University of Alberta

ESL Students' Beliefs and Strategies: A Case Study of Three

Middle Years Readers

by

Gholam Yahya Moteallemi

A thesis submitted to the Faculty of Graduate Studies and Research

in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

in

Language and Literacy Education

Department of Elementary Education

©Gholam Yahya Moteallemi

Spring 2010

Edmonton, Alberta

Examining Committee

Joyce Bainbridge, Elementary Education, University of Alberta

Carol Leroy, Elementary Education, University of Alberta

Heather Blair, Elementary Education, University of Alberta

Jz Wu, Elementary Education, University of Alberta

Lynne Wiltse, Elementary Education, University of Alberta

William Dunn, Secondary Education, University of Alberta

Hetty Roessingh, Division of Teacher Education, University of Calgary

Abstract

The purpose of this research was to explore, through interviews, miscue and retrospective miscue analysis, and retellings of stories, the oral reading performance of three English as a second language (ESL) students and their perceptions of the reading process, their knowledge of the English language cueing systems and their use of strategies in reading narrative and expository passages in English. The Burke Modified Reading Interview was administered to explore the students' perceptions of the reading process and of themselves as readers. Additional interviews were conducted to obtain information about their schooling and literacy background. The students' miscues while reading narrative and expository passage from an informal reading inventory were recorded, transcribed and coded using selected parts of Goodman's reading miscue inventory. Students listened to their miscues during retrospective miscue analysis sessions and engaged in self-reflection and exploratory talk to discuss why they made those miscues. The findings showed that the students' perceptions of reading varied. The print-based readers relied heavily on graphophonic strategies and knowledge-based readers focused on semantic strategies in reading the selected passages. All of the participants read below their grade levels. The findings also revealed that these students created images and overarching schemata in their imaginations as they were reading the selected texts. The students performed better on passages about which they had strong background knowledge. Their relative performance with narrative and expository structures varied. It was concluded that ESL students need more instruction and experience in reading informational texts and need to learn new strategies for making inferences from the texts using their knowledge of the language cueing systems and their knowledge of the world.

Acknowledgements

This research would not have been possible without the continued support and feedback from my supervisor Dr. Joyce Bainbridge who continuously read, reread, and provided me with useful insights and comments on drafts of this copy.

I am very thankful to Dr. Carol Leroy, co-supervisor of this dissertation, for her fruitful feedback on reading miscue inventory, retrospective miscue analysis and methods of data analysis.

Many thanks go to Dr. Heather Blair for giving me invaluable feedback and thoughtful comments on my candidacy proposal. I am especially grateful to her for comments on the conceptual framework of the study as well as the literature review.

Thank you to Dr. Jo Wu for his support and thoughtful comments on the design of my candidacy proposal that eventually made writing this thesis possible.

I am also very grateful to Dr. Katherine Willson for her thoughtful questions and inspirational comments during my candidacy examination.

Special thanks to Dr. William Dunn for his invaluable comments during my candidacy examination and for his challenging and well-thought questions during my final oral.

I also thank Dr. Lynne Wiltse for joining my supervisory committee and providing me with feedback on the sociocultural aspects of second language learning.

My sincere thanks go to the participants in the study who made this research possible by taking part in it, and many thanks to their parents and family members who warmly welcomed me and made me feel comfortable in their homes.

Table of Contents

List of Tables

CHAPTER ONE

INTRODUCTION TO THE STUDY

Alberta schools are educating an increasing number of students who speak English as a second language. In Alberta schools, such students are referred to as ESL students. According to the Calgary Board of Education (2006), ESL students are defined as those who come from homes in which the primary spoken language is not English, and they have minimal English competencies, or are non-English speaking or they speak a non-standard English. In 2006 there were 37,300 ESL students enrolled in the Alberta school system. Each year more than 15,000 new immigrants arrive in Alberta, of whom 49% have limited English proficiency as assessed by the provincial ESL Benchmark used in the Alberta school system (Calgary Board of Education, 2006). Most of these ESL students are at great risk for dropping out of school before completing grade twelve. Research (Watt, Roessingh & Bosetti, 1996a, 1996b) suggests that dropout rates reach 74% for ESL students in Alberta compared to a Canadian provincial average of 34%. Dropout rates among specific categories of immigrant students such as refugees or students with specific ethnic backgrounds in one Western Canadian urban area reached nearly 85% (Gunderson, 2000). The national average for high school students dropping out of school each year before completing grade twelve is 18%, that is 120,000 students a year. For each year the dropout rate stays at 18%, the government of Canada loses two billion dollars (Canadian Center for Adolescent Research, 2006).

