute period.

After we discussed how she might overcome this difficulty by working with both grades simultaneously or one grade at a time, Judy decided to begin modifying one grade 2 reading lesson each week while her grade 3 students were withdrawn for music, providing her with a full 40-minute period to work with a single grade. She began working on the story elements and infused these weekly lessons with increased peer discussion as well as students’ use of the text to find evidence to support their ideas.

“After orally reviewing the characters in the basal story students’ read the previous day, Judy stated ‘Let’s pass out the readers so we can find out about the characters and see what proof we can find in our readers’” (Researcher’s Field Notes, April 25). She observed that these practices as well as props such as cards on which were written each of the story elements (e.g., setting, characters, problem) enhanced her students’ engagement in retelling stories.

We’ve done, like Violet [the grade 3 teacher who] had them [story elements] on cards, and I made some [story element cards] too, even just having the cards and turning them upside down and saying, “Who would like to pick one [card]?” Just having that [prop] gets them all excited [and they say], “I want to pick one!” (Judy, Professional Learning Community Session, May 10)

Finding these lessons effective prompted Judy to begin tinkering with the questions she posed during her daily read-aloud of authentic text with both classes. For instance, at times she reviewed the story elements and/or asked students to make “text-to-text” connections. “After reading the story Eight O’Cluck, Judy asked ‘Does this remind you of any other stories? Remember tell me how.’” (Researcher’s Field Notes, May 24).

Throughout this time Judy also worked on completing a second series of informal
reading inventory assessments in attempts to confirm and extend her insights about her students’ needs.

Only doing one [informal reading inventory assessment], I think, isn’t a fair representation [of students’ needs], because the one student I did again, she [initially] did [text level] 23 the Aesop fable, and it was kind of hard for her, especially the comprehension, but then I did [a second assessment recently at] the [text level] 24 and she flew through that. (Judy, Interview 2, March 7)

During April, as she completed these second assessments with a broader cross-section of her students, Judy continued to note how students in both grades had greater difficulties with comprehension of nonfiction text. For instance, they had difficulty identifying supporting details and rarely used nonfiction text structure (e.g., headings, subtitles) as an aid. This prompted Judy to think about implementing a reading unit focused specifically on nonfiction text comprehension. I offered to assist her with resources and planning.

In early May, we met to begin planning this unit. We reviewed the skills required to derive meaning from expository text, including how to approach reading these texts (e.g., many entry points), understanding nonfiction print conventions (e.g., headings, subtitles, index, labels, diagrams), as well as how to locate, summarize, and evaluate the credibility of information through activities such as completion of graphic organizers (e.g., “KWL” [i.e., know, want to learn, learned] charts, concept maps). After we discussed ways to organize the key concepts in this unit through a series of lessons that included scaffolding through teacher modelling followed by guided practice prior to students’ independent application of the targeted skills, Judy used the teacher resource materials I provided to plan a 2-week nonfiction unit that would replace her basal lessons. She perceived her abilities to teach this unit to both grades simultaneously and integrate these lessons with her science unit as particularly advantageous.
derive meaning from nonfiction text. “If I were to teach it [the nonfiction unit] again, I would definitely spend some time reworking things. I just kind of ploughed through [the unit] until the end. I didn’t take the time to rework it for a month or so” (Judy, Interview 3, June 27). Despite the brisk pace of this unit, it significantly enhanced Judy’s students’ understandings of how to approach and derive meaning from nonfiction text. She continued to foster these abilities through using activities introduced as part of this unit during her social studies unit that followed.

Throughout the remainder of the school year, while Judy continued to use the basal reading program, she deviated increasingly from the whole group lesson structure, altering her lessons to include scaffolding through small-group and partner dialogue. Initially Judy had been uncertain about the effectiveness of peer scaffolding. For example, when it was proposed early in this initiative Judy responded, “I don’t know, I guess that might be okay sometimes” (Judy, Professional Learning Community Session, December 13). However, over time as she used these practices, she perceived them to support all students, particularly those who struggled.

Using some of the partner work or the “think, pair, share” [discussion strategy], [I have been] incorporating more of that. So a lot of the [basal] lessons probably have stayed, the framework has been the same. But, by inserting more of these sorts of things, in that way it has changed quite a bit too especially being able to support a weaker student [by orally] sharing their ideas and [organizing lessons] so that everybody has to think and respond instead of always listening to one or two [students], so more partner discussion, small-group work, that kind of thing. (Judy, Interview 3, June 27)

Irrespective of Judy’s perception of the effectiveness of these practices, the challenges of teaching a combined grade, particularly the need for a quiet classroom to enhance students’ abilities to work independently, affected her comfort implementing them during all lessons. She anticipated increased use of these supportive formats when teaching a
single grade class.

I still found with the split I was doing a lot of jumping back and forth [from one grade to the other], and so that doesn’t always lend itself to these nice things [small-group and partner work] happening. I would like that to happen more, and I could see that happening more [with a straight grade]. (Judy, Interview 3, June 27)

Throughout this initiative Judy displayed a keen interest in enhancing her understandings of comprehension instruction and borrowed many professional resources, lesson plans, and authentic texts for strategy instruction. However, the lack of integration of these lessons with her existing reading programs affected Judy’s comfort using them, and with the exception of the nonfiction materials, she rarely did so. “Just to kind of insert it [a comprehension lesson] didn’t feel natural, like okay we’re going to shift gears and throw this [lesson] in, it just felt a little disjointed” (Judy, Interview 3, June 27).

Beginning to use lesson anchor charts and strategy visual prompts midway through the school year was similarly challenging. Although Judy used these visual aids during lessons that were being observed, she rarely did so otherwise. She anticipated making increased use of visual learning aids during the forthcoming school year.

I’d take them [visual prompts] down because we needed the whiteboard [for other lessons], and then I just thought ehn, you know [I’ll leave them down]. It felt a little disjointed this year because I started off one way and then we were adding these things in, so I think next year [I will] just start fresh with this. (Judy, Interview 3, June 27)

Over time, Judy determined that acquiring instructional resources was not the most important factor affecting her ability to provide comprehension instruction. Rather, she needed to allocate time for reflection in order to use her professional judgment to determine how to modify her existing programs. In essence, the process of reflection prior to implementation of new practices was critical and something that could be aided,
but not accomplished, by someone else.

You do [have to reflect], absolutely and just make a big picture for yourself. There is sort of a [general] big picture, but everybody has their own picture of how this [comprehension instruction] needs to work in their room, and you need to just work though that yourself. You get all this information, but you need to go through it yourself and figure out [how to use it]. (Judy, Interview 3, June 27)

Nonetheless, Judy believed the provision of additional lesson plans would be beneficial. “But I would still like more [lesson] plans” (Judy, Interview 3, June 27).

*Use of Levelled Text*

Although her students’ assessment results supported Judy’s perception of their need for differentiated reading materials, the lack of levelled text within the school posed a significant barrier. In late February, Judy and her colleagues decided that an after-school workshop on how to establish a levelled book collection might be beneficial, after which their volunteers could begin levelling their classroom libraries. However, other commitments, most notably the preparation of second term report cards, caused Judy to suggest postponing this session. “Do we have to be there [at the book levelling session]? Because it’s report card time [and we need time]” (Judy, Professional Learning Community Session, February 20).

When conflicting commitments later caused her colleagues to contemplate postponing this session further, Judy disagreed, suggesting the book levelling workshop take place as soon as possible. “No, we need to get it [book levelling] done” (Judy, Professional Learning Community Session, March 27). While she intended to begin book levelling with her volunteers’ assistance immediately after this workshop, diverting attention to this task would have precluded completion of other activities with which Judy also required assistance.
I'm honestly just doing my best to stay above water this year, and treading just as fast as I can to stay above in everything. I haven't started levelling the books, I have helpers [volunteers] two days a week but they're too busy doing other things for me. (Judy, Professional Learning Community Session, April 17)

As she perceived these constraints to be insurmountable, Judy considered postponing book levelling until the summer break. "It is just a matter of time and I don't think it [book levelling] will happen this year. So I think over the summer I'll [begin and] see how that goes" (Judy, Professional Learning Community Session, April 17).

As exploring use of levelled text was of particular interest to Judy throughout this initiative, I offered to provide extensive assistance, and over the next 2 weeks spent several mornings levelling the books in her classroom library. After I had completed levelling the majority of her classroom books, Judy and I worked together to complete her collection. With supported practice, Judy steadily developed confidence levelling these books independently. Once her collection was established, Judy used her informal reading inventory results to determine the level of text she would assign to each student. She also prepared independent reading logs, emulating the format Violet had presented during a group session. When she began using levelled text, Judy observed that her students appeared more on task during independent reading periods. "I think they are more engaged, more on task, they used to do a little more chatting during silent reading, and I would have to be reminding them [to remain on-task] all of the time" (Judy, Professional Learning Community Session, May 10).

Throughout the remainder of the school year, Judy's students displayed interest and engagement as they read levelled text each day. Judy's perception that this was instructionally valuable provided her with the confidence to begin including independent reading as an activity choice following students' completion of assigned seatwork.
I felt more comfortable giving them the opportunity to read as a choice. So if they would prefer to read from their levelled texts [instead of completing SRA cards], then that was okay with me because I felt that they were doing something that would help their growth in reading. Whereas before [I used levelled text] if I said silent reading was an option [following assigned work], I’d always wonder are they just looking at pictures, are they using that time well? (Judy, Interview 3, June 27)

At the end of this initiative, Judy highlighted her ability to meet a wider mosaic of students’ needs through using levelled text as a programming change she was particularly pleased to have implemented.

Using the levelled readers was pretty exciting because that’s something I’d wanted to learn more about and do, but [initially] I just didn’t have the tools. That’s been really neat to see the kids really take off with that and enjoy that. I know that it [reading text at their levels] is really beneficial for them, so I’m happy about that [programming change]. (Judy, Interview 3, June 27)

Whereas she had intended to listen to her students read these texts during independent reading, time limitations Judy attributed to teaching a combined grade rendered this difficult. Although she believed conferencing would enhance her understandings of her students’ reading strengths and needs, Judy required this quiet classroom time to organize before afternoon lessons.

I think [lack of] time was the big thing. I think it’s really important [to conference and listen to students read] but also logistically coming in [after lunch when] usually I have yard duty, it’s nice just to have 5 or 10 minutes to straighten my desk. Especially with the split grade I found my desk got chaotic, so that was often the time I spent just sifting through things and getting organized for the afternoon. (Judy, Interview 3, June 27)

Similarly, time limitations together with lack of materials precluded Judy from implementing small-group guided reading. “I would’ve really loved to get into guided reading as well, small groups, and that didn’t happen because of time and also the materials, we don’t have the materials for that” (Judy, Interview 3, June 27).

Nonetheless, Judy’s positive experiences using levelled text enhanced her
commitment to extending her collection of levelled reading material. At the end of the
school year, she obtained administrative approval to allocate school funds designated for
additional copies of her basal readers to the purchase of levelled text and initiated the
creation of a centrally located levelled book room where she and her colleagues could
house levelled reading material for shared use.

Cumulative Reading Assessment Portfolios

While working in public schools, Judy had observed teachers’ cumulative use of
assessment insights. As soon as she and her colleagues began using consistent assessment
practices, Judy began advocating that they similarly share their students’ assessment
results. “If you [Emma, the grade 1 teacher] would put the running records [you
complete] in a folder, then I could get the whole package [of assessment results] next
year; then if I wanted to look at it I could” (Judy, Professional Learning Community
Session, February 8). Despite initial apprehensions, over time Judy’s colleagues
supported this direction and they began to explore methods to track students’ cumulative
reading progress throughout the primary grades.

Judy’s perception of the importance of monitoring students’ ongoing progress
through sharing assessment insights provided her with the confidence to be a strong
advocate for these practices and ensure that their tracking procedures were “user
friendly.” For example, she recommended the use of summary sheets to provide at-a-
glance profiles of students’ assessment results. “I don’t think you want to go through the
whole packet [of students’ assessments], [perhaps] you could just look at a summary. Is
there a way to summarize [these results for] a class?” (Judy, Professional Learning
Community Session, April 17).
Nonetheless, making decisions about which assessment results should be included in cumulative tracking procedures was unfamiliar territory and a time-consuming process. At times, Judy alternated between appreciating the opportunity to assume responsibility for and wanting to relinquish control of these decisions. For instance, in the context of a discussion about the benefits and drawbacks of including various assessment results in their students' portfolios, Judy stated, "When Arlene builds this [tracking sheet] for us she's going to take into account what [assessment results] we want [included]" (Judy, Professional Learning Community Session, April 17). Later during the same session, as she and her colleagues wrestled with which results to include, Judy appealed for direction: "You [Arlene] have to tell us what [assessment results] we want [to include]" (Judy, Professional Learning Community Session, April 17).

Throughout the third term, Judy used the informal reading inventory on an ongoing basis to assess students while her retired teacher volunteers taught spelling. Consequently, she required little support to collect her students' end of year informal reading inventory assessment results. As her colleagues debated how they might allocate time for completion of their year-end assessments, Judy offered practical solutions, as well as her own time. For instance, she recommended they implement and volunteered to supervise all three classes during a weekly divisional "primary sing" period.

Two of you [Emma and Violet] could go [to assess students] during "primary sing." I don't think I need that much help for the rest of this [series of assessments], so I could do 'primary sing' and you both could do assessments. I have help, so I do mine during spelling lessons. (Judy, Professional Learning Community Session, May 22)

Judy's time then supported her colleagues' abilities to collect their year-end data.

Judy perceived the ongoing accrual of assessment data as vital to her ability to
provide the most enabling reading program for each student. She looked forward to using the insights from students’ assessment portfolios to provide such programming in the coming school year.

It’s definitely much more beneficial to know where they are [strengths and needs] to be able to put them in levelled readers at the beginning of the year right away. To know where they are as a class as well, and who will need that extra focus. It’s great to have that starting point. (Judy, Interview 3, June 27)

Personal Accomplishments and Future Directions

Judy perceived her increased confidence and competence assessing and evaluating her students’ reading strengths and needs as her greatest accomplishment throughout this initiative.

Just getting a really good feel on where they are as readers and being able to use those assessments to help me program for them, to be able to evaluate them on their reading and feel really confident that I really know where they are, that was a big thing [accomplishment] for me. (Judy, Interview 3, June 27)

One of her greatest challenges was determining how to assimilate and accommodate the plethora of new information. This professional decision-making was not an instantaneous process, which at times was discomforting.

Well one of them [my challenges] was just getting everything straight in my head of okay what do I teach when and how do I teach this [comprehension]. Getting the whole [reading] program kind of mapped out in my head of how I want this to come together as one big whole, so [it was] not overwhelming necessarily, but like I said, I like to know instantly. (Judy, Interview 3, June 27)

Over time, Judy acknowledged that there was no “one-size fits all” reading program. Rather, teachers needed to use their professional expertise to delineate how to modify programs to meet their students’ needs. “It [reading program modification] is something that you have to work through personally” (Judy, Interview 3, June 27).

As she reviewed her pre-and postinitiative literacy orientation surveys, Judy noted
how collegial collaboration during this study promoted the increased reflection denoted on her final survey. She elaborated on how reflecting with her colleagues enhanced her understandings of how to move forward and implement changes.

Like, I’ve always kind of thought, oh this isn’t working and why isn’t it working? But you don’t always know how to change it, we made a point of being reflective together, so definitely [reflecting] with colleagues was helpful, and because of the study we had to be reflective and think about that [how to change]. (Judy, Interview 3, June 27)

Changes Judy implemented that were reflected on these surveys included placing increased focus on encouraging students to monitor their comprehension and use a variety of reading strategies.

Critical to modifying her reading assessment and instructional practices was Judy’s receptivity to change. “I wanted to change it [reading practices], and I knew it needed to be changed so I was very open to change” (Judy, Interview 3, June 27). While Judy was aware that her reading practices required modifications, she was unsure of what or how to change. Judy shared that this initiative did not alter her reading-related beliefs per se, but rather enabled her to fill knowledge voids she was aware she possessed.

I guess because I came in [to primary] from an upper grade, I wasn’t necessarily sure how to do it [assess and teach primary-grade reading]. I definitely knew I didn’t know how to do it, so it wasn’t that it’s [the initiative has] changed my beliefs. I knew there was something missing, I just didn’t know what. (Judy, Interview 3, June 27)

Discovering that students could decode without comprehending text was novel to Judy, and she appreciated participating in professional learning focused on her own and her students’ identified needs. “That was new to me, to really see that they [students] could read and they could decode wonderfully, but the comprehension was lacking. So that was really neat, to take our concern and kind of go with that” (Judy, Interview 3, June 27).
As she reviewed the teacher efficacy scales she completed pre-and postinitiative, Judy confirmed that her efficacy for student engagement, classroom management, and instructional strategies all increased over the duration of the school year. She attributed these changes to both her increased primary-grade teaching experience and this initiative.

Well some of it [my increased efficacy] definitely has to do with what we’ve learned this year, questioning [strategies] and comprehension [strategies] you know some of that [growth] is [because of] using the [assessment] tools that we’ve used this year. So I think that is a good chunk of the growth for [me], and probably a small part of it is also settling [in] and kind of finding my way through this year. (Judy, Interview 3, June 27)

The establishment of trusting collegial relationships where teachers felt comfortable sharing challenges and successes together with ongoing support were factors Judy believed affected her change processes.

The open and honest communication was a wonderful environment to share feelings of concern, joy, and frustrations over the various changes. This was found in our relationship as well as the relationships with my colleagues. It was very important to be able to share both successes and failures with each other and to receive support for these things. (Judy, Written Reflections, June 27)

Being part of a learning community focused on common goals enabled Judy and her colleagues to scaffold one another’s growth, and at times provided an impetus for change.

With my colleagues as well, that’s been wonderful, getting ideas from them and seeing what they’ve done and, you know, talking about “oh I tried this” and “how did that go,” and so that’s been very helpful for sure. [It] kind of gave you the energy and enthusiasm to try it [strategies] yourself or try something similar. (Judy, Interview 3, June 27)

Judy also highlighted the importance of delineating and implementing small, manageable changes over time. Additionally, increased student achievement that she attributed to these programming changes encouraged Judy’s continued motivation for change.

I was given the encouragement by you [Arlene] to embrace and introduce small changes, a few at a time. Once I implemented a change, I was able to see the benefits of it [for my students], and as a result, my self-confidence has grown in
my ability to program for my individual students and to get a real feel for where they are at [strengths and needs] in their reading and comprehension abilities. (Judy, Written Reflections, June 27)

Judy was pleased with the changes she implemented during this initiative and had also established goals for continued professional growth as a primary-grade reading teacher. In particular, she hoped to increase her confidence and competence teaching comprehension strategies. "I think that [comprehension instruction] is not something I'm totally comfortable with yet, that's something I need to work on for next year, the "text-to-text" [connections] and "text-to-self" [connections] and all of that [comprehension strategy instruction]" (Judy, Interview 3, June 27). To that end, she had begun thinking about modifying her use of the basal program during the coming school year. She planned to allocate time during the summer months to determining how she could adapt the program lessons to place increased emphasis on comprehension instruction and supportive instructional formats.

[I am] planning for next year still to use some of it [basal program] but reworking a lot of it and taking out some of the activities and replacing them with graphic organizers or group work or things like that, so it'll [this initiative will] definitely change the way I use the [basal reading] program. (Judy, Interview 3, June 27)

**Violet: Developing Confidence in Her Teaching Competence**

Violet had long held interests in education and art. In part, opportunities to fuel both passions simultaneously influenced her decision to embark on a teaching career.

I thought of going through for art and thought of becoming a teacher. I decided to go that [the teaching] route. Art is always a passion [for me]. I love to do it on the side, and I can incorporate it into all of my teaching. (Violet, Interview 1, December 1)

Upon completion of her Bachelor of Education degree 3 years ago, Violet accepted a teaching position at this independent school, where she taught grade 6 for 1
year and then a combined grade 3/4 class for 2 years. Having struggled with the complexities of teaching a combined grade, she appreciated teaching a straight grade 3. “I feel like this is the first year where I am starting to get myself together because I only have one grade, so I am not split two ways” (Violet, Interview 1, December 1).

A significant amount of Violet’s personal time was devoted to planning and preparing materials for her class. She frequently deliberated how much time she should allocate to teaching-related activities and questioned her instructional abilities relative to those of her colleagues.

Teaching is something that you can always do more for, more and more after school so it [a challenge] is setting the boundaries and realizing that you’re doing what you can do. I compare myself to other people [teachers] and when I’m complaining my mother always says “you’re just as good a teacher as anyone else.” But I’m feeling like I don’t know how to do this [teach] as well. (Violet, Interview 1, December 1)

Violet attributed her self-doubt and nominal professional confidence to minimal mentoring and professional collaboration. “I didn’t have a [role] model. I learned [to teach] from doing things myself” (Violet, Interview 1, December 1).

While Violet appreciated the positive stakeholder relationships within this school community and believed her students’ parents were supportive, at times she was ill at ease with them. She attributed her lack of self-assurance to her youth and limited experience teaching.

Generally [parents are] very supportive. I feel sometimes insignificant next to a parent. You know I’m not a parent myself. I feel young still and relatively new, so sometimes I feel awkward. There is not necessarily a need to be, but that’s my own perception. (Violet, Interview 1, December 1)

The Learning Environment

Violet’s artistic flare permeated her classroom. Despite the additional time
required to do so, she enjoyed applying her creativity to the preparation of attractive visual learning aids, student worksheets, and interactive bulletin board displays. “I love wasting [my] time making beautiful handouts with cool [graphic] organizers, and making neat bulletin boards” (Violet, Interview 2, March 8). Colourful displays of lesson anchor charts as well as student work exhibits that were changed regularly occupied prominent places throughout her classroom.