Academic failure is a serious issue in public schools in Canada. Though it is not restricted to any particular community in this country, it is more common and widespread among ESL students (Watt & Roessingh, 1994). In the past two decades, academic failure among ESL students has been widely researched in Alberta and in Canada as a whole (Alberta Education, 1992a, 1992b, 1997; Eddy, 1999; Watt & Roessingh, 1994, 2001; Gunderson, 2000,2007; Worswick, 2001; Kouritzin & Mathews, 2002). These studies, along with those on second language

learning in the U.S. and other parts of the world, have contributed much to educators' understandings of the difficulties that ESL students cope with in their literacy learning and reading English texts, which is a major component of school success. However, even more research is required to provide ESL educators with new insights into successfully teaching literacy to these students so that they don't drop out. Both teachers and students require increased support in order to overcome the challenges they encounter. With increased support and a more thorough understanding of their literacy needs, it is hoped that the high school dropout rate among ESL students can be reduced.

It must be noted that this current study is not trying to establish causal relationships about the ESL students' literacy learning. The ESL students' reading levels in a second language could be affected by different factors such as the students' background experiences in refugee camps, the socioeconomic status of the family and their literacy skills in their first language. Therefore, it is not assumed that the ESL students' reading levels in a second language is purely a language issue and other factors are not involved. This study is limited to the students' perceptions of themselves as readers, their perception of the reading process and their oral reading of selected narrative and expository passages in English.

It is necessary to recognize how the development of relationships among ESL students, their teachers and peers support their literacy learning in a second language. These relationships were not the focus of this study. However, they remain central to the development of children's language and literacy. It is essential to recognize the challenges faced by ESL children in developing relationships with peers and teachers and to support these children to overcome these challenges (Wiltse, 2005).

Background to the Study

The number of English-as-a-Second-Language (ESL) students has been increasing dramatically in Alberta schools in recent years. This has been in general

due to the steady influx of immigrants into Canada and in particular due to a strong economy in Alberta that has attracted more migrants from other provinces as well. ESL students who attend elementary grades in Alberta school systems encounter grave challenges academically to catch up with their monolingual peers especially in content courses. As they move up to higher grades they have to learn both conversational English and the complicated academic English of subject matter content courses. These ESL students, especially those who arrive in Canada after the initial elementary grades are completed, require one to two years to gain fluency in conversational English. Geva (2000) and Lesaux and Siegel (2003) suggest that they also require at least two years for acquiring basic decoding skills in English to a level similar to that of their English speaking peers. As they move up to higher grades, they must be ready to learn the more challenging academic English necessary to read informational texts in schools.

Researchers have made a distinction between general language proficiency and cognitive academic language skills (Stotsky, 1979; Cummins, 1979a, 1981, 1992, 1994; Chamot & O'Malley, 1986, 1987, 1994; Valdez, Pierce & O'Malley, 1992). Cummins (1981) suggested that cognitive academic language proficiency (CALP) is necessary for students to be able to use language for reasoning and thinking.

According to Flowerdew (1994), Wang (1996), Wright and Kuehn (1998), low proficiency in academic English and in the type of language used in classrooms and in reading informational texts is a major contributing factor for academic failure and drop-out from school among ESL and minority language students. Conversely speaking, other researchers suggest that proficiency in the type of academic language used in the classroom might result in improved academic achievement of the immigrant students (Collier, 1989; Cummins, 1981; Spolsky, 1989; Saville-Troike, 1991; Chamot & O'Malley, 1994).

Proficiency in academic English not only requires a mastery of foundational literacy skills or the general language proficiency used in daily communications referred to as Basic Interpersonal Communication Skills (BICS) (Cummins, 1981), but also requires a mastery of higher level language skills such

as reasoning, using logic, generating inferences and forming hypotheses, which are needed in reading informational texts in school. Cognitive Academic Language Proficiency or CALP as coined by Cummins (1981) is highly context reduced. Consequently, it is more difficult for ESL students to cope with the complicated academic language required for content courses and this puts them at even more risk for failure at school.