Violet also appeared to enjoy interacting with her students. “I think I can have fun with the kids. I don’t think it’s silly playing the part or putting in some energy [during lessons]” (Violet, Interview 1, December 1). Reciprocally, students appeared to enjoy interacting with Violet and often shared their personal experiences with her. For instance, as they entered the room each day, students engaged in jovial discussions with Violet about their daily pastimes, friends, and out-of-school interests. Violet enthusiastically embraced these discussions not only during nonteaching times but throughout each day whenever students were able to relate their personal anecdotes to the focus of her lessons.

The tone in Violet’s classroom was cheerful and positive. Posted visual schedules of the subjects to be taught each period and firmly established routines enabled students to transition smoothly from one lesson to the next, with minimal loss of instructional time. For example, Violet used consistent routines for the distribution and collection of all materials as well as reminding students when the end of each lesson was approaching.

Violet raised one hand and said, “Grade 3s give me five. That means pencils down, eyes on me. We have five more minutes of spelling. I just want to warn you. Don’t rush but try to finish up. When you are done, do your word search [worksheet].” (Researcher’s Field Notes, December 5)

Violet held high behavioural expectations and used visual prompts as well as clear, concise instructions to ensure her students understood the guidelines for each
activity. For instance, after establishing the expected classroom noise level for independent work following her lessons, Violet collaborated with students as she set the class “noise meter” displayed on the front whiteboard that included levels one (complete quiet) through five (noise acceptable only outdoors). If students’ voices later exceeded the identified level, Violet referenced the meter and engaged students in self-assessing their behaviour as she refocused them.

Violet said, “Give me five”. Once all students had raised one hand, she pointed to the noise meter set at level two and asked them to rate the current classroom noise level, which they concurred, was level four. They then refocused following level two expectations. (Researcher’s Field Notes, December 5)

Violet consistently used a repertoire of effective management routines, including echo-clapping patterns in unison to gain students’ attention, waiting for all students’ attention before speaking, and following through with established consequences for unacceptable behaviour. Nonetheless, her students’ ongoing needs caused Violet to question her classroom management skills. “I would have said classroom management was my greatest challenge, but you tell me otherwise” (Violet, Interview 1, December 1). Violet’s perception of this class as particularly challenging to manage was shared by other teachers. “Well you [Violet] have a monstrous class” (Judy, Professional Learning Community Session, April, 17).

At times, Violet lamented that her students’ conduct constrained her from providing enjoyable co-operative learning experiences. “She [the school administrator] said to me, sometimes you can’t do that group work and the fun stuff you want to do, because they [students] can’t handle it” (Violet, Interview 1, December 1). Despite ongoing frustrations over their conduct, Violet rarely raised her voice or visibly lost patience with her students.
Although she occasionally used co-operative groupings of four to six students, Violet found the arrangement that most enhanced her students’ on-task behaviour was a double horseshoe “U,” where all desks faced an open area in the centre of the room. Placing students’ desks in two horizontal rows in the middle and two vertical rows on each side of the room all facing centre enhanced Violet’s ability to make eye contact with all students during lessons. This also provided a large carpeted meeting area in the centre of the room for group lessons.

The 28 students in Violet’s class had a mosaic of needs and abilities. These included 1 student receiving daily withdrawal remedial reading assistance from the special education resource teacher, 2 students who had just discontinued doing so, 2 English Second Language (ESL) students, 1 of whom received the one-to-one support of an educational assistant each morning, as well as 5 students who required constant teacher monitoring to complete independent work. Violet provided this one-to-one support as she circulated amongst her students during their completion of seatwork activities following each lesson.

*Initial Reading Program*

Violet initially followed the reading programs selected by a school-based curriculum review committee for use throughout the primary division. These included commercial basal reading, spelling, and phonics programs as well as a “daily language review” workbook. As a junior division teacher at the time of program review, Violet was uninvolved in the selection of these programs.

Although she followed the selected basal program, at times Violet substituted lessons with alternate activities, such as, for instance, readers’ theatre to build reading
fluency or literature circle small-group activities. While the scheduling of her lessons varied, each day included basal reading and word study (i.e., spelling or phonics) periods, and 15 minutes devoted to the daily language review. Independent reading sessions also occurred once or twice weekly.

Throughout this study, Violet altered her practices to place increased emphasis on story grammar, comprehension strategy instruction, and nonfiction text structure. She also increased her use of peer scaffolding and implemented daily independent reading sessions. The sequencing of her basal lessons however remained relatively consistent.

Violet began each lesson by accessing and building her students’ background knowledge of the lesson content or concepts, frequently modelling her own or her students’ personal connections to the text selection. For instance, to introduce her students to the analogies they would encounter in the basal story Amelia Bedelia, Violet showed students her engagement ring and said, “Mr. Smith [pseudonym] paid an arm and a leg for this ring. Does he still have both arms and legs?” (Researcher’s Field Notes, December 18). Following a jovial discussion about the meaning of this expression, she then used an analogous expression with her students’ names saying, “Billy [pseudonym] and John [pseudonym] ran into each other in the park. What do I mean?” (Researcher’s Field Notes, December 18).

After an introduction that included many students’ predictions about the story, Violet read the selection aloud with abundant expression and/or had selected students read portions of it. Throughout these readings, her students followed along in their individual copies of the reader. While at times students sat in their designated spots on the carpet during these lessons, more frequently they sat at their desks. As she read,
Violet used a dramatic style of walking around the open area in the middle of the classroom, gesturing animatedly and pausing frequently to make eye contact with her students, especially those with limited attention. Throughout these lessons, Violet’s voice and gestures exuded excitement about each story or topic of study.

Reading of the basal selections was followed next by Violet modelling how to complete the related follow-up seatwork activities, often basal workbook pages that included questions related to vocabulary or key concepts in the stories. While modelling, Violet used prepared charts or enlarged prototypes of the worksheets that she drew on the front board. These models remained posted as visual aids for students to reference in their completion of the activities. As Violet perceived many of the basal program worksheets to be “dated,” she modified them to increase the use of graphic organizers and update their appearance. “I redid a lot of them [basal worksheets] this summer” (Violet, Professional Learning Community Session, January 17).

Students were encouraged to reread the basal selections for clarification and reference their individual readers as they completed seatwork activities independently. Throughout these independent work periods, Violet circulated amongst students providing one-to-one encouragement and assistance as required. While most of Violet’s students finished these activities with ease and moved next to other unfinished work, independent reading, or SRA reading cards, some students required constant support to complete their seatwork. Violet recognized that the students who struggled with reading comprehension activities were those who lacked the metacognitive awareness required for strategic independent reading.

They [weak readers] are just sitting there stuck. They don’t know what to do and are waiting for you to feed them the answer. In terms of comprehension questions
[when] they have to write about their reading, they [strong readers] have strategies and they know what they’re doing and why. (Violet, Interview 1, December 1)

Fostering reading motivation and confidence were also of significant importance to Violet, who had witnessed their impact on student engagement.

I’ve got one child who is a decent reader but [his] mom said he wouldn’t read. She found this one book that he was interested in and you know he read the whole series, and that was unheard of for him. So definitely getting them [students] interested in the reading and feeling confident [is important]. (Violet, Interview 1, December 1)

To cultivate reading enjoyment, Violet encouraged her students’ parents to promote daily home reading. At the outset of the year she sent home a reading bookmark entitled “Reading Strategies” to enhance parents’ abilities to encourage strategic reading. This bookmark included before, during, and after reading strategies to support students’ comprehension. Items under the “Before reading I think about” heading included accessing prior knowledge, predicting, and setting a purpose for reading. Ensuring the text made sense, rereading for clarification, using decoding strategies, and creating mental images were incorporated under the “While I am reading” heading. The final segment, “After reading” included items such as discussing the author’s message, making personal connections to text, and revisiting initial predictions.

In addition to encouraging at-home reading, Violet scheduled in-class independent reading periods once or twice each week. As her classroom library was extremely limited, Violet relied on her students to bring books from home for independent reading.

*Initial Reading Assessment Practices*

At the outset of this initiative, Violet used a variety of reading assessment
strategies including focused observations of students’ oral reading, informal observations during lessons, and tracking of students’ performance levels in their completion of basal program worksheets. While observing students’ oral reading, Violet completed a fluency rubric from a teacher resource book that she adapted to focus on expression, fluency, and word attack skills. “I’ve found a rubric that I’ve modified to suit what our report card needs” (Violet, Interview 1, December 1). Within each of the fluency-related categories, she identified performance indicators at levels one through four (e.g., expression: level one—very little expression, level four—very expressive, etc.). Violet completed this rubric once per term with each student as she assessed their oral rereading of a basal passage and had a retired teacher volunteer complete the same rubric as each student read an unfamiliar basal passage. All students read the same designated passages, and comprehension was unaddressed during these assessments. “I never asked them comprehension [questions] after [they read]. It was just purely can they read fluently and accurately” (Violet, Professional Learning Community Session, January 17).

Reading comprehension was assessed through a combination of anecdotal notes gathered during reading lessons and records of students' completion of basal worksheets throughout each term. Violet maintained detailed tracking sheets on which she recorded marks assigned to each worksheet. These sheets were later colour coded by reporting area (e.g., comprehension, independent reading) and used in conjunction with Violet’s rubrics and anecdotal records to determine students’ end-of-term marks. “When I mark a [reading] sheet I just write down what sheet it is because I know what it was about. Like this one was comprehension. When it comes to report card [time] I colour code them” (Violet, Professional Learning Community Session, January 17). Although her colleagues
marveled at Violet’s organized tracking system, she believed this system precluded her from providing parents with concrete evidence of their children’s abilities. “But it feels like so scattered by the time I come to report cards. If the [student’s] parent wanted to see it [evidence of achievement] I can’t show them this disaster” (Violet, Professional Learning Community Session, January 17).

Despite the mosaic of assessment strategies she used, Violet found it difficult to ascertain whether her students’ reading abilities were in line with the grade 3 expectations. She sporadically used Ontario Ministry of Education resources to provide some assurance.

I have the Ontario Curriculum resources. I have pulled them off the shelf to see where my kids should be. I’m not finding enough detail in what I have [independent school resources]. I know the [Ontario] exemplars are handy, but I haven’t made as much use of them as I should. (Violet, Interview 1, December 1)

Lack of precision in delineating students’ reading levels influenced Violet’s decision to provide general rather than specific guidelines for parents in the selection of reading materials for their children, within which she included fostering motivation for reading.

Well if anybody [parent] asks, I tell them they should be reading short chapter books, unless their kids are behind [in reading], then I say “You know what, let’s just get him excited about reading. Pick things he feels confident about right now.” (Violet, Interview 1, December 1)

Desire for Professional Growth

As this was the first school site where she taught, Violet had little basis for comparison and was especially interested in learning about the reading practices of other teachers. “I would really like to know what other people do, to know what my options are and how else can I do this [teach reading] because I know there are things I can change and get better at” (Violet, Interview 1, December 1).
Although she followed the recommended commercial programs, Violet expressed concerns about the divergent foci of the basal program lessons in particular. “It [the basal program] feels very segmented. It doesn’t feel like it has flow” (Violet, Interview 1, December 1). She wondered if an integrated program with in-depth varied exploration of stories and explicit connections between lessons would enhance her students’ learning.

It feels very choppy sometimes, and it’s hard to slide it [lesson foci] together. So it would be nice to have consistency, [where] they are continuing with a story and they will get excited about it. I think definitely [it would be better to] have a variety of activities based on a [story], so some of them are writing and some of them are artistic, and more creative. (Violet, Interview 1, December 1)

She also questioned her lack of differentiated reading material. “But it’s all at one level. Everybody reads the same stories” (Violet, Interview 1, December 1). As a function of her concerns, Violet expressed interest in learning about alternative reading programs. “I don’t know whether the people in our school want to get rid of the [basal] program, but I might want to see what else is out there. Like, what other things can we use? What are our options?” (Violet, Interview 1, December 1).

Violet was especially concerned about the consistency and objectivity of her reading assessment practices.

I’ve got to step up from where I am like [it seems as though] it’s a stab in the dark. You can assess them and I can assess them, and they [students’ results] are totally different. It feels like it is so subjective. (Violet, Interview 1, December 1)

Of particular concern to Violet was her practice of grading her students’ performance relative to that of their peers, in essence regarding her class as a representative of a “normed” population.

I feel like with oral reading I base it [students’ marks] on grade 3 students I have had before. Like I know that “so and so” is a good reader, so [I am] comparing them to each other, and I know you’re not supposed to do that. (Violet, Interview 1, December 1)
Initial Impressions of the Benefits and Complexities of Reading Assessment

During her initial interview, Violet expressed her concerns about her students’ spelling skills and welcomed my offer to conduct a developmental spelling inventory with her class. These completed assessments, together with the results of informal reading inventory assessments I conducted with a sampling of Judy’s grade 2 students of varying abilities, then provided a focus for our first half-day professional learning community session.

In reviewing her students’ developmental spelling results, Violet was impressed with the at-a-glance summaries of their strengths and needs provided by the student and class profiles. The potential to use these tools to enhance parents’ understandings of their children’s needs and solicit their support in providing at-home assistance was instantly apparent.

Would you pull the student’s sheet to talk to the parent about it, if it [spelling] was a like a concern for that kid? It would just be really easy for them [parents] to see what they [their children] need to work on then. (Violet, Professional Learning Community Session, December 13)

Later during this professional learning community session, she and her colleagues worked together to deconstruct the needs revealed by grade 2 students’ responses to comprehension questions completed as part of an informal reading inventory assessment. Violet shared how these results, indicating how some who answered literal questions correctly struggled with inferential questions about the same text, were consistent with her classroom observations of some of her grade 3 students. “Some of them [my students] will answer the [literal] comprehension questions on here quite well, but you know they don’t really understand the story” (Violet, Professional Learning Community Session, December 13).
Violet agreed with Judy’s perception of the benefits of monitoring students’ growth throughout the primary grades by using consistent assessment tools such as those presented. The basis for comparison not only with each student’s own prior performance but also with expected grade level performance as indicated by the informal reading inventory was particularly appealing. “I’m figuring out where they’re at based on where everybody else in the class is at. I have nothing else to go on. But to have something to compare [their performance] against that’s concrete would help” (Violet, Professional Learning Community Session, December 13). As the session concluded, Violet concurred with her colleagues who expressed interest in learning more about the administration and use of informal reading inventories. “I’m agreeing that I would like to know some more about assessments like this [informal reading inventory] for sure” (Violet, Professional Learning Community Session, December 13).

Following an after-school session in early January focused on the administration and analysis of running records, Violet and her colleagues each decided to assess one or two students in their class using an informal reading inventory that included a series of graded texts, with follow-up comprehension questions, and a reading fluency rubric. They then brought these completed assessments to the professional learning community session held the following week.

As she reviewed her students’ results, Violet shared how they were unexpectedly illustrative of comprehension difficulties. “I picked my average readers [to assess], and I was surprised that they could retell the stories so poorly with details when they just read it 5 seconds ago. They’re obviously not getting it [comprehending] if they can’t” (Violet, Professional Learning Community Session, January 17). She also noted how this
assessment practice provided more in-depth insights than her previous practices.

I always had my jot [anecdotal] notes scribbled down, and maybe a rubric because I was marking, but it was so vague. I generally knew that they needed to slow down, or that they needed to look more carefully at the text or whatever, but it [previous practice] doesn’t break it [students’ strengths and needs] down the same way. (Violet, Professional Learning Community Session, January 17)

Throughout this session, as we next explored the components of reading instruction, Violet related each component to her classroom practices and associated observations of her students. For example, as we reviewed the reading developmental continua highlighting students’ abilities to make connections to text as an indicator of comprehension, Violet shared her students’ struggles with this and sought advice with respect to how to enhance their abilities to do so.

Things that relate to the fluent readers, applying it to their own life, they always go, “I don’t know, it never happened to me.” And so a lot of them leave it blank, and I think well they really just can’t think of one. But how do you pull that out of them? (Violet, Professional Learning Community Session, January 17)

Violet reflected critically and began to ponder modifications to her instructional practices. For instance, she wondered if she should place increased emphasis on teaching story elements.

If that [story elements] is one of the key things, we talk about it when we write a story and they can list all these [story elements] off for me generally. But I don’t know, maybe we need to talk about that, about every story [we read], like I don’t do that. (Violet, Professional Learning Community Session, January 17)

She also began to question her practice of assessing students’ comprehension predominantly through written responses rather than oral retelling. “I don’t have the kids retell stories to me verbally. Like they’ll answer comprehension stuff written but in terms of me assessing how well they comprehend something through their [oral] retelling, I don’t do that” (Violet, Professional Learning Community Session, January 17).
As they discussed the utility of the informal reading inventory results, Violet and her colleagues agreed sharing these results may enhance parents’ understandings of their children’s needs. Violet thought this was particularly so with respect to comprehension.

I think it would be valuable [to share these results] because some parents just think their kids are good readers, but then when you [can] say well, when I asked him to retell the story he gave me three facts and that was it [it illustrates their comprehension needs]. (Violet, Professional Learning Community Session, January 17)

While the benefits of this assessment process were apparent to Violet, the potential difficulties of finding uninterrupted time to conduct these one-on-one assessments within her classroom context were of concern. After she and her colleagues shared several potential methods of organizing instructional time to conduct the assessments, Violet expressed her appreciation of these opportunities for professional collaboration. “This is nice, because we never get to sit down and say what we do, like Judy and I do [collaborate] in passing, but we just don’t do it [in-depth] like this” (Violet, Professional Learning Community Session, January, 17).

As a function of the increased understandings of reading strengths and needs revealed by the informal reading inventory assessments, Violet decided to use this tool to assess a broader cross-section of her students. “Well I would like to try doing them [these assessments] with more of them”. (Violet, Professional Learning Community Session, January 17). She intended to assess as many students as possible prior to the upcoming parent-teacher interviews, and I offered to assist by assessing her weakest students, about whom she was most concerned.

The positive reaction of one of Violet’s weakest students to the “praise points” I used following this reading assessment left Violet with an enduring impression of the
impact of students’ awareness of their reading strengths. It was not only the motivating affect of praise but also this student’s awareness of the strategy she used that indicated she was a “good reader.”

I still remember the one student coming back from reading to you [during her assessment] that came in [to the class] and said, “She says I’m a good reader!” And she was just beaming, and she told me what strategy she used that showed she was a good reader. So now I try to model your language more. (Violet, Interview 2, March 8)

Following this incident, Violet immediately began placing increased emphasis on ensuring all students understood what strategies and skills they used well during their individual assessments. She was impressed with her students’ growing awareness of their reading strengths and later shared vignettes illustrating this during a group session. “I said [to a student after he read], do you know one thing you did really well? And he goes yeah, I used expression. And that’s exactly what I was going to say and he knew that was coming” (Violet, Professional Learning Community Session, February 20).

Throughout January, as we completed these assessments, Violet and I met regularly to discuss her questions related to the assessment protocol, review her students’ reading strengths and needs, discuss classroom instructional implications, as well as how parents might provide at-home assistance. While Violet appreciated the insights we discussed, finding uninterrupted time for these conversations was challenging. “It always feels like there is not enough time [to debrief] and that’s difficult. I feel like I’m always cutting you off, going there’s a student that, you know, I have to deal with. So it’s a juggling act” (Violet, Interview 2, March 8).

Assessment Insights

Violet shared her students’ results together with suggestions for at-home
assistance during parent-teacher interviews held at the end of January, by which time we had assessed over half of her students. She found her students’ parents were responsive to and appreciative of these insights. Use of these assessment results during conferences as well as in the preparation of her second term report cards enhanced Violet’s confidence and sense of professional credibility.

I feel like it [use of the informal reading inventory] has made me feel more confident in terms of that I know where they are [strengths and needs]. I was able to give more specifics to parents, and it helped with conferences too. It [these results] just made me feel a little safer because I could back it [students’ evaluations] up, so I felt more professional. (Violet, Interview 2, March 8)

Following the parent-teacher conferences, Violet wanted to conduct these assessments with the remainder of her students. She required support to do so, as her students’ behaviour had been problematic when she conducted these one-on-one assessments during instructional time.

I was maximizing DEAR [independent reading] time, trying to get one kid done and it was just like one bad period of that, it didn’t work, and I was like, that’s the end of it [assessing during independent reading]. I didn’t want to open that [potential for problems] up again. (Violet, Professional Learning Community Session, February 8)

Consistent with the support provided to her colleagues, I offered to teach Violet’s class for several periods to provide her with the time required to complete these assessments.

As she assessed the remainder of her students, their results continued to confirm Violet’s initial perception of their varied needs, with reading comprehension, particularly identifying story elements, as well as reading fluency predominant across many.

I have a couple [of] real strugglers in the decoding part, and there are a few [with needs] in comprehension for sure, and there is fluency, most of them could improve there. I’ve got a couple of really strong [readers] with the exception of using story elements, so [identifying] characters and problems and such. (Violet, Professional Learning Community Session, February 8)
Violet noted how these insights were consistent with her classroom observations, particularly with respect to her students’ difficulties answering inferential comprehension questions.

My students read a story on Alexander Graham Bell today, and there was one question at the end [of their worksheet] that was something like “Why is the telephone an important invention?” and immediately someone comes up [to me] and goes “But, it [the story] doesn’t tell us that.” I mean it [the story] was all about him inventing the telephone, so they had to infer a little bit and think about what the text said. I got really poor answers for that [question]. (Violet, Professional Learning Community Session, February 8)

Initially as Violet began contemplating how to modify her instruction to enhance her students’ comprehension, she considered adjusting her independent reading sessions as she felt responsible to follow the basal program that had been selected for use throughout the school. However, when Judy confirmed their administrator had sanctioned altering the basal program lessons, Violet declared her intent to do so.

Not leave it [basal program], but just do less of it. I was thinking [about modifying] DEAR [independent reading], because I assumed that it [our program] has to do with [using] what we have [existing basal], but if we can change things I will. (Violet, Professional Learning Community Session, February 8)

As students in all 3 participants’ classrooms experienced difficulties retelling stories, making personal connections to text, and answering inferential questions, we decided to devote our next professional learning community session to examining reading comprehension instruction.

Comprehension Instruction

During a half-day session in February, we explored the characteristics of proficient readers, text structure, story grammar, and comprehension strategy instruction that could be used to enhance students’ abilities to derive meaning from text. Throughout this session Violet noted the similarities between suggested strategies and her current
practices. For instance, she shared how activities in her forthcoming literature circle unit focused on some of the comprehension skills and strategies reviewed.

One form [worksheet] that they get one day a week [during literature circles] is predicting and the other one is about a character, and the other one is, you know, summarizing. So it’s got those key things [strategies] in there, a lot of them. [I’ll] make sure to cover those since I’m going to do that [unit] after March break. (Violet, Professional Learning Community Session, February 20)

Violet also discerned how she might adapt sample lessons featured during this session. For example, after viewing a video illustrating a comprehension activity, Violet stated, “She used it [sticky note organizers] for the theme, but you could use that for character descriptions” (Violet, Professional Learning Community Session, February 20). The potential to use the activities presented during this session in many lessons was particularly appealing to Violet.

So things like this you don’t have to use just for one [lesson]. You can use [this activity] for many stories, and that’s your questioning [strategy] over and over again. There’s all kinds of different things [activity suggestions I can use for many lessons] summarizing; beginning, middle, end; categorizing. (Violet, Professional Learning Community Session, February 20)

Immediately after this group session, Violet placed the comprehension strategy (e.g. predicting, making connections, visualizing, questioning) visual prompts she was provided with in the pocket chart at the front of her classroom, above a set of story grammar cards (i.e., setting, characters, problem, solution) she had prepared following our previous professional learning community session. These visual prompts remained posted there for the duration of the school year. Violet briefly reviewed each of the comprehension strategies and associated visual prompts with her students, highlighting how their use of these strategies would enable them to better understand the books they read. She then began referencing these strategies and visual prompts during each
subsequent lesson. For instance, she made explicit connections between use of questioning and each of the story elements.

Violet reviewed each of the story elements (e.g., characters, setting, problem), referencing the cards in her pocket chart. She then referenced the visual prompt “Ask a question,” explaining how this strategy would enable students to determine the story elements. She then placed corresponding question words under each of the story element cards (i.e., characters—who) and asked students to answer these questions and determine the story elements as they listened to the story she read. (Researcher’s Field Notes, February 26)

As she began modifying her reading lessons, Violet was appreciative of her ability to focus on comprehension skills and strategies rather than coverage of the basal curriculum. As a function of her program modifications, as well as teaching a single rather than a combined grade, Violet’s enjoyment of teaching reading increased.

I feel a little less pressure to make it through some of the [basal reading] units that we’re supposed to do and [in lieu of that] to really focus on what we really wanted to get from this. We’re doing more fun things with the stories, a couple of different activities instead of just one. I feel like it’s much more fun and much more in-depth. I’m not teaching a split this year, which is a huge difference too. (Violet, Interview 2, March 8)

Her students’ enhanced abilities to identify the story elements affirmed Violet’s overt explicit, rather than implicit instructional focus on story grammar.

[I am] really focusing on story grammar because I realized that they never refer to those [elements] unless you ask them to. I wasn’t intentional on some things. I guess I just assumed that students would pick certain things up, but not each of them does [without explicit instruction]. (Violet, Interview 2, March 8)

Violet’s classroom observations of her students’ improved reading comprehension as she focused on story schema propelled her to deviate increasingly from the basal lessons. She used the basal selections to explore each of the story elements with increased depth. For instance, she taught a variety of lessons focused on from whose perspective or point of view the basal stories were told and how characters were developed. “We’ve
been talking more about characters, so I’ve been trying to hit the action, appearance, monologue, and dialogue” (Violet, Professional Learning Community Session, April 17). During each lesson, Violet had her students identify the comprehension strategies they would use to understand the story elements (e.g., visualizing, questioning, making connections), referencing and using the language on the posted visual prompts. Violet then extended her students’ understandings through integrating these story schema lessons with related writing activities. For example, her students co-operatively wrote monologues or dialogue for “cool characters” they created.

After we talked about those things [character development] a lot, then we did this miniumit basically, on cool characters, where they made [up] their own [characters] and then we listened to monologues and dialogues and so on, and then they had to get together and write one too. (Violet, Professional Learning Community Session, May 10).

In discussing their experiences during a subsequent professional learning community session, Violet and Emma compared their different approaches to comprehension lessons that led to common outcomes–students’ increased abilities to derive meaning from text. Whereas Emma focused her lessons explicitly on teaching specific comprehension strategies, Violet focused explicitly on story schema, infusing comprehension strategy language within her lessons.

I’ve tried to add things [comprehension strategies] into the [story schema] lessons, but I haven’t been intentionally teaching each strategy like you [Emma] are trying to do. I’ve been referring to them [strategies] every chance I get, you know, on the spot. (Violet, Professional Learning Community Session, May 22)

As part of this discussion Violet highlighted how their ongoing collegial communication about their strategy instruction may scaffold their students’ comprehension growth.

I think it’s helpful to know what strategies you focused on the most, like if you [Emma] tell Judy that you’ve done these ones really well and these ones you’ve just touched on, it will help her [to plan next year]. (Violet, Professional Learning
Community Session, May 22)

Throughout these group sessions, Violet and her colleagues promoted one another’s learning, with changes one teacher implemented often later emulated by another. For instance, following the session in late May, Violet implemented some reading lessons focused on specific comprehension strategies (i.e., questioning, visualizing) and focused on nonfiction text structure during her social studies unit, following the practices Judy described. More specifically, Violet reviewed how to approach reading nonfiction text (e.g., many entry points) and explored a variety of nonfiction print conventions (e.g., headings, subtitles, labels, diagrams, index), after which her students worked co-operatively to apply these understandings.

I introduced them [nonfiction conventions] all first. Then [showing books about Canada] I said, what makes this different, and I held up another book and they told me all the differences [in conventions], and then I went, what things would this have that the other one doesn’t and then they had to read it [their assigned book] and pick out the important things [conventions]. They worked really hard on that for a whole period in groups of three. (Violet, Professional Learning Community Session, June 5)

In February, when Violet first began exploring story schema explicitly, her students’ limited previous experience with this necessitated that she provide extensive modelling. While Violet believed that modelling scaffolded her students’ growth, she expressed concern over whether this would lead to their independent use of these skills and strategies. “And sometimes I feel like maybe we’re doing too much of it together. Modelling is good, I know that’s good, but then where do I draw the line?” (Violet, Interview 2, March 8).

Prior to March Violet provided primarily whole-group lessons, and we discussed how peer scaffolding may support her students’ abilities to complete independent work.
While she agreed with peer support in theory, her students' conduct made her reluctant to implement it in practice. "My dilemma is I have trouble getting my kids to sit still [for long] enough and to listen to their peers." (Violet, Professional Learning Community Session, February 20). She also expressed concern about assigning marks to individuals for work completed jointly. However, as she deviated increasingly from the basal program and her students became more engaged in her reading lessons, Violet began providing increased opportunities for them to work co-operatively and found doing so effective for all students, particularly those who struggled. Ultimately, peer support became something she valued, and her concern about recording "marks" diminished.

Well, I used to think I had to see what Johnny could do, not what Johnny and Sally could do. And so if Johnny was weak and Sally was strong, then [I worried that] really I was just seeing her work. Because I'm [now] less worried about gathering an assessment from everything, then it doesn't bother me to have them work together and know that it was purely for the sake of them gaining learning. (Violet, Interview 3, June 27)

In essence, over time Violet adopted the gradual release of responsibility—that is modelling, followed by supported practice, leading to students' independent application of the targeted skills and strategies. She found this instructional scaffolding coupled with a sustained focus on key skills and strategies enhanced all students' abilities to complete story schema activities independently. While the focus of her lessons was consistent, Violet applied her creativity to the activity masters by using different graphics.

So a worksheet looked different, but it had the same elements. And they knew that we'd talked about those things, and they knew that was what the focus was. So they weren't surprised by questions about the text specifics. (Violet, Interview 3, June 27)

Initially, altering the focus of her reading lessons required additional planning time. However, by the end of the year Violet was able to plan these lessons with ease.
“I’ve got lots of ideas. I can take anything and fairly quickly come up with something off the top of my head. It’s not even like I’m putting a lot of planning [time] in” (Violet, Interview 3, June 27). A sustained focus on story schema and comprehension strategy instruction also enabled Violet to create the cohesion between lessons she initially believed her program lacked. “I like structuring lessons that way. Like that [sustained focus] ties together all these random books you’re reading them. It’s this common thread” (Violet, Interview 3, June 27).

At the end of this project, Violet perceived one of her greatest achievements to be the ease with which she and her students used strategy language across the curriculum.

Probably [I feel best about] the fact that my language has changed, that I use comprehension and story schema language really naturally. I can integrate it across any field. The fact that they were really good with the language and that they understood no matter where [what achievement level] the students were at [made me] confident that this is working. (Violet, Interview 3, June 27)

Although she had not previously focused explicitly on comprehension instruction, her familiarity with the strategies supported her use of this language. “I didn’t find that [using the terminology] difficult. I was familiar enough with them [the strategies], I just didn’t use them. I used them a little in the past but never so infiltrated through everything” (Violet, Interview 3, June 27).

*Independent Reading*

Following a January Professional Learning Community Session discussion about using independent reading to foster reading motivation, Violet began using her personal funds to build a classroom library. She also initiated and took pleasure in providing daily independent reading periods. “DEAR [independent reading] is now one of my favourite parts of the day. [Before] I tried to do it once or twice a week, now I do it daily” (Violet,
Interview 2, March 8).

Her students enjoyed the new reading materials during these regular independent reading periods, after which Violet encouraged them to discuss their reading with one another and relate their book reports to the story elements they explored during reading lessons. This enhanced students’ motivation and created a classroom reading community.

They are almost all picking [books] from there [the classroom library]. One student [who read a personal book] happened to say, “Well I am allowed to lend this book to someone,” and I said “Perfect!” and three kids put up their hands [to borrow it], and so a couple of others have followed suit with that. So they’re excited about reading each other’s things too! (Violet, Interview 2, March 8)

In early April Violet also implemented reading logs for her students to track their independent reading, together with a series of story schema activities that required them to independently apply the concepts taught during basal lessons. After they finished reading a book, students selected their choice of the six available follow-up activities. Violet showed her colleagues these activities during a group session, as she shared her modified independent reading practices as well as her students’ enjoyment of them.

I decided to make a tracking log for them so [they] just [record the] title of the book, author, date they started, finished, then which [follow-up] activity it was they finished. Some of them [students] are really enjoying them [the activities]. They’re excited [about reading]. (Violet, Professional Learning Community, April 17)

Throughout the remainder of the school year Violet used these practices, and her students’ enjoyment of their daily independent reading periods persisted.

As she reflected on the changes to this component of her program, Violet highlighted how her students’ increased motivation for reading affirmed her allocation of instructional time for independent reading and altered her beliefs about its importance.

The kids all enjoyed it [independent reading]. I don’t think I believed it was as important as I do now. [Previously] it kind of felt like a time-filler and a waste, in
terms of the kids should be doing this [reading] at home and I should be cramming in as much teaching as I can [during instructional time]. (Violet, Interview 3, June 27)

The changes to Violet’s independent reading practices also provided assessment insights about students’ abilities to independently apply the skills focused on during basal lessons. It’s changed the way I assess their independent reading as well in terms of [now] they are handing in a sheet that they’ve done on a book they’ve read [independently], a response that mirrors what [an activity] we’ve done in class. (Violet, Interview 3, June 27)

As a function of their increased motivation, students’ engagement during independent reading periods improved. “They, some of them wouldn’t sit still and read [previously], and now they were all excited to [read] and everybody looked forward to it. And that [independent reading] was one of their favourite subjects” (Violet, Interview 3, June 27).

Although she used the informal reading inventory assessment insights to guide her lowest achieving students’ book selections, lack of resources precluded Violet from using levelled text with all students. To prepare to do so in the future, Violet began levelling the books in her classroom collection. As she lacked familiarity with this process, Violet sought support.

It’s a waste of time to dive into that [book levelling] myself until I feel more confident with it. I could sit down and do it, but I think that I am going to have such a pile [to ask you about] and it is going to take me a ridiculous amount of time until I know what I am doing is right. (Violet, Professional Learning Community Session, May 10)

Consequently, we met during two of her preparation periods and levelled books together, after which Violet continued levelling her classroom collection with her volunteers’ assistance. As her collection was established late in the year, she decided to implement levelled reading with all of her new students in September. “In the fall I would like to jump right into levelled reading” (Professional Learning Community Session, May 22).
Violet also planned to augment her independent reading program in the coming year with regularly scheduled student conferencing. “One thing I would like to do is make times for them to conference with me about their independent books. So I feel like that’s the next step” (Violet, Interview 3, June 27).

*Cumulative Reading Assessment Portfolios*

Perusing her students’ prior report cards was something Violet had always avoided in attempts to circumvent the potential of previous teachers’ judgments influencing her impression of students’ learning potential. However, as she came to value the instructional implications of insights from students’ assessments, Violet recognized the importance of perusing her new students’ informal reading inventory results and began to consider how these results might also enhance her grade 4 colleagues’ abilities to support students.

I’m thinking maybe I should be telling the fourth grade teacher, because I typically haven’t [shared reading results]. You know they [grade 4 teachers] ask for [information about] behaviours but generally [with reading] it’s everybody fend for themselves and figure it [students’ needs] out. (Violet, Interview 2, March 8)

Accordingly, Violet provided support for Judy’s suggestion that they create and begin using cumulative reading assessment portfolios to monitor their students’ ongoing reading progress. “We’ve done all this work to try to figure out [assess] where they are, I think we need to do that [share these insights]” (Violet, Professional Learning Community Session, April 17). Violet and her colleagues then collaboratively determined the assessments these profiles would include and developed tracking sheets to provide at-a-glance profiles of students’ growth, which included their third term informal reading inventory results, yet to be collected.
During a professional learning community session in May, we explored ways teachers could support one another and manage collecting these data without the provision of release time. When Violet shared her intent to assess students during her preparation periods, Judy suggested she consider having her educational assistant or a retired teacher volunteer instruct during spelling lessons. Violet's students' ongoing behavioural challenges precluded her from considering this. "But it's less stressful for me to have to use a prep than it is to worry about are they behaving" (Violet, Professional Learning Community Session, May 22). Violet did however consider conducting her assessments while her students were engaged in independent reading periods. "I did try to do these [assessments during independent reading] at the beginning [of the initiative], but it didn't work out well. They weren't into their reading but they're better for DEAR [independent reading] now, they're all more focused" (Violet, Professional Learning Community Session, May 22).

Violet completed her third term assessments during quiet classroom times such as independent reading periods as well as during her preparation periods. Additionally, she and her colleagues grouped their classes for a "primary sing" period each week, which Judy volunteered to supervise in order to provide release time for her colleagues.

Upon completion of her year-end assessments, Violet was encouraged that her students' results confirmed her perception of their growth and the accuracy of her informal classroom-based assessment measures (i.e., work samples, observations). "It was nice to see that what I had been doing to assess them was fairly on par with what [informal reading inventory results] we were getting this term, that my "gut" wasn't too wrong" (Violet, Interview 3, June 27). Additionally, she highlighted the benefits of her
increased knowledge of how to use assessment insights to implement responsive programming. “I didn’t know quite how to implement that [linking assessments with instruction], like I’d never been shown how to make it work as a whole” (Violet, Interview 3, June 27).

Reflecting on use of the informal reading inventory, Violet identified the benefits of using class trends to denote instructional implications, as well as individual assessment time to enhance students’ awareness of their reading strengths and needs.

It’s important because the kids get pulled out [to work individually] with you number one, so it’s one-on-one time with their teacher, where you can pour specific comments into them in terms of their strengths or areas [they need] to work on. (Violet, Interview 3, June 27)

Violet perceived these results, particularly with respect to students’ comprehension, as central to her ability to provide responsive programming, not only in reading but across all content areas. “It gives you knowledge on who to pair them with or what kind of things you need to expect, so when you’re reading [in] science you’re not floored when the kid doesn’t get [understand] anything that you’ve read” (Violet, Interview 3, June 27). She looked forward to using the insights from students’ assessment portfolios to provide such programming in the coming year.

*Personal Accomplishments and Future Directions*

During this project Violet realized that she was a highly competent teacher. “My greatest accomplishment was that my self-esteem and confidence as a teacher grew. I felt encouraged, supported, challenged, and affirmed in what I was doing in my individual classroom” (Violet, Written Reflections, June 27). A significant challenge was finding the time to devote to this initiative. Violet acknowledged the impact of her previous experience teaching grade 3 on enabling her to do so.
Reading really took priority this year over other things, and luckily this is my third year [teaching] at this level so it wasn’t detrimental [to other programs]. But the biggest challenge was probably just trying to fit it all in. (Violet, Interview 3, June 27)

Initially, Violet was ill at ease with my presence in her classroom, “because it was like ‘what is she [Arlene] thinking about me?’” (Violet, Interview 2, March 8). Over time, this discomfort diminished. “I was [initially] worried I would be stressed out having somebody in too often watching [me teach]. Because that’s always bothered me in the past but that’s faded away quickly” (Violet, Interview 3, June 27). Violet credited this change to the provision of ongoing support together with a flexible agenda that centered on meeting her needs.

You [changed this discomfort]. A good researcher, who was encouraging; and you know you’ve always gone above and beyond to help meet our needs, so that like the requests that we had for things, you were willing to make work or fit in with what you had planned. (Violet, Interview 3, June 27)

Throughout this project, as Violet became more aware of the classroom practices of her primary division colleagues, she came to appreciate her strengths and realize that the challenges she encountered each day were similar to those faced by others. “So [now] I kind of feel like I’m not on such a different plane as maybe I thought I was, I realize they [my colleagues] have strengths and they struggle with how to do other things” (Violet, Interview 2, March 8).

Violet elaborated on the effects of collegial collaboration in encouraging her growth and that of her colleagues. She noted how they energized each other and emulated one another’s practices, creating collective momentum for change.

Their successes made you excited to try something similar with your class. [They were] being encouraged to try this [activity] because it worked for me, just seeing a new idea can spur on different things. I did the nonfiction stuff [unit] after Judy. I went and got buckets [for books] like Emma. (Violet, Interview 3, June 27)
The establishment of trusting relationships within this group was also critical to supporting Violet’s change. “I felt that I had a safe place in which to discuss, ask questions, and share concerns about reading assessment and lessons” (Violet, Written Reflections, June 27). In particular, Violet appreciated the collegial collaboration focused on a teacher-driven agenda during the semimonthly professional learning community sessions. This she noted was in contrast to previous primary division meetings that “weren’t focused on our needs—it was top down” (Violet, Interview 3, June 27). Violet believed that their future divisional meetings could be more effective if administration “let us [teachers] choose the focus and problem solve” (Violet, Interview 3, June 27).

Throughout this initiative, Violet had a strong receptivity to change. Delineating short-term goals enabled her to modify her practices over time rather than become overwhelmed by the plethora of changes she envisioned. “It [setting goals] gave you a focus, because otherwise it was overwhelming. I wanted to change 10 things, but it [goal setting] forced me to choose something that was practical, that I could do [over the short term]” (Violet, Interview 3, June 27).

Observing a mentor teacher in a local public school also enhanced Violet’s confidence. Throughout this half-day visit, she watched this highly regarded teacher use many of the instructional practices that she herself had implemented with similar, if not greater, skill. Despite Violet’s lack of comparable student resources, the classroom environment (e.g., use of visual prompts) and program she observed mirrored her own.

I think when you took us on the field trip to see the other classroom, it sounds really “cocky,” but I thought I was pretty good [comparatively]. So, I thought I do similar things to that, like not that exact lesson, but I can do that, and my room is equally as nice. We don’t have the resources they do but I thought I read better than she did, or more expressively, like I get the students more excited. (Violet, Interview 3, June 27)
Collectively, these experiences enhanced Violet’s self-confidence, and her perception of herself as a capable teacher with a diverse array of talents and strengths grew exponentially. These changes were reflected on the pre-and postinitiative teacher efficacy scales she completed.

As she reviewed these scales, Violet shared how affirmation of her management practices, rather than alteration of them, in addition to increased student engagement she attributed to her instructional modifications, had positively affected her efficacy beliefs.

I felt that I was weak in classroom management, but when you were in here I realized that I wasn’t. Like you backed me up in saying, no you’re doing what’s right. [Later in the year] they were better behaved for my lessons, I think because they were more engaging lessons. (Violet, Interview 3, June 27)

For instance, Violet shared how her increased use of peer support enhanced her weaker students’ abilities to complete assigned tasks, “because they [stronger students] can keep the other one [weaker student] on task more easily” (Violet, Interview 3, June 27). Violet also noted how enhancing students’ metacognitive awareness of their reading strengths increased their motivation for learning and consequently their time on task.

I saw that [increased student motivation] hugely. To be honest I think part of it was you. It’s the language and the way you encouraged them and you know [say] “this is what good readers do,” and those sorts of things that I’ve picked up from you as well. That motivates them to work more, and they realize they’re stronger than maybe they’d been told before, and so they felt more valued. (Violet, Interview 3, June 27)

As she reviewed the literacy orientation surveys she completed pre-and postinitiative, Violet noted the increased alignment between her beliefs and practices together with how this affected her teaching efficacy positively. “If they [your teaching beliefs and practices] match, you’re better off in terms of feeling guilty or feeling good about what you do [in the classroom]” (Violet, Interview 3, June 27). Violet shared how
in some instances her changes in reading practices exceeded those reflected in her survey responses. For instance, “I do give them self-selected reading all the time now, but not writing [every day] and that’s why I put sometimes, but if we’re just talking [about] reading it, [my response] would be yes always” (Violet, Interview 3, June 27). Additionally, Violet discussed her intent to begin modifying her writing program and borrowed several instructional resources to use in planning how to do so.