According to Cummins (1981), it would take 5 to 7 years for minority language students to acquire the language skills required to successfully complete grade level appropriate learner outcomes. Collier (1987) and Collier and Thomas (1989) reported that immigrant students would require 7 to 10 years of English instruction to achieve norms comparable to native English speaking peers on standardized achievement tests. Limiting English instruction to focus on communication skills for only two to three years can cause ESL students to continue to fall two to three years behind their English speaking classmates in school subjects. This is not sufficient time for them to catch up. ESL students who have limited first language (L1) literacy skills, have certain sociocultural backgrounds, or who belong to immigration categories such as refugees, may be at an even higher risk for school drop-out than ESL students with sufficient L1 literacy skills (Valdes, 1998; Adger & Peyton, 1999).

Gunderson (2007) reported that Russian immigrants in a western Canadian province who arrived in Canada as refugees had the highest dropout rate in the school district (nearly 85%). Gunderson also found that ESL students with Spanish and Vietnamese backgrounds who had received refugee status in Canada were at a much higher risk for dropout from the school system than the more educated and affluent immigrants from China, especially the Mandarin speakers from Taiwan. However, Collier (1995) reported in her study of 2000 immigrant students (65% Asian, 20% Hispanic) in an affluent American suburban school district that even ESL students from more affluent and privileged families encountered numerous literacy challenges and potential underachievement in the mainstream in English language arts, reading, science and social studies by the time of graduation.

Watt, Roessingh and Bosetti (1996a, 1996b), in their eight-year longitudinal study of 505 ESL students of beginner, intermediate and advanced levels of language proficiency in an urban Calgary high school reported a dropout rate of 74%. The dropout rate varied according to the students' level of language proficiency. Advanced ESL students had a lower drop out rate than intermediate and beginner level students, and beginner level students had the highest dropout rate. The patterns of dropout rates in Watts' et al. study indicate that ESL students are at a much higher risk for failure in high school particularly if they exit ESL instruction before developing a sophisticated academic language for learning content courses. Watt and Roessingh (2001) in an analysis of their own longitudinal studies concluded that "accelerated integration into academic mainstream courses has had a detrimental impact on the education success of intermediate level ESL students" (Abstract, www.utpjournals.com/jour). They argued that ESL students are faced with having to cope with discourse specialization while they are learning to speak, listen, read, and write in English. They also need to speak, listen, read, and write in an academic discourse required for informational genres and complete school in Canada where the social and cultural norms are often different from those at home. Thus, the language burden on ESL students in the elementary and middle years of schooling is much greater than that on their mainstream peers. If they exit ESL instruction before learning the academic discourse, they will be at much higher risk of dropping out of high school than the mainstream students.

In the area of Mathematics, Worswick (2001) tracked children aged four to fifteen on the National Longitudinal Survey of Children and Youth (NLSCY) database. He found that the children of non-English or French speaking immigrant parents had similar scores on math to their native English-speaking peers but were disadvantaged in reading and writing. He reported that these disadvantaged children equaled or surpassed their Canadian born counterparts in all areas by the time they reached the age of 13 years.

Researchers over the past two decades have stressed the importance of instructional support for beginner level ESL students in the primary grades.

Knowledge about the way ESL students in these grades learn to read in English is important as it may reveal what challenges they encounter in their reading practices and how they overcome those challenges. Findings of this study could have important pedagogical consequences for the reading education of ESL students in the elementary and middle years of schooling in Canada, and may affect the dropout rate among the ESL school population at a critical time when these students are first experiencing membership in Canadian society.

Purpose of the Study

The purpose of the current study was to investigate the oral reading performance of three ESL students registered in grades six, seven, and eight in three different schools in Alberta. The study aimed (1) to explore the ESL students' beliefs, and perceptions about the reading process and about themselves as readers and (2) to learn about their knowledge of the English language cuing systems and use of strategies in reading selected narrative and expository passages in English. The study was conducted within the principles of a whole language approach to language learning and Goodman's (1994) sociopsycholinguistic model of reading.

Research Questions

The research questions guiding this study were:

I. What are the ESL students' beliefs and perceptions of the reading process and of themselves as readers?

    1. What are the ESL students' beliefs and perceptions about good reading?

    2. How do the ESL students perceive themselves as readers?

II. What knowledge and strategies do the ESL students use in reading selected narrative and expository passages independently in English?

    1. What knowledge of the language cueing systems do the ESL students use when reading selected narrative and expository passages independently in English?

2. What strategies do the ESL students use when reading selected narrative and expository passages independently in English?

Significance of the Study

Reading is an important language domain and a primary means for learning throughout the years of schooling. Thus gaining knowledge about the way in which ESL students learn to read in English is important because it may have significant pedagogical implications for the education of minority language children.