Violet was pleased with the changes she implemented throughout this project and established goals to enhance her reading program further. In particular, she planned to use levelled text to support all of her students next year. Students’ end-of-grade 2 assessment results provided important insights to assist Violet in determining the materials she would require in doing so. “So in [looking at] Judy’s [assessment results I found] I need to get [books] lower than a J [reading level], whereas I wouldn’t have thought that [I needed that level] without that knowledge” (Violet, Interview 3, June 27).

**Cross-Case Analyses**

Each single-case study illustrated the complexities and unique patterns of teacher change. Analysis of each participant’s experiences through coding and categorizing as described by Creswell (2002), Merriam (2001), and Yin (2003), revealed an array of interdependent and interconnected factors that affected teachers’ abilities to modify their reading practices and associated beliefs. Six broad themes were identified as those representing the factors that affected each individual participant’s growth and change. These included: (a) motivation for change, (b) professional knowledge, (c) professional beliefs, (d) resources, (e) uncontrollable influences, and (f) differentiated professional learning opportunities. Through cross-case analysis as described by Creswell, Merriam,
and Yin, the role of each of these factors in each participant’s change processes was compared and contrasted with those of the other 2 participants. A description of each theme and the effect it appeared to exert on participants’ experiences follows.

Motivation for Change

At the beginning of this research study, all participants appeared receptive to change. They were interested in learning more about reading assessment and instruction, with this motivation providing the catalyst to participate in this study. While their initial practices varied, they shared the belief that they lacked professional knowledge and that their assessment practices required modification. In part, their assessment concerns were based on the use of practices that were incompatible with their existing professional knowledge and/or ideals and commitment to student learning. This included their desire to be accountable to parents and to provide them with specific information with respect to students’ abilities and relevant home-based programming.

For instance, Violet expressed concern that assessing her students’ abilities relative to the performance of their peers was neither objective nor in keeping with evidence-based practices. She also sought tangible evidence of students’ strengths and needs that could be presented during parent-teacher conferences. Emma shared that, at times, she was unable to respond to students’ needs or parental inquiries about children’s reading strengths and needs and related home-based programming. She also expressed concern that her method of keeping “mental assessment files” for her students would present difficulties for another teacher if she should be called away from her position unexpectedly. Judy was aware of her limited understandings of her students’ use of reading skills and strategies and believed an informal reading inventory would provide
these insights as well as ongoing evidence to both teachers and parents of students’ growth trajectories. She also sought to provide her students’ parents with suggestions for home reading experiences.

Extending their professional understandings about how to provide responsive instruction was also a factor that motivated these teachers to participate in this study. Emma expressed specific interest in fostering critical thinking, Judy was particularly interested in the use of levelled text to differentiate instruction, and Violet was interested in exploring alternative programming options in hopes of providing an integrated program with a wider variety of engaging activities. Incremental steps towards meeting these initial goals affected participants’ motivation to continue modifying instruction in response to their students’ identified needs.

When Emma began implementing comprehension strategy instruction, she perceived it to foster the development of her students’ critical thinking skills, which promoted her increased interest in extending this instructional focus. Judy’s positive experiences implementing levelled text during independent reading led her to include this as an activity choice following students’ completion of seatwork. Violet’s perception that her use of comprehension instruction and strategy language during reading lessons enabled her to provide connected learning experiences that fostered student engagement and learning promoted her increased use of these practices across content areas.

*Professional Knowledge*

Teachers’ diverse reading assessment knowledge, skills, and practices as well as their disparate knowledge of their students, the interactive reading process, and factors that affect it were apparent throughout the duration of this study. Collectively, their
experiences illustrated the importance of teachers’ professional “knowledge for practice” and “knowledge of practice” in mediating their abilities to be thoughtfully adaptive and use “knowledge in practice.”

While their specific patterns of professional growth differed, all participants altered their understandings of the roles and relevancy of individual components of reading instruction (e.g., motivation, comprehension, decoding) and approaches to scaffold students’ growth (e.g., levelled text, self-monitoring, peer support). The levels of discrepancy between participants’ prior knowledge and the information presented during this initiative were diverse and appeared to affect their abilities to modify their practices and associated beliefs. Violet’s prior knowledge seemed to differ minimally and Emma’s moderately, while Judy appeared to be acquiring extensive new information that at times she found difficult to relate to her existing understandings.

The integral relation between assessment and instruction was of primary importance, with participants’ instructional changes related directly to the insights and understandings they obtained through assessment. When asked to reflect on their growth at the end of this study, all teachers commented positively about their increased understandings of how to align reading assessment and instruction.

Participants’ knowledge of practice, particularly observational knowledge of their students in the classroom context, appeared to mediate the change process by promoting or diminishing the credibility of students’ informal reading inventory results and related instructional implications. Although Emma initially used few assessment tools, her ability to reflect and make connections readily between the topics explored during the professional learning community sessions, her classroom practices, and students’ needs
was supported by her strong observational knowledge of her students. For example, during a discussion about how successful reading experiences fostered reading motivation, Emma shared how her struggling readers "wandered" during independent reading and wondered if their engagement would be enhanced if she provided them with texts at their independent reading levels. Violet was also able to draw on her classroom observations to reflect critically and make such connections on a continuous basis. For instance, while reviewing the developmental continua of reading, Violet shared her students' difficulties making personal connections to text during classroom activities and inquired about how she might foster these abilities. As she and her colleagues reviewed their students' difficulties with the informal reading inventory inferential comprehension questions, Violet shared classroom observations recounting students' experiences that corroborated these results. She also sought strategies to help students develop these skills. Knowledge of their students' needs and abilities gained through classroom observations appeared to promote Emma's and Violet's perceptions of their students' informal reading inventory results as valid and credible. This in turn motivated them to begin thinking about instructional modifications in response to needs these initial assessments revealed.

Conversely, Judy's limited observational knowledge appeared to make it more difficult for her reflect and make connections to her students' performance during classroom activities. Although Judy shared her experiences during group sessions when prompted to do so, she focused primarily on describing her instructional practices rather than questioning them and often included vignettes reflecting informal observations of her students' engagement or "on-task" behaviour rather than their learning processes. At times Judy questioned the relevance of the skill voids her students' initial assessment
results revealed. For instance, Judy empathized with her students’ difficulties forming personal connections to texts and questioned whether they should be asked to do so. Uncertainty about the credibility of her students’ initial informal reading inventory results prompted Judy to begin a second series of assessments. After these results supported her initial perception that many students struggled with nonfiction text comprehension, Judy began to plan for related instructional modifications.

Prior experience with the assessment and instructional practices promoted during this initiative also affected participants’ receptivity to change. For instance, Judy advocated for the use of an informal reading inventory and cumulative assessment tracking procedures as a function of witnessing their use in publicly funded schools. Conversely, public school teachers’ use of these practices initially caused Emma to question whether they were “best practices.” Emma also wondered whether comprehension instruction would limit her students’ reading enjoyment based on her own prior experiences as a student.

Previous experience using their professional judgment or “knowledge in practice” also appeared to affect teachers’ abilities to modify their instruction. Although all participants initially followed a basal program, they did so with varying degrees of program fidelity. Whereas Emma and Violet initially modified or supplemented these lessons with alternate activities, Judy followed the prescribed lessons as adapted by the recently retired teachers, with few alterations.

Professional Beliefs

Professional beliefs, including efficacy beliefs and theoretical orientations to instruction, appeared to affect participants’ patterns of professional growth. Judy’s
general teaching efficacy or perception of the potential of education to affect students’ learning outcomes seemed to differ from that of her colleagues. Whereas her colleagues discussed how to support their weakest students’ abilities to view reading as a meaning-making process, Judy wondered if struggling students’ perceptions of the purpose of reading to be that of decoding could be attributable primarily to these students’ cognitive abilities or home environments.

All teachers appeared to enter this study with moderate to high teaching self-efficacy, as shown in Table 4. These levels, in turn, affected their receptivity to engage in this study, with Emma, who appeared to be a confident teacher interested in continued professional growth, initiating this process. During her initial interview Judy shared how she believed she possessed considerable knowledge about reading instruction, attributed to her recent preservice education. She also expressed interest in extending her knowledge, particularly with respect to reading instructional strategies and assessment practices. Initial interview responses indicated that Violet’s teaching efficacy was lower than that of her colleagues. Her survey responses suggested this was with respect to instructional strategies rather than student engagement or classroom management.

There were junctures during this study when participants’ self-efficacy appeared to decrease, particularly when awareness of new practices provoked them to question or acknowledge the limitations of their existing practices. For instance, Judy’s self-efficacy appeared to decrease when she became aware of the need for comprehension instruction. However, at the end of the study all participants attributed their increased self-efficacy for instructional strategies, classroom management, and student engagement to their successful implementation of new classroom practices promoted during this initiative.
Table 4

*Teaching Self-Efficacy*

<table>
<thead>
<tr>
<th></th>
<th>Efficacy for student</th>
<th>Efficacy for instructional strategies</th>
<th>Efficacy for classroom management</th>
<th>Overall efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>M</em></td>
<td><em>M</em></td>
<td><em>M</em></td>
<td><em>M</em></td>
<td><em>M</em></td>
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<tr>
<td><strong>Emma—Grade 1</strong></td>
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<tr>
<td>November</td>
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<td>7.750</td>
<td>8.000</td>
<td>7.625</td>
</tr>
<tr>
<td>June</td>
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<td>8.625</td>
<td>9.000</td>
<td>8.708</td>
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<td></td>
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</tr>
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<td>6.250</td>
<td>6.875</td>
<td>6.540</td>
</tr>
<tr>
<td>June</td>
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<td>7.500</td>
<td>8.875</td>
<td>8.000</td>
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<tr>
<td><strong>Violet—Grade 3</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
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<td>5.875</td>
<td>7.125</td>
<td>6.875</td>
</tr>
<tr>
<td>June</td>
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<td>7.440</td>
<td>8.250</td>
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</table>

Theoretical orientations also appeared to affect participants’ change patterns. Consistent with their interview responses, participants’ literacy orientation survey responses (summarized in Table 5) reflected their diverse perspectives. The levels of consistency between participants’ initial beliefs and practices also differed. It appeared that Emma initially held eclectic beliefs that were often consistent with her instructional practices. While Judy’s initial beliefs were more transmission oriented, they were also largely consistent with her classroom practices. On the other hand, Violet’s initial beliefs and practices were less consistent. While many of her beliefs were constructivist oriented, her practices were often transmission oriented. When asked to reflect on her growth at the end of this study, Violet recognized that initial inconsistencies between her beliefs and practices promoted her feelings of inadequacy and a desire for change. She also acknowledged that when her beliefs and practices became aligned, she gained a sense of professional satisfaction. As Emma reflected on her growth, she was surprised by some of her initial beliefs and attributed her changes to increased knowledge that promoted her instructional modifications and resultant perception of students’ growth. Although Judy appeared to be moderately confident of her professional knowledge at the outset of this study, when reflecting on her growth at the conclusion of it she shared how this initiative did not change her reading-related beliefs but rather enabled her to fill knowledge voids she was aware she possessed. Judy’s perception that she did not know how to teach or assess primary-grade reading at the onset of this study, and was aware of this, appeared to be a deviation from the level of confidence as a reading teacher she presented initially.

Throughout this study, teachers’ overall theoretical orientations were apparent in their classroom practices. For instance, Emma’s and Violet’s initial constructivist-
Table 5

*Literacy Orientation Survey Responses*

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<th></th>
<th>Literacy beliefs</th>
<th>Literacy practices</th>
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</thead>
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<tr>
<td>June</td>
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<tr>
<td><strong>Judy—Grade 2/3</strong></td>
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</tr>
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<td>51.5</td>
</tr>
<tr>
<td><strong>Violet—Grade 3</strong></td>
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<td></td>
</tr>
<tr>
<td>November</td>
<td>60.0</td>
<td>50.0</td>
</tr>
<tr>
<td>June</td>
<td>61.0</td>
<td>59.0</td>
</tr>
</tbody>
</table>

oriented or "student-centered" beliefs were reflected in their classroom organization (e.g., visual learning aids, student work exhibits), focus on building strong student-teacher relationships, emphasis on oral language, and attention to fostering student motivation for learning. These beliefs appeared to support their abilities to use dialogical scaffolding as well as strategic language and associated visual prompts in order to enhance their students' metacognitive awareness of their strategic reading processes.

On the other hand, Judy's initial transmission-oriented or "teacher-centered" beliefs were reflected in her custodial style of classroom organization and management. As part of this environment, discussions and/or student-teacher interactions were more limited, and habitual organizational routines such as removing all materials promptly and beginning each lesson with a clean board or "blank slate" seemed to hinder the provision of student scaffolding through ongoing use of visual learning aids. Judy's beliefs, in conjunction with limited professional knowledge, appeared to constrain her adoption of strategic language and associated visual prompts. Nonetheless, Judy's "teacher-centered" organizational focus supported her pragmatism during group sessions and her influential role in the development of assessment profiles and a levelled text resource room.

Resources

Personal and situational resources including participants' task analysis abilities, materials (e.g., levelled text), supports, and time appeared to be interrelated factors that affected change. The role of these resources in participants' unique change patterns were mediated by their interaction with one another as well as their interaction with participants' motivation, professional knowledge, and professional beliefs.

Throughout the professional learning community sessions, Judy often suggested
solutions to problems her colleagues presented, such as finding time to conduct assessments. While many of Judy's ideas promoted collective change (e.g., assessment profiles), at times her proposed solutions appeared to be expedient in nature and precluded an in-depth and systematic analysis of the demands of the specific issue at hand. For example, during her initial interview Judy stated that she could not conceive of conducting running records within her classroom context. Yet, 2 weeks later, she suggested that she and her colleagues (who all had little if any experience with this assessment practice) complete these assessments for use in their upcoming parent-teacher interviews. Judy's limited professional knowledge also appeared to constrain her ability to analyze the demands of creating a levelled book collection. Throughout the duration of this study, it often appeared that Judy required encouragement to reflect carefully and implement small, thoughtful changes over time.

Emma on the other hand appeared to consider each suggestion for change in a thoughtful manner, weighing the time and effort required of herself against the potential effects to individual students and her class as a whole. Violet also appeared to reflect carefully on each proposal for change and analyzed the demands of each task before proceeding. Extensive professional knowledge and constructivist-oriented beliefs, together with the increased time she was willing and able to devote to modifying her practices, appeared to allow Violet to implement instructional changes more expeditiously than her colleagues.

While all participants initially lacked materials (e.g., assessment tools, current basal program, levelled text), with support they were able to overcome some of these constraints over time. For instance, with support each participant was able to create a
levelled authentic text collection. The provision of release time enabled participants to surmount the potential barrier presented by the steep learning curve as they began to use the informal reading inventory. In part, the amount of time and support required by each participant differed as a function of their professional knowledge, professional beliefs, prior experiences, classroom dynamics, and out-of-school responsibilities. For instance, Violet recognized her prior experiences teaching grade 3 provided her with more time to devote to participating in this initiative. Judy and Violet reflected on the limiting constraints associated with teaching a combined grade, whereas Emma and Judy discussed the demands associated with simultaneously parenting and teaching.

All participants highlighted the importance of collegial relationships in promoting change, elaborating about how all relationships within this group were positive and nonthreatening. These relationships appeared to enable participants to solicit my support and provide support for one another (e.g., sharing experiences, resources). For example, Judy recommended and supervised “primary sing” sessions to provide her colleagues with assessment time, after sharing how she was able to assess students during instructional time as a function of the support she obtained from the retired teachers.

While Judy’s relationships with these retired teacher volunteers supported her ability to modify her assessment practices, they may have also affected her ability to modify the basal program lessons. During professional learning community sessions, it was proposed that these lessons be modified to place increased emphasis on comprehension instruction. Despite Violet’s concerns about the basal program and the lessons contained within it, she was initially reluctant to deviate from the decision made by the school-based review committee to adopt this resource. Emma appeared to be
similarly reluctant. While Judy’s clarification that their administrator had approved modifying these lessons enabled Violet to do so promptly, Judy demonstrated fewer lesson modifications than either of her colleagues. In addition to the mediating effects of time and professional knowledge, this reluctance may be reflective of Judy’s strong collegial relationships with the retired teachers, who, as members of the school-based review committee, had recommended the adoption of the basal program. In essence, the support of these prior teachers may have been a “double-edged sword,” providing Judy with time to adjust her assessment practices but simultaneously constraining her willingness to adopt instructional changes.

*Uncontrollable Influences*

Throughout this study, participants’ change processes were also affected by influences largely beyond their control and/or the control of the project facilitator. These included parental and student reactions and responses, particularly with respect to those who struggled with the reading process. For instance, when assessment results were presented to the parents of Emma’s struggling students, they approved of her recommendations for remedial programming. This appeared to promote further Emma’s interest in modifying her reading practices. Alternatively, parents in Judy’s class did not respond favourably to the sharing of assessment results. This response limited Judy’s ability to secure remedial support and compounded the challenge of meeting the needs of her weakest students within the classroom context. The reaction of a struggling student to my use of “praise points” during an assessment session served as a catalyst for Violet to develop all students’ metacognitive awareness of their reading strengths.

Teachers’ diverse needs and interests were also an uncontrollable factor. While
the attention devoted to group protocols at the outset of this project appeared to enable
teachers to speak openly and exhibit mutual respect during the professional learning
community sessions, their diverse perspectives and dispositions enabled them to assume
different roles within the group. Emma often focused on students’ emotional needs, with
this orienting her colleagues to be “student-centered.” Judy was pragmatic and suggested
solutions to potential problems her colleagues raised. Violet frequently was the first to
modify instruction and share positive experiences related to new instructional practices,
thus inspiring her colleagues to follow suit.

At times the diverse needs and interests of participants’ students propelled them to
embark on unique programming options that their colleagues later emulated. Had all
participants adopted identical paths, the opportunities for collegial scaffolding and
momentum for change might have been reduced. In this manner the group dynamics
appeared to support participants’ growth. While this may be attributed in part to
encouraging teachers’ unique interests, it may also be considered fortuitous that their
needs, interests, and dispositions were diverse.

On the other hand, addressing participants’ varied interests through exploring a
wide breadth of topics may have constrained growth by precluding the opportunity for in-
depth exploration of fewer topics. This may have been particularly so for Judy, whose
knowledge of the reading process and pedagogical approaches to instructional scaffolding
appeared to be more limited than that of her colleagues.

*Differentiated Professional Learning*

Throughout this study there was a synergistic effect reflective of combining the
semimonthly professional learning community sessions focused on a teacher-driven
agenda with individualized classroom-based coaching. The group sessions provided a supportive venue for developing a shared understanding of the components and developmental progression of reading assessment and instruction, working collaboratively to meet collective goals and solve common problems, as well as share individual successes and challenges. However, these group sessions alone were insufficient to meet teachers’ diverse individual needs. Instead, fulfilling these needs required in-depth understandings of participants’ individual needs and goals and the needs of their students within the context of their individual classrooms.

All participants emphasized the importance of proximal goal-setting and associated support in enabling them to implement change over time. Classroom-based coaching provided a vehicle for the differentiated learning opportunities required to support teachers’ abilities to achieve their unique goals. Whereas Violet required confirmation of her classroom management and lesson planning practices, Emma required support meeting the needs of her weakest students, while Judy required support planning for instruction and engaging in reflection. While these two professional learning formats were mutually reinforcing, either format alone may have been insufficient to promote teacher change.

Equally important, participants’ change processes were affected by their perceptions of increased student motivation and/or learning they attributed to their proximal changes. For instance, after Emma perceived that levelled text enhanced her weakest students’ reading motivation, she began using levelled text with all students. Similarly, after discovering that her comprehension lessons fostered increased student learning and engagement, Emma was motivated to continue modifying this program
component. Likewise, Violet’s perception that providing daily independent reading
sessions increased her students’ reading motivation propelled her to continue to refine
this program element by implementing reading logs and story schema activities.
Additionally, students’ increased metacognitive awareness of their strategic reading
processes and their knowledgeable use of the strategy language that she modelled during
reading lessons motivated Violet to use strategy language across subject areas. Judy’s
perception of her students’ increased abilities to derive meaning from nonfiction text
through using the strategies she presented during her nonfiction unit, prompted her to
then infuse these strategies within her social studies unit that followed. She also increased
her use of supportive instructional formats (e.g., partner or small-group work) after
perceiving her initial use of these practices to provide increased support, particularly to
students who struggled. While their change patterns were diverse, each teacher’s
motivation for continued change was promoted in part by a perception of increased
student engagement or achievement that they attributed to their own instructional
modifications.

Conclusion

Cross-case analysis of these participants’ experiences illustrated that teacher
change is a complex process affected by a mosaic of interconnected factors including
motivation, professional knowledge, professional beliefs, resources, uncontrollable
influences, and differentiated professional learning opportunities. Findings from this
study suggest that the effects of each factor are compounded by interaction with the
others. While this study illustrated that professional development can support teacher
change, it also revealed the need for multidimensional learning opportunities and ongoing
site-based support.

In Chapter Five participants' change processes are examined further and related to the literature and the conceptual models of teacher change used to guide this inquiry. Implications for theory, practice, and research are provided.
CHAPTER FIVE: DISCUSSION

In this inquiry, case study methodology was used to investigate teachers' change processes throughout their participation in a professional learning initiative focused on reading assessment and instruction. While previous investigations have explored the effects of reading-related assessment-focused professional development (Hoffman et al., 1998; Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004), there was little research documenting the processes through which teachers changed their beliefs and practices during participation in such initiatives.

In this chapter participants' experiences are related to existing understandings of teacher change. Factors that influenced change as identified through single and cross-case analysis are related to the literature. Next participants' experiences are related to the models of teacher change used to guide this inquiry. My personal reflections as the researcher and facilitator of the professional learning opportunities and suggestions for practice follow. The final section of this chapter presents implications for future research.

Factors That Influenced Teachers' Change Processes

All participants presented themselves as caring and committed teachers who were interested in engaging in professional learning (R. Evans, 2001; Tye, 2000). Their change processes were mediated by a mosaic of interconnected factors including their initial goals and motivation, professional knowledge, professional beliefs, and resources (Chard, 2004; Clarke & Hollingsworth, 2002; Gregoire, 2003; Guskey, 1986, 2002; Walpole et al., 2004). Uncontrollable influences and the school context also affected participants' changes (Fullan et al., 2006; Grisham, 2000; Triplett, 2007; Van Pelt, Allison, & Allison, 2007). Differentiated learning opportunities were critical to all participants' growth
(Chard; Kise, 2006; Snow et al., 2005; Tomlinson, 2005; Walpole & McKenna, 2004).

Initial Goals and Motivation

All teachers elected to participate in this study in order to enhance their reading practices and presented themselves as receptive to change (R. Evans, 2001; Kise, 2006; Tye, 2000). Consistent with previous research, participants’ experiences here demonstrated that assessment-focused professional learning can promote teacher change (Hoffman et al., 1998; Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004), especially when teachers’ motivation for change is high (Evans; Kise; Tye). Analysis of the factors that appeared to motivate participants to engage in this initiative provided insights about their professional knowledge and theoretical orientations.

For instance, Judy’s desire to use informal reading inventories and cumulative assessment tracking procedures appeared to be reflective of her focus on summative assessment of learning, consistent with her transmission orientation (Brookhart, 2004; Pilcher, 2001; Serafini, 2002; Shepard, 2004). Violet’s goal of increased objectivity when analyzing students’ needs as reflected in the multiple forms of evidence she collected throughout each term revealed her increased orientation towards constructivist practices (Brookhart; Davis & Wilson, 1999; Earl, 2003; Pilcher; Serafini; Shepard).

All teachers expressed initial interest in enhancing their instructional practices, with their preliminary goals providing foundational insights about their knowledge of the reading process and the factors that affect it. For instance, Violet was aware of the importance of students’ metacognitive awareness of their use of strategies (Chard, 2004; Pressley, 2002; Pressley et al., 2001; Snow et al., 2005; Woloshyn & Elliott, 1998). Beneath Emma’s and Violet’s interest in fostering critical thinking was their
understanding of the nature of effective reading comprehension (National Reading Panel, 2000; Ruddell & Unrau, 2004; Pressley; Snow et al.). Consistent with Patrick and Pintrich’s (2001) assertion that conceptual change is related to metaconceptual awareness, Emma and Violet were implicitly aware of the need to focus on comprehension instruction and higher level thinking skills. The process of making these tacit understandings explicit appeared to enhance their abilities to implement related instructional modifications (Bendixen, 2002; Patrick & Pintrich; Pintrich et al., 1993).

Many of the changes implemented throughout this study were related directly to participants’ preliminary objectives and perceived needs. Their experiences substantiated the importance of making explicit teachers’ tacit knowledge in order to support their change processes (Gregoire, 2003; Patrick & Pintrich, 2001; Pintrich et al., 1993), as well as attending to the nuances of their underlying knowledge and beliefs. Analysis of these understandings prior to engaging in professional learning initiatives may enhance the abilities of facilitators to meet teacher’ diverse needs and support their change processes.

*Professional Knowledge*

This study corroborated the importance of teachers’ “knowledge for practice” and “knowledge of practice” in supporting their abilities to be thoughtfully adaptive and use “knowledge in practice” (Chard, 2004; Cochran-Smith & Lytle, 1999; Duffy & Hoffman, 1999; Grierson et al., 2007). Consistent with previous research, teachers’ understandings of how to provide responsive reading instruction varied as a function of their professional knowledge and classroom experiences (Chard; Duffy & Hoffman; Grisham, 2000; Maloch et al., 2003; Pressley et al., 2001; Snow et al., 2005; Triplett, 2007).

Participants’ experiences supported the importance of assessment insights in
enhancing teachers’ knowledge of how to modify their practices to provide responsive instruction (Black & William, 1998; Earl, 2003; Hoffman et al., 1998; Popham, 2003; Wiggins & McTigue, 1998). Assessment was central to all teachers’ change processes, enhancing their understandings of their students’ needs as well as the components of reading instruction and pedagogical approaches to instructional scaffolding (Butler et al., 2004; Fullan et al. 2006; Hoffman et al.; Grierson & Woloshyn, 2006; Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004).

Consistent with Hynd’s (2003) position, the levels of discrepancy between the information presented during this study and participants’ prior knowledge appeared to mediate change significantly. This initiative created minimal cognitive dissonance for Violet, as the assessment and instructional innovations proposed were often consistent with her professional knowledge (Gregoire, 2003; Hynd; Posner et al., 1982). Emma’s change processes appeared to be affected positively by acquiring new information that differed moderately from her existing knowledge, whereas Judy’s change processes seemed more arduous, as at times the information presented differed extensively from her prior understandings (Gregoire; Hynd; Posner et al.).

In order to promote change, cognitive dissonance must be accompanied by thorough understanding of the discrepant information (Hynd, 2003; Posner et al., 1982). While Judy extended her professional knowledge significantly, it appeared that her understandings of the reading process remained incomplete. At the conclusion of this study Judy referred to assessing her students’ “reading and comprehension.” This may indicate her perception of decoding and comprehension as separate rather than interconnected and interdependent competencies, and her continued perception of
“reading” as the process of decoding (Fountas & Pinnell, 1996; National Reading Panel, 2000; Pressley, 2002; Ruddell & Unrau, 2004; Snow et al., 1998).

In addition to thorough understanding, conceptual change is dependent on believing in the credibility of discrepant information (Hynd, 2003; Posner et al., 1982), with the potential for this enhanced when multiple forms of anomalous information are presented (Chinn & Brewer, 1993). Consistent with previous research, participants’ enhanced knowledge of their students’ needs acquired through the completion of the reading assessments was especially critical to the change process (Butler et al., 2004; Grierson & Woloshyn, 2006; Hoffman et al., 1998; Invernizzi et al., 2005; Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004). Participants’ experiences here illustrated how students’ assessment results hold the potential to affect the credibility of related curricular reform messages, thereby promoting or constraining teachers’ conceptual change processes (Chinn & Brewer; Gregoire, 2003; Hynd; Posner et al.).

The credibility of students’ informal reading inventory results appeared to be increased by triangulation of evidence with data from other sources, particularly teachers’ classroom observations (Clay, 2002; Duke, 2005; Fullan et al., 2006; Paris & Hoffman, 2004; Salinger, 2005). When Emma and Violet obtained their students’ informal reading inventory results they perceived them to be credible as a function of supporting and extending understandings they had derived from other assessments. Consequently, these participants began to engage in related instructional modifications. Conversely, lack of triangulation propelled Judy to perceive the need to collect further evidence before embarking on instructional changes. Participants’ experiences demonstrated that professional development in the use of tools like informal reading inventories alone may
be insufficient to promote instructional change, reinforcing the importance of assisting teachers in developing a repertoire of assessment competencies, particularly classroom observation (Clay, 2002; Duke, 2005; Fullan et al, 2006; Invernizzi et al., 2005; Paris & Hoffman, 2004).

Teachers’ confidence in the accuracy of their interpretations of students’ needs as reflected in their classroom assessment practices (e.g., informal reading inventories, observations) also appeared to mediate their comfort levels in providing constructivist-oriented learning experiences. There appeared to be a relation between assessment and instruction (Hoffman et al., 1998; Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004), with increased use of peer scaffolding through co-operative learning experiences and decreased emphasis on the completion of worksheet evidence of learning in part dependent on teachers’ confidence in their formative assessment practices.

Consistent with the observations of others, (Black & Wiliam, 1998; Brookhart, 2004; Pilcher, 2001; Shepard, 2004; Wiggins & McTigue, 1998), participants initially lacked understandings about how to align their assessment practices with related instructional programming. Furthermore, acquiring such understandings seemed to be essential to enhance teachers’ commitment to expending the time and effort required for the collection of the informal reading inventory data (Paris & Carpenter, 2003).

Collectively participants’ experiences confirmed the importance of data-driven decision-making in supporting teacher change (Black & Wiliam, 1998; Clare & Ascbacher, 2001; Fullan et al., 2006; Hoffman et al., 1998; Joyce & Showers, 2002; Ross, 2004) and illustrated the potentially pivotal role of assessment in providing a catalyst for teachers’ conceptual change processes. Through providing tangible evidence
of students’ needs, participants’ experiences in this study documented that convergent
evidence from a repertoire of classroom-based assessment results holds the potential to
promote the credibility of related curricular reform messages, and sustain teachers’
commitment to reforming their assessment and associated instructional practices.

As a function of the increased consistency in reading assessment practices, these
participants may also now be ready to implement a response-to-intervention program
(Berkeley, Bender, Peaster, & Saunders, 2009; Mesmer & Mesmer, 2008). Using their
common assessment measures as an initial screening process, followed by gradually
increasing tiered levels of assessment and intervention measures, they are likely to further
enhance their abilities to meet the needs of students who struggle with the reading
process (Berkeley et al.; Mesmer & Mesmer).

Professional Beliefs

Analysis of participants’ experiences revealed their evolving theoretical
orientations to instruction, teaching efficacy, and subject-matter beliefs together with the
significant impact of their professional knowledge and experiences on their change
processes (Gregoire, 2003; Hynd, 2003; Pajares, 1992). Consistent with researchers’
assertions (Gregoire, Pajares), this study revealed the interdependence of teachers’
epistemological, self-efficacy, and subject-matter beliefs, with each of these constructs
appearing to affect the others.

The complexities of promoting changes in teachers’ subject-matter beliefs when
their theoretical orientation to instruction conflicted with that of the recommended
reforms were emphasized here (Gregoire, 2003; Hynd, 2003; Lenski et al., 1998; Pajares,
1992; Toll et al., 2004). For example, embracing constructivist-oriented approaches to
instructional scaffolding (e.g., strategic language) appeared to be less arduous for Violet and Emma, whose theoretical orientations were more student-centered (Duffy & Hoffman, 1999; Lenski et al.; Pearson, 2004; Pressley et al., 2001). Judy’s change processes appeared onerous as a function of her strong initial transmission orientation to instruction (Hynd). Analysis of her experiences throughout this initiative appeared to reveal her belief that knowledge is stable and certain rather than relative. These beliefs seemed to be reflected in Judy’s general teaching efficacy, limited use of instructional scaffolding, reliance on prepared lesson scripts, and teacher-directed practices (Chard, 2004; Duffy, 2005; Hoffman & Pearson, 2000; Loughran, 2007; Morrison et al., 1999; Niersteimer et al., 2000; Schön, 1983; Triplett, 2007).

Judy’s perception of students’ comprehension difficulties as attributable to their home environments or cognitive abilities appeared to reflect her general teaching efficacy (Chard, 2004; Triplett, 2007). She did not seem to feel as personally responsible as either of her colleagues for supporting the development of these competencies. This orientation may have limited Judy’s commitment to allocating available resources (e.g., volunteer time) to providing the recommended remedial programming within her classroom and expending the effort required for conceptual change (Hynd, 2003). Conversely, Emma capitalized on her volunteers’ assistance to provide these experiences for struggling students, subsequently noting their growth and increasing her perception of successfully meeting the needs of her weakest students. This investigation corroborated the importance of nurturing teachers’ willingness and abilities to meet the needs of students who struggle with the reading process, reinforcing the importance of successful personal experiences doing so (Chard; Niersteimer et al., 2000; Snow et al., 2005; Triplett).
Participants' theoretical orientations to instruction also appeared to be reflected in the student-centered or teacher-centered climate of their classrooms and their approaches to instructional scaffolding. There appeared to be a relation between these two aspects of participants' practices (Morrison et al., 1999). For instance, teachers who shared their perceptions of the importance of strong student-teacher relationships and who focused on students' self-regulation of their behaviour were also those whose pedagogical approaches to instructional scaffolding included abundant oral language (Bartlett, 1994; Morrison et al.; Peterson, 1992; Routman, 1991). Conversely, when management practices were largely teacher-directed, there was a decreased emphasis on oral language and students' self-regulated learning. This study extended understandings of the relation between teachers' theoretical orientations to reading instruction and management by corroborating self-reported data (Morrison et al.) with classroom observations. It may be fruitful for facilitators to begin professional learning initiatives by observing teachers' classroom organization and management practices to glean insights about their theoretical orientations to instruction.

The relation between teachers' theoretical orientations and their abilities to engage in reflective exploration of the complexities of teaching were also documented throughout this initiative. Participants who held an increased orientation towards constructivist beliefs also appeared to be more critically reflective. Perceiving knowledge as stable and certain appeared to render it difficult to view teaching as a problematic endeavour where uncertain outcomes necessitate ongoing reflection (Duffy, 2005; Hoffman & Pearson, 2000; Loughran, 2007; Russell & Loughran, 2007). While some have asserted the ability to engage in critical reflection is developed later in teachers'
careers (Allington & Cunningham, 2002; Leithwood, 1990; Snow et al., 2005), Violet, the most novice participant, appeared to be one of the most reflective teachers. Emma, the most experienced teacher, also demonstrated critical reflection. Prior educational experiences may have affected the novice participants’ development of reflective competencies (Nespor, 1987; Pajares, 1992; Woolfolk Hoy & Murphy, 2001).

Judy’s extensive experience as an educational assistant responsible for supporting students with behavioural needs may have provided an apprenticeship of observation (Lortie, 1975) focused on acquiring behaviour management strategies rather than understandings of the complexities of teachers’ adaptive use of professional knowledge for program planning. This may have reinforced Judy’s transmission-oriented beliefs and adversely affected her ability to engage in critical reflection (Nespor, 1987; Pajares, 1992; Woolfolk Hoy & Murphy, 2001). Conversely, Violet developed the ability to reflect critically. This investigation affirmed the imperative of deconstructing teachers’ prior experiences and beliefs and fostering their abilities to engage in critical reflection (Duffy, 2005; Hoffman & Pearson, 2000; Loughran, 2007; Risko et al., 2005; Russell & Loughran, 2007; Snow et al., 2005).

Participants’ moderate to high self-efficacy beliefs as measured at the onset of this study appeared to influence their receptivity to change positively (Alderman, 2004; Bandura, 1997; Ghaith & Yaghi, 1997; Ross, 1995; Tschannen-Moran et al., 1998). However, teachers’ self-perceptions of competence did not always appear to be reflective of their professional knowledge and/or competence. More specifically, although Violet’s self-efficacy for instructional strategies was lower than that of her colleagues, her knowledge of the components of effective reading instruction and pedagogical
approaches to instructional scaffolding appeared to exceed theirs.

The professional knowledge Violet acquired during her initial teacher education program provoked her to question the programs used in this school. However, prior to this initiative she appeared to possess the confidence to deviate only minimally from them. Violet’s experiences implementing the programs used throughout this school despite incongruence with her beliefs mirrored those of other novice teachers (Grisham, 2000; Maloch et al., 2003). Yet, unlike the teachers in Grisham’s study, emulating the practices used in this school appeared to lower Violet’s instructional efficacy. During this study as she came to trust her professional decision-making, Violet gained confidence modifying the commercial program lessons to provide learning experiences consistent with her knowledge and beliefs. Although she was initially the most reluctant participant, Violet was extremely responsive to change, with increasing congruence between her beliefs and practices steadily augmenting her self-efficacy. Participants’ experiences here documented that those teachers most amenable to engaging in professional learning opportunities are not necessarily those who will be most responsive to change. Rather than avoiding “resistors” as has been previously recommended (R. Evans, 2001; Tye, 2000), facilitators may elect to establish positive relationships and explore the factors that may underlie teachers’ resistance to curricular reforms (Kise, 2006).

This study supported Kise’s (2006) assertion that focusing on all participants’ strengths is integral to facilitating change. For instance, Judy’s strong focus on organization promoted positive school-wide change in the development of assessment profiles and procedures to facilitate shared use of instructional resources (Fountas & Pinnell, 1996, 1999; Grierson & Woloshyn, 2006; Invernizzi et al., 2005; Pennington,
2001; Salinger, 2005; Slack, 1999; Walpole et al., 2004). Emma’s consistent focus on students’ emotional needs ensured that this consideration was prominent in all collaborative decision-making. While their strengths varied, in part as a function of their professional beliefs, all participants’ unique assets made significant contributions that supported their colleagues’ growth throughout this study.

Resources

Integral to participants’ change processes were resources, particularly support, time, and materials (Butler et al., 2004; Coburn, 2005; Fullan et al., 2006; Gregoire, 2003; Keys, 2005; Taylor & Pearson, 2005; Walpole et al., 2004). The support of the school administrator and facilitator, as well as participants’ support for each other were critical to initiating and sustaining change (Butler et al.; Coburn; Davis & Wilson, 1999; Earl, 2003; Fullan et al.; Kise, 2006; Noble & Smith, 1994; Walpole & McKenna, 2004).

Vital throughout the duration of this project was the support of the school administrator (Coburn, 2005; Fullan et al., 2006; Newmann et al., 2000; Youngs, 2001; Youngs & King, 2002). While administrative participation in the professional learning community sessions would have been optimum, by encouraging teachers to question their practices and supporting their professional decision-making, this administrator played a pivotal role in promoting school-wide change (Coburn; Fullan et al.; Newmann et al.; Ross, 2004; Youngs; Youngs & King; Toll, 2005). Furthermore, her perception of this initiative as a nonthreatening professional learning opportunity focused on meeting her teachers’ needs was foundational to her support for this investigation.

Supportive relationships were integral to all participants’ changes, with the school-wide expectations of professional collaboration appearing to set the stage for the
formation of a professional learning community focused on collective knowledge building (Dufour & Eaker, 1998; Fullan et al., 2006; Ontario Ministry of Education, 2005). Trusting relationships between all members of the professional learning community appeared to enhance participants’ willingness to share differing perspectives. For example, when Violet expressed interest in providing comprehension instruction, Emma questioned whether this focus would foster students’ motivation for reading. In sharing their divergent perceptions, participants provoked one another to consider alternative viewpoints, thereby promoting the higher levels of reflection required for conceptual change (Risko et al., 2005). Their experiences illustrated the importance of nurturing trusting relationships with and between all participants in professional learning initiatives. The collaborative development of group procedures, responsibilities, and rights at the outset of this investigation may have contributed to the development of the supportive context (Dufour & Eaker, 1998; Lyons & Pinnell, 2001; Stringer, 2004).

All participants cited the facilitator’s support as integral to their change processes. While the specific focus of support varied, all teachers required modelling and guided practice prior to carrying out the targeted practices independently. From this perspective, it would appear that the widely-used practice of gradually releasing responsibility to support students’ independent use of new strategies (Clay, 1998; Fountas & Pinnell, 1996, 1999; Snow et al., 1998), is equally important in supporting teachers’ growth.

Limited time and materials created constraints for all participants (Allington & Cunningham, 2002; Fullan et al., 2006; Keys, 2005; Walpole et al., 2004). Consistent with previous research (Walpole et al.), this study documented the importance of curriculum-linked instructional materials. The basal program used in this site was
developed during the era when implicit rather than explicit instruction and literal rather than inferential comprehension were emphasized (Allington & Cunningham; Baumann et al., 1998; Pearson, 2004). Participants’ abilities to modify these lessons appeared to be related to their career stages, with prior experience using the program being a precursor to developing instructional flexibility (Allington & Cunningham; Leithwood, 1990). While the basal program did not appear to constrain the provision of comprehension instruction when teachers possessed relevant professional knowledge, time, and experience, it appeared to do so in the absence of these attributes. Consequently, participants’ experiences affirmed the importance of curriculum-linked resources, particularly in the early stages of teachers’ careers (Fullan et al.; Gregoire; Leithwood; Ontario Ministry of Education, 2006; U.S. Department of Education, 2002).

While their curriculum was based on the Ontario provincial expectations, Violet was initially the only participant who seemed to use resources provided by the Ministry of Education. Other participants here seemed to be unaware of these materials. This supported the importance of professional development related to these resources (Fullan et al., 2006; Ontario Ministry of Education, 2003a, 2004, 2005) and revealed the limitations and challenges to independent school teachers who lack these opportunities.

The constraints created by the lack of common assessment tools, limited levelled reading material, as well as the time and knowledge teachers required to modify basal lessons that lacked curricular congruence were apparent throughout this project. This reinforced the importance of alignment of resources and expectations in promoting program cohesion and building capacity for sustainable change (Coburn, 2005; Fullan et al, 2006; Ontario Ministry of Education, 2006; Youngs, 2001; Youngs & King, 2002).
Participants' experiences supported Gregoire's (2003) assertion that teachers' intentions to engage in systematic processing of curricular reform messages may be constrained by their lack of resources, highlighting how this may be compounded by interaction with other factors such as time and/or professional knowledge. Additionally, participants' experiences provided support for Clarke and Hollingsworth's (2002) inclusion of a mosaic of factors with the domain of external information (i.e., sources of information, stimulus, or support) that may affect teacher change. The multifarious effects of these factors appeared to significantly mediate participants' abilities to experiment with new practices and consequently affected their change processes.

Uncontrollable Influences

Teaching occurs in a complex, unpredictable environment influenced by a mosaic of factors (Allington & Cunningham, 2002; Dufour & Eaker, 1998; Fullan, 2001; Pearson, 2004). Consequently, teachers must be reflective, responsive, and adaptive to the capricious situations that arise within their school context (Duffy, 2005; Loughran, 2007; Russell & Loughran, 2007; Snow et al., 2005). This investigation documented how teachers' change processes were mediated by a compilation of uncontrollable factors, largely beyond their control and/or the control of the project facilitator. These included teachers' diverse needs, interests, and dispositions (Allington & Cunningham; Fullan et al., 2006; Kise, 2006; Snow et al.), school policies and practices (Davis et al., 1993; Davis & Wilson, 1999; Goddard & Goddard, 2001; Grisham, 2000; Triplett, 2007), and the responses of parents and students to teachers' practices (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002; Tschannen-Moran et al., 1998; Van Pelt et al., 2007).

Teachers' diverse needs, dispositions, and interests appeared to both promote and
constrain change. As a function of their diversity, participants frequently held and presented alternative perspectives consequently promoting higher levels of critical reflection (Risko et al., 2005; Schön, 1983). While this appeared to support change, participants’ diverse interests may have served to constrain change by precluding in-depth exploration of fewer topics during the professional learning community sessions.

Previous research has identified the importance of a sustained focus on one aspect of reading instruction over an extended time period in enhancing teachers’ professional growth and resultant increased student learning (Butler et al., 2004; Taylor & Pearson, 2005; Walpole et al., 2004). As a function of participants’ varied interests, the professional learning community sessions during the second and third phases of this study focused on independent reading practices, comprehension strategy instruction, nonfiction text structure, as well as continued refinement of assessment practices. A consistent focus on one aspect of reading instruction may have been of particular benefit to participants whose time and/or knowledge were limited. This illustrates the complexities of attempting to simultaneously meet the collective and diverse individual needs of site-based professional learning community members.

Consistent with previous research, all participants were influenced by the skills-based focus in this school site (Davis et al., 1993; Davis & Wilson, 1999; Grisham, 2000; Maloch et al., 2003; Shepard, 2000, 2004; Triplett, 2007) and the emphasis on summative assessment practices (Brookhart, 2004; Clare & Aschbacher, 2001; Earl, 2003; McMillan, 2004; Popham, 2003; Serafini, 2002; Shepard, 2004; Stiggins, 2004). When describing their initial practices, all participants cited the report card as their central assessment focus. Teachers’ perceptions of the informal reading inventory as supporting
their abilities to collect the data they required for reporting purposes promoted their initial interests in these tools. Only later were they able to discern the importance of the instructional insights from summative data collection (Paris & Carpenter, 2003).

While teachers’ perceptions about the utility of the informal reading inventory assessment results affected their change processes positively, reporting practices in this school appeared to overemphasize “bottom-up” processing (Ruddell & Unrau, 2004). Report card data included several categories devoted to decoding (e.g., word recognition, word attack) and only one category for comprehension. This appeared to promote all participants’ initial emphasis on decoding assessment and instruction, revealing how reporting policies may support teachers’ perceptions of reading development as the process of acquiring a series of discrete skills rather than deriving meaning from text.

Students’ responses to the practices that I modelled were also an uncontrollable factor that appeared to affect participants’ changes. For instance, Violet observed that students’ reading confidence increased after I used “praise points” (i.e., highlighting reading strategies I observed them use) following assessment sessions. This observation contributed to her subsequent emphasis on enhancing her students’ awareness of their strategic processes and reading strengths. Participants’ experiences here reinforced the importance of modelling evidence-based practices as well as nurturing teachers’ observation abilities (Kise, 2006; Snow et al., 2005; Toll, 2005; Walpole & McKenna, 2004).

Accountability to parents appeared to be of particular importance in this school context. All participants noted that using the informal reading inventory increased their sense of professionalism and confidence when reporting students’ progress. Securing
parental support seemed to be of particular relevance in enhancing teachers’ commitment to use of the informal reading inventory (Paris & Carpenter, 2003). While the saliency of this factor may be related to the independent school context (Van Pelt et al., 2007), parental confidence is also important in the public school context (Fullan et al., 2006).

Differentiated Learning Opportunities

In this era where differentiated instruction for students is advocated widely (Allington & Cunningham, 2002; Chard, 2004; Fountas & Pinnell, 1996; Fullan et al., 2006; Ontario Ministry of Education, 2005; Snow et al., 2005; Tomlinson, 2005), this study documented that differentiated learning opportunities were critical to supporting teachers’ growth (Chard; Tomlinson; Triplett, 2007). The beneficial effects of providing concurrent small-group professional learning community and individualized coaching sessions (Taylor & Pearson, 2005; Walpole & McKenna, 2004) were reinforced throughout this investigation. Teachers’ understandings and practices were extended positively by engaging in these two mutually reinforcing professional learning formats.

The professional learning community sessions were integral to building capacity for sustainable change through promoting shared understandings of the reading process and the factors that affect it, required for program coherence and cohesion (Coburn, 2005; Fullan et al. 2006; Lyons & Pinnell, 2001; Newmann et al., 2000; Youngs, 2001). The inclusion of participants at various career stages appeared to support participants’ collective knowledge building (Allington & Cunningham, 2002; Leithwood, 1990). Collaborative reflection during the professional learning community sessions was of particular importance in providing opportunities for participants to explore their beliefs through social dialogue, entertain diverse perspectives, and delineate new directions
(Dufour & Eaker, 1998; Nespor, 1987; Pajares, 1992; Risko et al., 2005; Woolfolk Hoy & Murphy, 2001). Participation in these sessions enhanced the potential for conceptual change by promoting teachers’ metaconceptual awareness of their beliefs (Nierstheimer et al., 2000; Pajares; Patrick & Pintrich, 2001; Pintrich et al., 1993; Woolfolk Hoy & Murphy). Moreover, participants’ perceptions of discrepant information as credible and useful (Hynd, 2003; Posner et al., 1982) were often enhanced as a function of these collegial discussions. This study extended existing understandings by documenting how a professional learning community can support teachers’ conceptual change processes by fostering reflective practice, creating motivation for change, and providing a supportive social context for the collaborative exploration of personally relevant issues (Gregoire; Sinatra & Pintrich, 2003; Sinatra, 2005).

Yet, this study also documented how participation in these group sessions alone may have been insufficient to support change and highlighted the necessity of concurrent differentiated learning opportunities through individualized teacher coaching (Kise, 2006; Walpole & McKenna, 2004). Whereas the group sessions provided the catalyst for participants to consider alternative perspectives and establish plans to modify their practices, coaching was critical to their execution of these plans. Participants’ positive implementation experiences then provided the salient outcomes associated with increased student learning that enhanced the potential for conceptual change (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002).

Throughout this study the synergistic effects of combining professional learning community sessions and associated goal-setting with individualized coaching were documented. Proximal goal-setting was integral to all participants’ change processes,
enhancing their abilities to delineate short-term program modifications that collectively promoted long-term growth (Kelleher, 2003). These procedures enabled participants to monitor their progress and celebrate their accomplishments and fostered their motivation for continued change. When teachers’ motivation for change appeared to decrease, individualized coaching was especially critical. For instance, Judy’s inability to work towards creating a levelled book collection caused her to contemplate abandoning or postponing her objective of using levelled text. However after being provided with individual assistance, she was able to achieve this goal and subsequently perceived it as one of her greatest accomplishments during this project. Proximal goal-setting procedures may enable professional development facilitators to enhance teachers’ abilities to identify their needs, monitor their progress, and document their growth over time (Kelleher).

Sinatra and Pintrich (2003) described conceptual change as intentional goal-directed behaviour. Clarke and Hollingsworth (2002) delineated teachers’ modifications to their practices and attribution of increased student learning to these modifications as precursors to sustainable change. Participants’ experiences in this investigation documented how first establishing goals to modify their practices may later create the conditions required for teachers to engage in intentional conceptual change, particularly when they are provided with the individualized support required to achieve their goals.

Each participant assumed the role of an “innovator” or “key player” (R. Evans, 2001; Tye, 2000) at some juncture in this study. Participants’ experiences here documented that the positions teachers assume during curricular reform (Evans; Tye) are relative perspectives that can be altered with professional development tailored to meet their needs (Kise, 2006). Participants brought unique strengths to this initiative, with their
collective change enhanced by focusing on individuals’ assets rather than their deficits.

While differentiated learning appeared to affect all participants’ growth positively, their experiences support Chard’s (2004) position that analogous to students, some required professional learning opportunities that were more explicit and intensive. The complexities of adopting an inquiry stance when participants possess limited professional knowledge were revealed throughout this study. Specifically, the information discussed during the professional learning community sessions, at times, seemed to exceed Judy’s zone of proximal development. Although coaching was intended to provide additional support, the participant with the greatest needs also possessed limited time. This study reinforced the importance of teachers’ acquisition of foundational understandings during teacher preparation programs (Hoffman & Pearson, 2000; Loughran, 2007; Maloch et al., 2003; Snow et al., 2005). Just as students’ early reading success is vital for their later success (National Reading Panel, 2000; Snow et al., 1998), teachers’ development of foundational understandings during the early stages of their careers may be vital to their later abilities to support students’ growth.

**Conceptual Models of Teacher Change and Implications for Theory**

During this study, each participant experienced some form of conceptual change (Bendixen, 2002; Gregoire, 2003; Hynd, 2003; Pajares, 1992). Emma altered her beliefs about differentiated instruction, comprehension strategy instruction, and the use of assessment profiles. Judy changed her beliefs about the efficacy of peer scaffolding and the use of levelled reading material, while Violet increased her teaching efficacy beliefs and altered her beliefs about the use of instructional time for independent reading.

Teachers’ growth patterns were affected by their reactions to curricular reform
messages, professional knowledge, support, and their accumulation of successful change experiences (Clarke & Hollingsworth, 2002; Gregoire, 2003; Guskey, 1986, 2002; Hynd, 2003). In this section participants’ experiences are related to the two conceptual models used to guide this inquiry, Gregoire’s Cognitive Affective Model of Conceptual Change (CAMCC) and Clarke and Hollingsworth’s (2002) Interconnected Model of Teacher Professional Growth (IMTPG). Implications for theory are then presented.

*Cognitive-Affective Model of Conceptual Change*

The CAMCC (Figure 1 in Chapter Two) is a dual process model that presents teachers’ change processes as following either a central route requiring systematic cognitive processing with the potential to promote lasting change through accommodation, or alternatively a peripheral route requiring heuristic superficial cognitive processing with the potential to lead only to assimilation (Gregoire, 2003). Change is presented as mediated by teachers’ reactions to the stress induced by the presentation of persuasive curricular reform messages as implicating personal threats or challenges, together with their efficacy for the advocated reforms and resources. The CAMCC depicts teachers who feel personally implicated by reform messages, perceive the stress induced consequently to be personally challenging, and also possess sufficient motivation and resources as likely to engage in the systematic cognitive processing required for potential accommodation. Conversely, teachers who do not feel personally implicated, perceive the stress induced by these messages as threatening, and/or possess insufficient motivation or resources are presented as likely to engage in peripheral heuristic processing, leading to assimilation, if any change.

Consistent with Gregoire’s (2003) model, participants’ reactions to persuasive
curricular reform messages, appraisals of the resultant stress, motivation, and resources were central to their changes throughout this study. However, the processes of teacher change documented in this investigation appeared to follow an iterative circuitous rather than a dual process linear progression. Participants’ experiences here suggest that while teachers may intend to process reform messages heuristically leading to superficial if any change (Gregoire), successive positive experiences implementing a suggested reform may provoke them to later revise their intentions and engage in systematic processing leading to lasting change (Clarke & Hollingsworth, 2002; Guskey, 2002).

Emma initially declared her intent to focus on comprehension strategy instruction minimally, indicative of peripheral processing as a function of appearing not to perceive this message to be personally implicating (Gregoire, 2003). However, subsequent observations of her students’ inferential thinking during comprehension lessons motivated Emma to implement these lessons increasingly. Her beliefs about the importance of providing comprehension instruction in tandem with decoding instruction were altered in gradual increments following the delivery of each successful comprehension lesson (Clarke & Hollingsworth, 2002). Similarly, Emma’s perceptions of the importance of differentiating instruction through the use of levelled text and creating students’ assessment profiles were altered gradually. Emma’s case study illustrates how the accumulation of evidence of increased student learning that she attributed to her own instructional modifications influenced her to revise her initial intentions of peripheral processing and later decide to systematically process each of these messages.

Violet’s and Judy’s case studies also reveal an iterative process of gradual change as a function of recursive reflection on experiences (Clarke & Hollingsworth, 2002) and
support the impact of personal implications, motivation, and resources (e.g., professional knowledge) as factors that mediated change (Gregoire, 2003). As a function of Violet’s initial perception of the limitations of the basal lessons, together with her professional knowledge that promoted the credibility of the comprehension instruction reform messages, she appeared to view these messages as personally challenging (Gregoire). Consequently, Violet was responsive to suggestions for change and deviated increasingly from the basal lessons, with successive positive experiences with her modified lessons increasing her self-efficacy over time (Bandura, 1997). Violet’s beliefs about allocating time for independent reading, using peer-scaffolding, and enhancing her students’ awareness of their strategic processes were also altered in gradual increments as a function of perceiving these changes to be personally challenging together with a series of successful implementation experiences (Clarke & Hollingsworth; Gregoire).

Conversely, Judy’s initial positive perception of the basal lessons together with the abundant discrepancies between her professional knowledge and the recommended instructional strategies appeared to render these curricular reform messages as personally threatening (Gregoire, 2003; Hynd, 2003). Although Judy appeared to alter her beliefs about the importance of comprehension instruction, her ability to modify her practices seemed to be constrained by her transmission-oriented beliefs and lack of resources, with this appearing to promote peripheral rather than systematic processing (Gregoire). Judy’s most significant changes appeared to be with respect to organizational practices, specifically implementing the use of peer scaffolding and levelled text. Consistent with her colleagues’ experiences, Judy’s perceptions were altered in gradual increments as a function of successful experiences using these practices (Clarke & Hollingsworth, 2002;
Guskey, 2002). It is noteworthy that Judy’s most significant changes were ones least
dependent upon in-depth understandings of the interactive reading process.

*Interconnected Model of Teacher Professional Growth*

Clarke and Hollingsworth’s IMTPG (2002) depicts teacher change as a
continuously evolving process that involves multiple change sequences that over time
may lead to lasting growth through accommodation. Participants’ experiences here
support the continuous interplay between the four domains (i.e., personal knowledge,
beliefs and attitudes; professional practice; external sources of stimulus or support;
salient outcomes) depicted within this model, as well as the applicability of representing
change with multiple sequences that collectively may lead to lasting growth. The degree
of participants’ growth appeared to be dependent upon salient outcomes, particularly the
level of student success that teachers attributed to their instructional modifications.

As Emma began to “tinker” with comprehension instructional modifications, she
received affirmation for these practices from her students’ engagement, external
professional reading, as well as collegial discussions during the group sessions.
Receiving positive feedback from multiple sources of external information appeared to
enhance Emma’s efficacy for reform, which led to her increased use of these practices,
with successive mastery experiences promoting her conceptual change (Bandura, 1997;
Clarke & Hollingsworth, 2002). Similarly, the affirmation and extension of Emma’s
understandings of her students’ needs provided through their informal reading inventory
results together with the instructional changes that she and her students’ parents were
able to implement as a function of these analyses, promoted Emma’s change with respect
to the use of cumulative assessment profiles. Her beliefs about the use of differentiated
reading material similarly were altered over time as a function of the positive reactions of students and their parents to these practices.

Conversely, the insights Judy obtained from analyses of her students’ informal reading inventory assessments, contradicted her initial perception of the abilities of some students, with this creating cognitive discomfort. While Judy remained committed to the collection of the informal reading inventory assessment data, her perception of the importance of the instructional implications of these results may have also been affected negatively by her inability to secure parental support for remedial programming on the basis of them. Additionally, whereas Judy’s colleagues consistently noted increased student learning which they attributed to their altered comprehension lessons, Judy’s comprehension instruction experiences were inconsistent. When she did not perceive her initial lessons to enhance student learning, Judy’s students’ difficulties appeared, in part, to cause her to question rather than sustain this instructional focus. With support through individualized coaching, Judy later experienced considerable success implementing a nonfiction text structure unit. While Judy’s ability to modify her lessons increased over time, resources (e.g., basal program), professional knowledge, and time constraints appeared to limit her focus on comprehension instruction, and her orientation to attribute gains in student learning to these modifications remained less than that of her colleagues. However, Judy’s perception of students’ increased learning through the provision of peer scaffolding during her comprehension lessons promoted her increased use of these practices across the curriculum. Similarly, Judy’s perception of the instructional value of her students’ initial experiences with levelled text propelled her to use these practices increasingly. The level of commitment to each instructional modification appeared to be
related to Judy’s perception of increased student engagement or learning she attributed to it, with her initial implementation experiences especially salient.

Violet’s changes were also promoted as a function of the interplay between her professional beliefs, increased professional knowledge, experiences refining her classroom practices, and attributing her students’ increased learning to her instructional modifications (Clarke & Hollingsworth, 2002; Guskey, 1986, 2002). Violet deviated from the basal lessons to provide comprehension instruction, provided increased opportunities for co-operative learning, modified her independent reading sessions, and enhanced her students’ metacognitive awareness of their use of reading strategies increasingly, with positive experiences promoting further use of each of these practices. Violet’s experiences also support the applicability of the change sequences depicted by the IMTPG (Clarke & Hollingsworth) in representing teachers’ growth over time.

Implications for Theory

The CAMCC (Gregoire, 2003) does not include explicit attention to successive episodes of theory revision as a function of professional experimentation with new practices as a mediating factor in teacher change. Consequently, the dual-process linear progression of the CAMCC does not appear to capture and represent the continuous synergy of the interaction of factors affecting these participants’ conceptual change processes over time. The IMTPG (Clarke & Hollingsworth, 2002) excludes explicit attention to the dual process decision-making inherent in the CAMCC. This investigation documented participants’ change patterns as involving continuous cycles as represented within the IMTPG, with their progression during each cycle affected by the decision-making processes depicted within the CAMCC. In order to obtain in-depth insights it
may be fruitful to analyze teachers' conceptual change processes through the lens of both models in synchrony with one another, with the IMTPG providing comprehensive macrolevel insights over time, and the CAMCC progressive microlevel insights depicting the cognitive processes of assimilation or accommodation at each change sequence. Use of the CAMCC in conjunction with the IMTPG may provide the specificity required to delineate when teachers' change sequences become growth patterns, thereby providing not only the direction in doing so recommended by Justi and van Driel (2006), but also enhancing understandings of the factors that may be precluding or supporting teachers' growth. The provision of such multilevel understandings may enhance the abilities of researchers and professional development facilitators to support teachers' change processes.

Personal Reflections and Implications for Practice

Throughout this study I developed an increased appreciation of the impact of my beliefs and practices on teachers' change processes (Kise, 2006; Toll et al., 2004; Walpole et al., 2004). In this section my personal reflections as the researcher and facilitator are related to participants' experiences and the literature. Implications for future teacher professional learning opportunities are suggested.

Theoretical Orientation

The level of consistency between my theoretical orientation to instruction and those of participants appeared to mediate their change processes (Kise, 2006; Toll et al., 2004). Situating this study within a social constructivist research paradigm where I adopted and encouraged participants to implement social constructivist approaches was reflective of my theoretical orientation (Guba & Lincoln, 1994; Schwandt, 2000). These
methods seemed to be embraced more readily by Emma and Violet, whose orientations to instruction more closely approximated my own (Kise; Toll et al.). Alternatively, the disparity between the practices that I advocated and Judy’s beliefs may have lessened the extent to which she experienced conceptual change (Hynd, 2003).

Although I attempted to be nonjudgmental, participants’ behaviours provided reason to question whether I did so consistently. While all participants described our relationships as supportive, the level of comfort participants developed with my suggestions and presence in their classrooms appeared to be related to the consistency between our beliefs. For example, although Emma was dubious about the effectiveness of comprehension instruction, she implemented my recommendations, in part as a function of our working relationship. Whereas Emma and Violet often shared their lesson implementation experiences and encouraged me to assist with deconstructing lessons in addition to scheduled observations, Judy did so infrequently.

In addition to all planned and requested observations, I visited participants’ classrooms informally each week during reading lessons throughout the final two phases of this study. Intended to provide insights about the consistency of participants’ use of new practices, these visits confirmed the methodological importance of prolonged engagement and the inclusion of unscheduled observations to control for observer effects (Gay & Airasian, 2003; Merriam, 2001; Miles & Huberman, 1994). Whereas Emma and Violet appeared to implement the practices they described during group sessions consistently, at times Judy seemed to do so primarily when being formally observed.

Participants’ experiences here revealed how rapport with a facilitator may affect the potential for observer effects, reinforcing the imperative of developing nonthreatening
relationships (Kise, 2006). Regrettably, the needs of the participant with the most limited knowledge appeared to have been met least by my approach of collaboratively constructing understandings. Accordingly, it may be reasonable to question whether teachers’ needs may be met best through professional learning opportunities implemented within the framework of their own theoretical orientations to instruction. While the inconsistencies between our orientations appeared in part to lessen the extent to which Judy experienced conceptual change, her experiences may provide the greatest insights for others seeking to promote these processes.

Organizational Elements

The potential to optimize participants’ experiences may have been enhanced by recognizing and taking steps to overcome constraints created by organizational elements associated with this initiative, particularly time and materials (Earl, 2003; Fullan et al. 2006; Gregoire, 2003; Kise, 2006; Walpole et al., 2004). The benefits of providing release time for professional learning community sessions and participants’ initial administration of assessments were documented throughout this study. It would have been advantageous to also negotiate release time for individualized coaching. This would have provided increased opportunities for lesson planning and deconstruction as well as reviewing informal evidence of student learning (Earl; Kise; Toll, 2005). Such time may have been of particular benefit to teachers whose time was restricted by other factors such as teaching a combined grade class and/or parenting responsibilities.

My inability to ensure curricular co-ordination appeared to be a limitation of this initiative that was affected in part by the available instructional materials. My suggestion that teachers modify a set of instructional materials designed to support one approach to
comprehension instruction, so that another instructional approach could be adopted, appeared to create a “mixed message” (Coburn, 2005; Fullan et al., 2006). It may have been prudent to gain familiarity with the instructional materials used in this site prior to embarking on this initiative. Doing so would have afforded opportunities to address potential constraints with the administrator, and thereby enhanced the potential for the provision of alternative materials. Additionally, this may have enhanced the potential to ensure all participants were explicitly aware of administrative approval to modify their use of the existing programs. Regrettably, in this study the level of support through time, materials, and active administrative participation was less than optimum (Coburn; Fullan et al.; Gregoire, 2003; Taylor & Pearson, 2005; Walpole et al., 2004).

However, facilitating this initiative as an external “arm’s length” researcher rather than as an internal member of a school community appeared to support participants’ change processes. Internal professional development facilitators are often expected to direct teachers to implement specific approaches, with doing so at times diminishing teachers’ confidence in their professional decision-making (Hibbert & Iannacci, 2005; Hoffman & Pearson, 2000; Kise, 2006). Additionally, although the focus of a coach should be teachers’ growth (Toll, 2005), internal facilitators are often accountable for both increased student and teacher learning (Kise; Toll). As an external facilitator, I was able to focus on teachers’ growth, supporting and guiding participants rather than directing them in a predetermined path. This appeared to enhance teachers’ receptivity to change and enable them to develop greater confidence in their professional decision-making. Additionally, participants appeared to share their diverse opinions during the group sessions without fear of reprisal, which in turn enabled misconceptions to be
addressed. Teachers’ reluctance to share their opinions candidly during professional learning initiatives has been identified as a potential barrier to change (Davis & Wilson, 1999; Duffy, 2005; Earl, 2003; Noble & Smith, 1994). Participants’ experiences provided reason to question whether the needs of teachers might be met more effectively by external facilitators who provide site-based long-term professional learning initiatives on a contractual basis rather than by internal facilitators employed by the school or district.

Assessment of Participants’ Needs and Understandings

Analysis of participants’ experiences revealed the importance of accurately assessing teachers’ needs prior to engaging in professional learning initiatives (Kise, 2006). Regrettably, I misinterpreted some teachers’ initial understandings, most likely as a result of my prior knowledge and participants’ use of familiar vocabulary. For example, I initially appraised Judy’s knowledge of the reading process to be more extensive than it later appeared to be. When she expressed interest in learning more about reading strategies, I presumed she was referring to comprehension strategies. My understandings of comprehension instruction as a key component of the Four Blocks Literacy Framework (Cunningham et al., 2000) led me to assume that Judy possessed foundational understandings about comprehension after she used the terms “multilevel instruction” and “Four Blocks Literacy Framework” when describing her practices. The misinterpretations that may have constrained my ability to be sensitive fully to Judy’s initial needs may have been circumvented by probing all participants to describe the terms that they used.

Throughout this study, participants’ understandings of their students’ needs appeared to be related to their observational abilities. Similarly, my ability to support all participants may have been enhanced by gathering more in-depth understandings of their
needs through allocating increased time during the initial phase of this inquiry to classroom observations. The initial time that I devoted to modelling and providing participants with supported practice using an informal reading inventory enabled them to develop competence assessing their students’ needs. Yet, this was insufficient to promote instructional change when participants possessed limited knowledge and/or resources.

In conjunction with increased classroom observations, it also may have been advantageous to begin by accessing and building participants’ conceptual understandings of pedagogical approaches to instructional scaffolding in addition to soliciting their beliefs about ideal reading assessment and instructional practices. This may have provided additional initial insights about their theoretical orientations to instruction and provided for more in-depth explorations of why certain pedagogical approaches are effective (Butler et al., 2004; Cochran-Smith & Lytle, 1999; Guskey, 1986, 2002; Hoffman & Pearson, 2000). These foundational explorations may have built stronger shared understandings of social constructivist approaches to instructional scaffolding that could have been later related to reading assessment and instruction. However, adopting such an approach may not have been without risk. Beginning this initiative by attempting to build such understandings may have diminished participants’ motivation for learning, which appeared to be fostered by exploring issues they perceived to be relevant. This illustrates the complexities of ensuring participants possess foundational understandings when adopting an inquiry-based approach to in-service professional learning.

Scaffolding Participants’ Growth

Peer scaffolding appeared to affect participants’ change processes positively. Just as students use peer dialogue to support their construction of meaning (Cunningham et
al., 2000; Fountas & Pinnell, 1996; Pressley, 2002; Snow et al., 1998), participants supported on another’s growth by engaging in collaborative discussions about issues they perceived to be relevant (Dufour & Eaker, 1998; Ontario Ministry of Education, 2005). Participants’ perceptions of the feasibility of program modifications that I suggested appeared to be affected positively when their colleagues shared their support for these methods and/or their successful implementation experiences. Observing one another implement the targeted methods may have further augmented participants’ growth.

Although I modelled the suggested practices, the impact of these vicarious experiences appeared to be related to teachers’ perceptions of their abilities to implement similar practices (Bandura, 1997). Consequently, these experiences were not within the zone of proximal development of all participants (Bandura; Vygotsky, 1986). After some had developed competence using new practices, peer modelling may have provided a more effective avenue for promoting their colleagues’ self-perceptions of competence implementing like practices. Initiating peer modelling may have also created a vehicle for teachers to support one another’s professional growth beyond this study’s duration.

Peer collaboration in their basal lesson modifications may have also provided increased support. While I used think-aloud procedures to model the complexities of my professional decision-making while lesson planning (Loughran, 2007), my delivery of lessons in participants’ classrooms may have appeared to simplify the planning process rather than reiterate the importance of their adaptive use of professional knowledge (Duffy, 2005; Loughran). For instance, Judy appeared to recognize my instructional practice as “effortful” only after I revealed my inability to teach a lesson without devoting time to reflection. After this event, Judy appeared more acceptant of the need
for reflection in order to develop lessons to meet her students’ needs. Engaging teachers in collaboratively modifying their lessons during group sessions would have provided the opportunity for multiple interpretations rather than perpetuate any misunderstandings with respect to a “one size fits all” approach to lesson planning. Additionally this may have fostered participants’ ongoing interest in collaborative lesson planning.

Throughout this study, teachers’ reflective abilities were critical to their change processes (Duffy, 2005; Loughran, 2007; Risko et al., 2005; Sinatra & Pintrich, 2003). Collaborative reflection during the group sessions and associated goal-setting procedures promoted reflective practice (Dufour & Eaker, 1998; Kelleher, 2003). However, teachers’ abilities to engage in these processes were affected by their observational knowledge of their students. Accordingly, it may have been beneficial to provide supported practice in the collection and analysis of observation data and student work samples. This may have promoted teachers’ increased confidence in their formative assessment practices and decreased any overreliance on use of the informal reading inventory.

Self-Assessment

The role of self-assessment instruments in enhancing teachers’ awareness of their strengths, needs, and change processes was revealed during this study (Lenski et al., 1998). Just as students’ awareness of their strategic reading processes supports their ongoing growth (Clay, 1998; Fountas & Pinnell, 1996; Pressley, 2002), teachers’ awareness of their strengths and needs is integral to self-regulated learning (Butler et al., 2004). Participants’ experiences here supported the use of goal-setting procedures and survey tools to promote teachers’ awareness of their strengths, needs, and growth (Kelleher, 2003; Lenski et al). Although the survey tools used in this investigation were
intended primarily to provide triangulation of evidence, discussing participants’ response
patterns appeared to enhance their awareness of their change processes. Use of similar
self-assessment tools during other professional learning opportunities may support
teachers’ metacognitive awareness of their beliefs, practices, and professional growth.

Implications for Research

While participants’ experiences in this study have extended understandings about
the processes of teacher’s conceptual change, to determine the extent to which these
findings are context specific, research using a similar methodological approach could be
undertaken in the public school system. Similar investigations of teachers’ change
processes during assessment-focused differentiated professional learning initiatives in
other subject areas may enhance understandings about whether these findings are domain
specific or domain general (Sinatra, 2005). In addition to these general implications, the
longitudinal effects related to a study of this nature should also be explored. Research
investigating teacher mentorship programs and the experiences of those responsible for
facilitating teachers’ professional learning is also recommended.

Longitudinal Effects

The findings of this investigation may provide reason to be cautiously optimistic
about the sustainability of participants’ changes. However the duration of this study was
more limited than those of other investigations documenting the positive effects of
assessment-focused professional learning initiatives (Taylor & Pearson, 2005; Walpole et
al., 2004). Consequently, these participants should be tracked longitudinally to determine
the prolonged effects of this initiative on their reading beliefs and practices.

Conducting a longitudinal study could provide researchers with the opportunity to
document whether participants maintain their reformed reading practices and associated beliefs without the support of the external facilitator. Insights about participants’ abilities to self-regulate their professional learning and achieve the goals they established for professional growth at the conclusion of this study could enhance understandings of the longitudinal effects of proximal goal-setting. Participants’ engagement or lack thereof in continued reflective collaborative professional learning may provide insights about the long-term effects of professional learning communities on teachers’ collaborative practices. A longitudinal study could also investigate whether the understandings derived during this initiative affect participants’ subsequent reading-related instructional decision-making (e.g., factors considered when selecting new instructional resources). It would also be of interest to investigate whether participants’ experiences reforming their reading practices affect their later professional decision-making in other subject areas.

Associate Teacher Preparation

Participants’ experiences in this study confirmed the importance of reflective practice and supported the need for further research investigating methods to foster critical reflection (Duffy, 2005; Hoffman & Pearson, 2000; Loughran, 2007; Mueller & Skamp, 2003; Risko et al, 2005; Snow et al., 2005). The positive effects of integrating coursework, practicum experiences, and guided reflection have been documented (Hill, 2004; Long & Stuart, 2004; Maloch et al., 2003; Niersteheimer et al., 2000). These insights may be extended through research documenting the effects of programs intended to enhance associate teachers’ abilities to foster teacher candidates’ reflective practice.

It has been recommended that preservice teacher educators share their pedagogical decision-making processes to foster candidates’ perceptions of teaching as
an uncertain process that necessitates reflective practice (Long & Stuart, 2004; Loughran, 2007; Russell & Loughran, 2007). Associate teachers modelling their decision-making processes for teacher candidates within the classroom context may be equally if not more important, as candidates may perceive these experiences to be more within their zone of proximal development (Bandura, 1997; Vygotsky, 1986). Yet, there is little research documenting how associate teachers engage in modelling the processes of “reflection-in-action” and “reflection-on-action” (Schön, 1983), their preparation to do so, or the complexities thereof.

Studies exploring the effects of professional learning opportunities designed to support associate teachers’ abilities to explicitly model and foster reflective practice may advance existing understandings. Just as some students require explicit strategy instruction (Pressley, 2002; Woloshyn & Elliott, 1998), some teacher candidates may require explicit modelling to support their perception of teaching as a profession requiring adaptive use of professional knowledge (Loughran, 2007; Risko et al., 2005). Qualitative investigations of the experiences of associate teachers during professional learning opportunities focused on reflective practice could explore their change processes, as well as how their modified practices affect the reflective abilities of the teacher candidates they mentor subsequently.

Teacher Mentorship Programs

This study affirmed that teachers may benefit from mentoring that includes modelling and guided practice (Kise, 2006; Snow et al., 2005). In particular it documented how this support enhanced teachers’ understandings of pedagogical approaches to instructional scaffolding and the assessment-to-instruction cycle. Further
research investigating the effects of teacher mentorship programs on the development of these understandings may provide insights about how to overcome potential barriers to acquiring in-depth understandings of these critical elements of effective instruction during teacher education programs (Duffy, 2005; Snow et al.).

Although teacher candidates are introduced to social constructivist pedagogical approaches, promoting conceptual change during teacher preparation programs has been described as a difficult process (Patrick & Pintrich, 2001; Risko et al., 2005). In part, this has been attributed to the mediating effects of limited situational knowledge from teaching experiences that may cause candidates to assimilate rather than accommodate new information (Mueller & Skamp, 2003; Patrick & Pintrich; Snow et al., 2005). In light of the importance of conceptual understandings (Butler et al., 2004; Cochran-Smith & Lytle, 1999; Flavell et al., 2002; Snow et al.) and the complexities of fostering in-depth understandings of these concepts without a concurrent domain of professional practice, research investigating the effects of reviewing foundational course content (e.g., social constructivist approaches, the reading process) within the context of mentorship programs on teachers’ subsequent practices may be fruitful.

Teachers’ assessment competencies have also recognized as a critical to the provision of effective instruction (Earl, 2003; Paris & Hoffman, 2004; Salinger, 2005; Snow et al., 2005; Walpole et al., 2004). While teacher candidates are introduced to the assessment-to-instruction cycle during preservice programs, their abilities to apply these understandings in professional practice may be limited by the relatively short duration of their field practicums. Consequently, research investigating the effects of focusing on the assessment-to-instruction cycle during teacher mentorship programs may be of particular
benefit. Insights gained from such studies may further support the development of effective teacher preparation and in-service professional learning opportunities.

_Facilitators of Professional Learning Opportunities_

In order to support students’ growth, teachers require shared understandings of the developmental progression of student learning and effective assessment practices, as well as the abilities to use these insights to implement responsive programs (Black & Wiliam, 1998; Earl, 2003; Paris & Hoffman, 2004; Snow et al., 2005). Similarly, those responsible for facilitating teachers’ professional learning require shared understandings of the developmental nature of teacher change and effective assessment practices related to teachers’ learning needs and interests, as well as the ability to use these insights to implement responsive professional learning opportunities (Kise, 2006; Snow et al.).

The potential to optimize teachers’ professional learning may be dependent upon enhancing the professional growth of teacher educators. Existing understandings about how teacher educators develop and enact their pedagogy of teacher education are very limited (Cochran-Smith, 2003; Kise, 2006; Loughran, 2007; Russell & Loughran, 2007; Snow et al., 2005; Zeichner, 2005). Moreover, while in-service coaching programs have been recommended for the provision of differentiated teacher learning opportunities, it has been acknowledged that those responsible for providing coaching may receive limited preparation for their complex roles (Kise; Lyons & Pinnell, 2001; Toll, 2005; Walpole & McKenna, 2004). Consequently, further research investigating the professional knowledge, practices, change processes, and growth of this large group of teacher educators appears to be particularly warranted.

Increasing teachers’ knowledge and skills through assessment-focused
professional learning opportunities has been shown to enhance their abilities to promote increased student learning (Ross, 2004; Taylor & Pearson, 2005; Walpole et al., 2004). Similarly, enhancing professional development facilitators’ and literacy coaches’ knowledge and skill in assessing the needs of the teachers whose growth they intend to foster, may in turn promote increased teacher professional growth. Specifically, without the abilities to assess teachers’ needs and support their ongoing growth through differentiated learning and reflective practice, the abilities of in-service teacher educators to prepare teachers for the challenges they will encounter may be restricted.

Given the effectiveness of professional learning communities in promoting teachers’ collaborative reflective practice (Dufour & Eaker, 1998; Fullan et al., 2006), these structures may also be effective in supporting the growth of in-service teacher educators. Action research or case study qualitative inquiries may provide the in-depth insights required to advance understandings of in-service teacher educators’ change processes. During such inquiries it may be beneficial for teacher educators to explore conceptual models of teacher change such as the IMTPG (Clarke & Hollingsworth, 2002) and the CAMCC (Gregoire, 2003), and relate these models to the experiences of teachers whose growth they are attempting to foster. The understandings promoted may enhance the potential for the provision of responsive differentiated teacher professional learning opportunities that, in turn, could ultimately foster increased student learning.

Conclusions

This professional learning initiative promoted increased learning for all participants. Collectively this study documented that the provision of responsive professional learning opportunities is dependent on facilitators’ understandings of the
context-specific needs, interests, and abilities of the teachers whose professional growth they intend to support (Cochran-Smith, 2003; Russell & Loughran, 2007; Snow et al., 2005; Zeichner, 2005). These understandings together with the abilities to provide differentiated professional learning opportunities that promote teachers' self-efficacy and foster their abilities to engage in self-regulated learning may be foundational to fostering sustainable educational improvement. It is hoped that the insights from this study will inspire researchers, practitioners, and educational policymakers to believe in the value of, and work towards the provision of, such opportunities.
References


Appendix A

Administrator Participant Interview #1 Potential Question Prompts

Pre-Interview script to be followed by the researcher conducting the interview

Thank you for agreeing to participate in the research study, “Exploring the Affects of Participating in a Professional Learning Community: Teachers’ Changing Conceptions of Reading Assessment and Reading Instruction.” The purpose of this interview is to gain the perspective of the school administrator with respect to the reading instruction and assessment practices used historically (i.e., over the past ten years) by teachers at your school site, as well as information about your school setting and primary-grade teachers’ current reading practices.

We appreciate your willingness to share your experiences with us. Before we begin this interview, we would like to remind you of your right to withdraw from this study. As outlined in the information letter and consent form that you signed, your participation in this study is entirely voluntary. You may withdraw from the study or any part thereof at any time, for any reason, without penalty. In addition, you may choose not to answer any question, or part thereof during this interview, for any reason without penalty. Should you wish not to answer a question, or wish to end the interview, please tell me, and I will abide by your wishes, without question.

As outlined in the information letter and consent form for this study, this interview will be audio-recorded for transcription and review. By signing a confidentiality agreement, the transcriber has agreed to respect your privacy and to keep all information about this study and your responses to all questions during this interview strictly confidential. Following completion of the transcription process, you will be provided with a copy of your interview transcript for review and verification of accuracy.

Additionally, to protect your privacy and ensure that the information you provide is confidential, you will be provided with a pseudonym that will be used in collecting, analyzing and reporting information during this research project. Throughout the interview, I will refer to you as (insert participant’s pseudonym), rather than by your actual name. Do you have any questions or concerns? May I start the audiotape?

Demographics & Context

1 Tell me about the students in your school community. How would you describe their academic, social and emotional needs?

2 How would you describe the parental community?

3 Tell me about the climate of your school. How would you describe the working relationships between the primary division staff, between the primary division staff and yourself, and between the primary division staff and the other members of the teaching staff?
4 Describe how the current primary-division staff devises their instructional planning. What learning experiences or approaches do they plan as a division?

5 How would you describe the reading abilities and instructional needs of the primary-grade students in your school?

**Reading Instruction**

6 How do you believe students learn to read? What factors do you think contribute to students' abilities/difficulties learning to read?

7 Describe the primary-grade reading programs used historically (i.e., over the past ten years) at your school.

8 Describe the primary-grade reading programs used currently at your school. What instructional methods and programs are used?

9 Does your school follow the Ontario Ministry of Education Language curriculum and related professional documents (e.g., The Guide to Effective Instruction in Reading)? What learning opportunities are provided to enhance teachers' abilities to follow these documents?

10 How does your primary-grade staff support students who struggle with the reading process?

11 Would you like to see changes to the current primary-grade reading instructional programs? If so, what resources/support do you think are required for teachers to implement changes?

**Reading Assessment**

12 Describe the primary-grade classroom-based reading assessment practices used historically (i.e., over the past ten years) at your school. What assessment tools and approaches did teachers use?

13 How would you describe your primary-grade teachers' current classroom-based reading assessment practices? What assessment tools and approaches do they use?

14 Would you like the primary-grade teachers to change their current classroom-based reading assessment practices? If so, how and what resources/support do you think are required for them to implement these changes?

15 What do you hope will be accomplished during this professional development project? What do you believe will be the greatest challenges? What administrative support do you think will be necessary?
Appendix B

Teacher Participant Interview #1 Potential Prompts

Thank you for agreeing to participate in the research study, "Exploring the Effects of Participating in a Professional Learning Community: Teachers’ Changing Conceptions of Reading Assessment and Reading Instruction." The purpose of this interview is to gain insights about your prior experiences, school setting, and current reading practices and beliefs. This information will be used to plan the professional learning community sessions during this study.

We appreciate your willingness to share your experiences with us. Before we begin this interview, we would like to remind you of your right to withdraw from this study. As outlined in the information letter and consent form that you signed, your participation in this study is entirely voluntary. You may withdraw from the study or any part thereof at any time, for any reason, without penalty. In addition, you may choose not to answer any question, or part thereof during this interview, for any reason without penalty. Should you wish not to answer a question, or wish to end the interview, please tell me, and I will abide by your wishes, without question.

As outlined in the information letter and consent form for this study, this interview will be audio-recorded for transcription and review. By signing a confidentiality agreement, the transcriber has agreed to respect your privacy and to keep all information about this study and your responses to all questions during this interview strictly confidential. Following completion of the transcription process, you will be provided with a copy of your interview transcript for review and verification of accuracy.

Additionally, to protect your privacy and ensure that the information you provide is confidential, you will be provided with a pseudonym that will be used in collecting, analyzing and reporting information during this research project. Throughout the interview, I will refer to you as (insert participant’s pseudonym), rather than by your actual name. Do you have any questions or concerns? May I start the audiotape?

Demographics & Context

1 Tell me about yourself as a teacher. How many years have you been teaching and in what school settings have you taught? What grades have you taught?

2 What are your greatest strengths as a primary-grade teacher? What are your greatest challenges as a primary-grade teacher?

3 Tell me about the students in your school community. How would you describe their academic, social and emotional needs?

4 How would you describe the parental community?
5 Tell me about the climate of your school.

6 How would you describe the working relationships between the primary division staff, between the primary division staff and the school administrator, and between the primary division staff and the other members of the teaching staff?

7 Describe how the current primary division staff devises their instructional planning. What learning experiences or approaches do you plan as a division?

8 Describe your current teaching assignment. What grade and subject areas are you responsible for teaching?

9 How many students are in your class? How would you describe their reading abilities and instructional needs?

**Reading Instruction**

10 How do you believe students learn to read? What factors do you think contribute to students' abilities/difficulties learning to read?

11 Describe your current reading program. What instructional methods and programs do you use? What are the key professional resources you use, and are these resources used across the primary division of your school?

12 Do you follow the Ontario Ministry of Education Language curriculum and related professional documents (e.g., The Guide to Effective Instruction in Reading)?

13 What reading-related professional development opportunities have you taken part in over the past five years (e.g., conferences, workshops, university courses)? Did you have the opportunity to discuss and implement suggested strategies from these sessions with your colleagues? Were you able to implement the suggested strategies in your classroom? Why or why not?

14 Describe your view of the ideal reading program at the grade level you currently teach.

15 What do you think are the key components of effective primary-grade reading programs? How do you address these components within your current reading program?

16 How do you support students who struggle with the reading process? Do you collaborate with your colleagues to support students who struggle with reading? Please elaborate.

17 What are your greatest strengths and greatest challenges as a primary-grade reading teacher?
18 Would you like to change your current reading instructional program? If so, how and what resources/support do you think are required for you to implement these changes?

Opening Assessment

19 How would you define or describe assessment? How would you define or describe evaluation?

20 Describe your current classroom-based reading assessment practices. What assessment tools and approaches do you use?

21 What do you think are the key components of effective primary-grade reading assessment? How do you address these components within your current reading assessment practices?

22 Describe your view of ideal primary-grade reading assessment practices.

23 What are your greatest strengths with respect to primary-grade reading assessment? What are your greatest challenges with respect to primary-grade reading assessment?

24 Would you like to change your current classroom-based reading assessment practices? If so, how and what resources/support do you think are required for you to implement these changes?

25 How do you communicate students’ reading abilities to the special education resource teacher and to students’ next-year receiving?

26 How do you communicate your students’ reading abilities to their parents or guardians?

27 Why are you participating in the reading-focused professional learning community? What do you hope to accomplish during your participation in this project?

28 What do you believe will be the greatest challenges to you in accomplishing your goals? What support do you think will be necessary for you to do so?
Appendix C

Teacher Participant Survey

Literacy Orientation Survey (Lenski, Wham, & Griffey, 1998)

Name ______________________ Date ______________________

Please read the following statements and **circle the response that most indicates your beliefs or behaviours** regarding literacy.

<table>
<thead>
<tr>
<th>Statement</th>
<th>1 (strongly disagree)</th>
<th>2 (disagree)</th>
<th>3 (undecided)</th>
<th>4 (agree)</th>
<th>5 (strongly agree)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The purpose of reading instruction is to teach children to recognize words and to pronounce them correctly.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>When students read text, I ask them questions such as “What does it mean?”</td>
<td>1 (never)</td>
<td>2 (seldom)</td>
<td>3 (sometimes)</td>
<td>4 (usually)</td>
<td>5 (always)</td>
</tr>
<tr>
<td>Reading and writing are interrelated processes.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>When planning for instruction, I take into account the needs of children, including activities that meet their social, emotional, physical and affective needs.</td>
<td>1 (never)</td>
<td>2 (seldom)</td>
<td>3 (sometimes)</td>
<td>4 (usually)</td>
<td>5 (always)</td>
</tr>
<tr>
<td>Students should be treated as individual learners rather than as a group.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>I schedule time every day for students’ self-selected reading and writing experiences.</td>
<td>1 (never)</td>
<td>2 (seldom)</td>
<td>3 (sometimes)</td>
<td>4 (usually)</td>
<td>5 (always)</td>
</tr>
<tr>
<td>Students should use “fix-up” strategies such as rereading when text meaning is unclear.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>Teachers should read-aloud to students on a daily basis.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>I encourage my students to monitor their comprehension as they read.</td>
<td>1 (never)</td>
<td>2 (seldom)</td>
<td>3 (sometimes)</td>
<td>4 (usually)</td>
<td>5 (always)</td>
</tr>
<tr>
<td>I use a variety of prereading strategies with my students.</td>
<td>1 (never)</td>
<td>2 (seldom)</td>
<td>3 (sometimes)</td>
<td>4 (usually)</td>
<td>5 (always)</td>
</tr>
<tr>
<td>It is not necessary for students to write text on a daily basis.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>Students should be encouraged to sound out all unknown words.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>The purpose of reading is to understand print.</td>
<td>1 (strongly disagree)</td>
<td>2 (disagree)</td>
<td>3 (undecided)</td>
<td>4 (agree)</td>
<td>5 (strongly agree)</td>
</tr>
<tr>
<td>I hold parent workshops or send home newsletters with ideas about how parents can help their children with school.</td>
<td>1 (never)</td>
<td>2 (seldom)</td>
<td>3 (sometimes)</td>
<td>4 (usually)</td>
<td>5 (always)</td>
</tr>
<tr>
<td>Number</td>
<td>Statement</td>
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<tr>
<td>15.</td>
<td>I organize my classroom so that my students have an opportunity to write in at least one subject every day. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>16.</td>
<td>I ask the parents of my students to share their time, knowledge, and expertise in my classroom. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
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</tr>
<tr>
<td>17.</td>
<td>Writers in my classroom generally move through the process of prewriting, drafting and revising. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
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<tr>
<td>18.</td>
<td>In my class, I organize reading, writing, speaking and listening around key concepts. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
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<td></td>
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<tr>
<td>19.</td>
<td>Reading should be delivered to the whole class at the same time. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
<td></td>
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<tr>
<td>20.</td>
<td>I teach using themes or integrated units. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>21.</td>
<td>Grouping for reading instruction should always be based on ability. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
<td></td>
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<tr>
<td>22.</td>
<td>Subjects should be integrated across the curriculum. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
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</tr>
<tr>
<td>23.</td>
<td>I use a variety of grouping patterns to teach reading such as skill groups, interest groups, whole group, and individual instruction. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>24.</td>
<td>Students need to write for a variety of purposes. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25.</td>
<td>I take advantage of opportunities to learn about teaching by attending professional conferences and/or courses 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>26.</td>
<td>Parents' attitudes towards literacy affect my students' progress. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>27.</td>
<td>The major purpose of reading assessment is to determine a student's placement in the leveled text. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>28.</td>
<td>I assess my students' reading progress primarily by classroom-based assessments. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>29.</td>
<td>Parental reading habits in the home affect their children's attitudes toward reading. 1 (strongly disagree) 2 (disagree) 3 (undecided) 4 (agree) 5 (strongly agree)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30.</td>
<td>At the end of each day, I reflect on the effectiveness of my instructional decisions. 1 (never) 2 (seldom) 3 (sometimes) 4 (usually) 5 (always)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Teacher Beliefs - TSES

**Directions:** Please indicate your opinion about each of the questions below by marking any one of the nine responses in the columns on the right side, ranging from (1) “None at all” to (9) “A Great Deal” as each represents a degree on the continuum. Please respond to each of the questions by considering the combination of your current ability, resources, and opportunity to do each of the following in your present position.

<table>
<thead>
<tr>
<th>Question</th>
<th>None at all</th>
<th>Very Little</th>
<th>Some Degree</th>
<th>Quite A Bit</th>
<th>A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. How much can you do to get through to the most difficult students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2. How much can you do to help your students think critically?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3. How much can you do to control disruptive behavior in the classroom?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4. How much can you do to motivate students who show low interest in school work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5. To what extent can you make your expectations clear about student behavior?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6. How much can you do to get students to believe they can do well in school work?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7. How well can you respond to difficult questions from your students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8. How well can you establish routines to keep activities running smoothly?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9. How much can you do to help your students value learning?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10. How much can you gauge student comprehension of what you have taught?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11. To what extent can you craft good questions for your students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12. How much can you do to foster student creativity?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13. How much can you do to get children to follow classroom rules?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>14. How much can you do to improve the understanding of a student who is failing?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. How much can you do to calm a student who is disruptive or noisy?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. How well can you establish a classroom management system with each group of students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. How much can you do to adjust your lessons to the proper level for individual students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. How much can you use a variety of assessment strategies?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. How well can you keep a few problem students form running an entire lesson?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. To what extent can you provide an alternative explanation or example when students are confused?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. How well can you respond to defiant students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. How much can you assist families in helping their children do well in school?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. How well can you implement alternative strategies in your classroom?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>24. How well can you provide appropriate challenges for very capable students?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>

Appendix D

Teacher Participant Planning Template

Planning for Future Professional Learning

Planning for future accomplishments is a vital part of reflective practice. The following planner is intended to help you identify attainable goals, strategies, support required and timelines for implementation.

<table>
<thead>
<tr>
<th>Teacher ___________________________</th>
<th>Date __________________________</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Reflections</th>
<th>In light of this group session, what do I think I am doing well?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>What reading-related practices do I need to think about altering?</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Goal(s)</th>
<th>Areas of reading-related skills and strategies that I am interested in understanding and developing further: What am I planning to explore or implement in my classroom?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Short-term (over the next 2-3 weeks)</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>* Long-term</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Strategies to achieve goal(s)</th>
<th>How am I going to accomplish my goal(s)?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Short-term (over the next 2-3 weeks)</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>* Long-term</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Support Required</th>
<th>What resources or support is required to enhance my ability to achieve my goal(s)?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Short-term (over the next 2-3 weeks)</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>* Long-term</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Assessment of success</th>
<th>How will I measure my success?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>* Short-term (over the next 2-3 weeks)</td>
</tr>
<tr>
<td></td>
<td>*</td>
</tr>
<tr>
<td></td>
<td>* Long-term</td>
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<td>*</td>
</tr>
</tbody>
</table>
Appendix E

Teacher Participant Interview #2 Potential Prompts

Thank you for participating in the research study, “Exploring the Effects of Participating in a Professional Learning Community: Teachers’ Changing Conceptions of Reading Assessment and Reading Instruction.” The purpose of this interview is to glean insights about your experiences to date as a participant in the reading-focused PLC. We are especially interested in your thoughts about how your participation in this group has affected your reading-related beliefs and practices.

We appreciate your willingness to share your experiences with us. Before we begin this interview, we would like to remind you of your right to withdraw from this study. As outlined in the information letter and consent form that you signed, your participation in this study is entirely voluntary. You may withdraw from the study or any part thereof at any time, for any reason, without penalty. In addition, you may choose not to answer any question, or part thereof during this interview, for any reason without penalty. Should you wish not to answer a question, or wish to end the interview, please tell me, and I will abide by your wishes without question.

As outlined in the information letter and consent form for this study, this interview will be audio-recorded for transcription and review. By signing a confidentiality agreement, the transcriber has agreed to respect your privacy and to keep all information about this study and your responses to all questions during this interview strictly confidential. Following completion of the transcription process, you will be provided with a copy of your interview transcript for review and verification of accuracy.

Additionally, to protect your privacy and ensure that the information you provide is confidential, you will be provided with a pseudonym that will be used in collecting, analyzing and reporting information during this research project. Throughout the interview, I will refer to you as (insert participant’s pseudonym), rather than by your actual name. Do you have any questions or concerns? May I start the audiotape?

Professional Development Context

1. Tell me about your experiences as a participant in the reading-focused PLC to date. If someone outside of the group were to ask you to describe the focus and activities of the group, what would you tell them?

2. In general, what have been the greatest strengths of the group? In general, what have been the greatest challenges to the group? Do you think these challenges could be overcome, and if so, how?

3. Do you think that the reading-focused PLC has had any effect on the working relationships between the members of the primary division staff and/or the working
relationships between the school administrator and the members of the primary-
division teaching staff?

4 Do you think that the PLC has had any effect on the planning practices of the primary
division with respect to reading-related learning experiences?

**Reading Instruction**

5 How do you believe students learn to read? Do you think that your participation in the
PLC has affirmed or altered your beliefs about how students learn to read?

6 What factors do you believe contribute to students’ difficulties learning to read?

7 Describe the ideal reading program at the grade level you currently teach.

8 Describe your current reading program. Have you altered any components or
instructional methods used in your program as a function of your participation in the
PLC?

9 What are the key components of effective primary-grade reading programs? How do
you address these components within your current reading program?

10 What are your greatest strengths and greatest challenges as a primary-grade reading
teacher? Do you think that your participation in the PLC has affirmed or altered your
perceptions of your strengths and/or challenges as a primary-grade reading teacher?

11 Would you like to change or refine your current reading instructional program? If so
how, and what resources/supports are required to implement these changes?

**Reading Assessment**

12 How would you define or describe assessment? How would you define or describe
evaluation?

13 Describe ideal primary-grade reading assessment practices.

14 Describe your current classroom-based reading assessment practices. Has your
participation in the PLC affected your reading assessment practices? Please elaborate.

15 What are the key components of effective primary-grade reading assessment? How
do you address these components within your current reading assessment practices?

16 Do you think that your participation in the PLC has affirmed or altered your
perceptions of effective primary-grade reading assessment?
17 What are your greatest strengths and challenges with respect to primary-grade reading assessment? Has your participation in the PLC affirmed or altered your perceptions of your reading assessment strengths and challenges?

18 Would you like to change or refine your current classroom-based reading assessment practices? If so, what resources/support are required to implement these changes?

19 How do you plan to communicate your students’ reading abilities to the receiving teacher at the end of one school year and onset of the next? Have your perceptions of what information should be communicated and how this can be most effectively done been affirmed or altered by your participation in the PLC?

20 How do you communicate your students’ reading abilities to their parents or guardians?

21 What do you hope to accomplish during your participation in the remainder of this project? What do you believe will be the greatest challenges to you in accomplishing your goals?
Appendix F

Teacher Participant Interview #3 Potential Prompts

Thank you for participating in the research study, “Exploring the Effects of Participating in a Professional Learning Community: Teachers’ Changing Conceptions of Reading Assessment and Reading Instruction.” The purpose of this interview is to glean insights about your experiences over the duration of your participation in the reading-focused professional learning community. We are especially interested in your thoughts about how your participation in this group has affected your reading-related beliefs and practices.

We appreciate your willingness to share your experiences with us. Before we begin this interview, we would like to remind you of your right to withdraw from this study. As outlined in the information letter and consent form that you signed, your participation in this study is entirely voluntary. You may withdraw from the study or any part thereof at any time, for any reason, without penalty. In addition, you may choose not to answer any question, or part thereof during this interview, for any reason without penalty. Should you wish not to answer a question, or wish to end the interview, please tell me, and I will abide by your wishes without question.

As outlined in the information letter and consent form for this study, this interview will be audio-recorded for transcription and review. By signing a confidentiality agreement, the transcriber has agreed to respect your privacy and to keep all information about this study and your responses to all questions during this interview strictly confidential. Following completion of the transcription process, you will be provided with a copy of your interview transcript for review and verification of accuracy.

Additionally, to protect your privacy and ensure that the information you provide is confidential, you will be provided with a pseudonym that will be used in collecting, analyzing and reporting information during this research project. Throughout the interview, I will refer to you as (insert participant's pseudonym), rather than by your actual name. Do you have any questions or concerns? May I start the audiotape?

Overall Impressions

1  What was your greatest accomplishment throughout this project?

2  What was the most insightful, revealing or profound moment(s) for you throughout this project?

3  What was your greatest challenge? Were you able to overcome this challenge, and if so, how? If not, do you think this challenge could have been overcome, and if so, how?

4  Participation in this project has entailed a significant amount of your time this year, with meetings twice each month, goal-setting after each meeting, individual one-on-
one conferencing and planning, classroom observations, coaching, etc. Throughout this project have you felt pressured and/or supported, and how did this affect your ability to change?

5 After the initial PLC session, we began each subsequent session sharing what each member of the group had been working on, as well as their successes and challenges as they did so. What if any effect do you think this had on you as an individual and/or the group as a collective?

Reading Assessment Beliefs and Practices

6 How do you think that this project has affected your beliefs about how you should assess reading? If it has altered your beliefs, what do you think were the events that provided the catalysts for change?

7 Please describe how this project has affected your reading assessment practices this year. How do you think it will affect your reading assessment practices next year?

8 Has this project had any effect on your reporting practices with respect to reading and/or your confidence in reporting students’ progress to parents and other teachers?

9 Has this project affected your communication of students’ assessment data to their receiving teachers for next year and how do you think this will affect students’ reading instruction?

10 Do you think that this project has had any effect on your beliefs about how you should assess the progress of struggling readers? Has it had any effect on your assessment practices when working with struggling readers? How do you think insights from this project will affect your future assessment practices when working with struggling readers?

11 Were there changes that you wanted to make with respect to your reading assessment practices that you were unable to implement this year, and if so what were the factors that inhibited your ability to do so?

Reading Instruction Beliefs and Practices

12 How do you think that this project has affected your beliefs about how you should teach reading? If it has altered your beliefs, what do you think were the events that provided the catalysts for change?

13 Has participation in this project affected your reading lesson planning practices? If so, how?

14 Do you think this project had any effect on the reading instructional formats you used this year? Please elaborate.
15 Do you think that this project has had any effect on your beliefs about reading instruction when working with struggling readers? Has it had any effect on your classroom practices when working with struggling readers?

16 Were there changes that you wanted to make with respect to your reading instructional practices that you were unable to implement this year, and if so what were the factors that inhibited your ability to do so? How do you think this project will affect your reading instruction next year?

**Literacy Orientation Surveys**

17 At the beginning and end of this project, you completed literacy orientation surveys. Here are your pre-and postprogram responses. I would like you to look at your responses. What do you notice? Do you think that any changes occurred as a function of your participation in this initiative? Please elaborate.

**Self-Perception of Teaching Competence or Efficacy Beliefs**

18 At the beginning and end of this project, you completed teaching efficacy surveys. Here are your pre-and postseeals to review. What do you notice? What effect do you think this project has had on your beliefs? Please elaborate.

19 How do you think this project has affected your self-perception of competence specifically with respect to teaching and assessing reading? If it has altered these beliefs, what do you think were the events that provoked these changes?

**Instructional Materials**

20 When we began this project you were using basal reading program lessons regularly. Has this project affected your use of the program or your perceptions of the program?

21 If you were to be involved in the selection of a reading program for your school, what features would you look for in reviewing commercial programs or materials?

22 What instructional materials or resources would you like to acquire for your reading program? How do you think these materials would support your students?

**Professional Collaboration**

23 Has this project had any effect on your perceptions of the value of professional collaboration? How were the “mini” divisional meetings that were held at your school in prior years different from or the same as our PLC sessions? What are the advantages and disadvantages of each? Which would you choose to continue next year and why?

24 Did relationships affect your change processes this year? If so, how?
Concluding Thoughts

25 Do you plan to continue the reading assessment and instruction focus over the coming year? Is so, what resources or support do you believe will be required for you to do so?

26 Throughout the project what have you learned about yourself as a teacher, and what key insights about yourself will you take from this experience into your teaching career?
Appendix G

Question Prompts for Teacher Participants’ Summative Written Reflections

Thank you for participating in the research study, “Exploring the Effects of Participating in a Professional Learning Community: Teachers’ Changing Conceptions of Reading Assessment and Reading Instruction.” The purpose of this written reflection is to glean insights about your experiences over the duration of your participation in the reading-focused professional learning community. We are especially interested in your thoughts about how your participation in this group has affected your reading-related beliefs and practices.

We appreciate your willingness to share your experiences with us. We would like to remind you of your right to withdraw from this study. As outlined in the information letter and consent form that you signed, your participation in this study is entirely voluntary. You may withdraw from the study or any part thereof at any time, for any reason, without penalty. You may choose not to answer any of these questions, or any part these questions for any reason without penalty.

Additionally, to protect your privacy and ensure that the information you provide is confidential, you will be provided with a pseudonym that will be used in collecting, analyzing and reporting information during this research project, including these written reflections.

1. What was your greatest accomplishment throughout this project?

2. What was the most insightful, revealing or profound moment(s) for you throughout this project?

3. What was your greatest challenge throughout this project?

4. Do you think that this project has affected your beliefs about how you should teach and assess reading? If it has altered your beliefs, what do you think were the events that prompted these changes?

5. Do you think this project has affected your self-perception of your competence teaching and assessing reading? If it has altered these beliefs, what do you think were the events that prompted these changes?

6. Were there changes that you wanted to make with respect to your reading assessment and/or instructional practices that you were unable to implement this year, and if so what were the factors that inhibited your ability to do so?

7. What have you learned about yourself throughout this project, and what key insights will you take from it into your teaching career?
Appendix H

Ethics Clearance

DATE: November 20, 2006
FROM: Linda Rosa-Krasnor, Chair
Research Ethics Board (REB)
TO: Vera Woloshyn, Education
Adlene GRIERSON
FILE: 06-096 GRIERSON
TITLE: Exploring the Affects of Participating in a Professional Learning Community: Teachers’ Changing Conceptions of Reading Assessment and Reading Instruction

The Brock University Research Ethics Board has reviewed the above research proposal.

DECISION: Accepted as clarified.

This project has received ethics clearance for the period of November 20, 2006 to December 31, 2007 subject to full REB ratification at the Research Ethics Board's next scheduled meeting. The clearance period may be extended upon request. The study may now proceed.

Please note that the Research Ethics Board (REB) requires that you adhere to the protocol as last reviewed and cleared by the REB. During the course of research no deviations from, or changes to, the protocol, recruitment, or consent form may be initiated without prior written clearance from the REB. The Board must provide clearance for any modifications before they can be implemented. If you wish to modify your research project, please refer to http://www.brocku.ca/researchservices/forms to complete the appropriate form Revision or Modification to an Ongoing Application.

Adverse or unexpected events must be reported to the REB as soon as possible with an indication of how these events affect, in the view of the Principal Investigator, the safety of the participants and the continuation of the protocol.

If research participants are in the care of a health facility, at a school, or other institution or community organization, it is the responsibility of the Principal Investigator to ensure that the ethical guidelines and clearance of those facilities or institutions are obtained and filed with the REB prior to the initiation of any research protocols.

The Tri-Council Policy Statement requires that ongoing research be monitored. A Final Report is required for all projects upon completion of the project. Researchers with projects lasting more than one year are required to submit a Continuing Review Report annually. The Office of Research Services will contact you when this form Continuing Review/Final Report is required.

Please quote your REB file number on all future correspondence.

LRK/mb