The findings of this study may produce useful insights about ESL students' perceptions of the reading process and of themselves as readers. It might reveal how the ESL students use their knowledge of the English cuing systems and strategies to construct and reconstruct meaning from texts. Findings may also reveal how the ESL students' perceptions of the reading process and of themselves as readers might affect their reading behavior. These findings can assist ESL teachers to better provide much needed support for their students at a time when they are learning literacy and experiencing membership in a new society.

The findings might help to provide more effective ESL pedagogy and thus decrease the dropout rate of ESL students within public schools in Canada. These insights may help policy makers and educators to better understand the situation of ESL students in public schools and thus implement programs aimed at providing better support for ESL students and increase their success in Canadian schools.

Limitations and Delimitations of the Study

My study is limited by the degree that I can understand and interpret the participants' miscues and their use of the English language cuing systems and reading strategies. In addition, my study is also limited by the participants' willingness to share and express their thoughts to me freely during the retrospective miscue analysis sessions, and by their word recognition skills,

background knowledge, and level of interest in the reading materials. It is also limited by the procedures required by miscue analysis.

The study is delimited to three ESL students from grades six, through nine, all of whom spoke Arabic as their first language. I originally started data collection in the summer of 2007 with six ESL students: two were boys and four were girls. The boys were registered in grades four and seven. The girls were registered in grades five, six, eight and nine. During the first month of data collection, three **participants** withdrew due to illness and other personal reasons. Therefore, the data collected for these students were deleted from the study and the study was completed with three ESL students (one boy and two girls) who remained in the study up to the very end of data collection. The boy was from Iraq and attended grade seven; the girls were from the Sudan and attended grades six and eight. All of the participants and their families had lived outside of their home countries as refugees or asylum seekers before they were admitted to Canada as refugees in 2003. All of the participants spoke Arabic as their first language. The girls were Christian and the boy was a Moslem.

The text types selected for the purpose of data collection further delimit this study. The findings might be different if different texts were used, and if the students were reading in a natural setting, such as the classroom. Only two types of texts, one narrative and one expository were selected for the procedures as it was anticipated that students' reading strategies may vary according to the text and their purpose of reading. Other categories of text genre and text types such as hypertexts and hypermedia and the literacy practices associated with them were excluded. The participants in this study were not literate in their first language. The findings may be different if the participants could read and write in their first language.

Overview of the Study

Chapter two presents the theoretical framework for the study. It elaborates on the roots of the whole language approach and the contributions made by the learning theorists, linguists and reading theorists towards its genesis as a language teaching approach. It includes discussions on the nature of reading, models of reading, the role of text, learner, and teacher in a whole language approach. It further presents Goodman's miscue analysis and language cueing systems, miscue analysis studies with monolingual and ESL students and a discussion of retrospective miscue analysis. Chapter three presents the methodology of the study. It presents a discussion of the research design followed by a discussion of the methods of data analysis including miscue analysis, retrospective miscue analysis and oral interviews. This chapter elaborates in detail on the procedures used for data collection, profiling the participants' reading miscues, conducting the retrospective miscue analysis sessions and oral interviews, as well as coding and categorizing of the data. It concludes with an elaboration of the methods of data analysis and a conceptual scheme for understanding students' reading patterns. Chapter four presents an analysis of the students' perceptions of the reading process and of themselves as readers, and it includes the analysis of the students' knowledge of the language cueing systems and use of strategies in reading selected narrative and expository passages independently in English. Chapter five discusses the findings of the study, the implications of the findings and presents questions for future studies.

CHAPTER TWO
BACKGROUND LITERATURE

The best method [for teaching reading and writing] is one in which children do not learn to read and write but in which both these skills are found in play situations … In the same way as children learn to speak, they should be able to learn to read and write. (Vygotsky, 1978, p. 118)

In this chapter, I will present a literature review on the whole language approach; the nature of reading; models of reading; K. Goodman's sociopsycholinguistic model of reading; the role of text, learner and teacher in this model; miscue analysis and studies with monolingual readers; miscue analysis and relevant studies with ESL students; retrospective miscue analysis; retrospective miscue analysis with monolingual readers; and finally retrospective miscue analysis and research with ESL students.

Whole Language Approach

The current study is framed within the principles of the whole language approach to learning language. According to Goodman and Goodman (1990), the whole language teaching approach is a holistic, dynamic, grass-roots movement among teachers who see beyond the principles on which a skill-based approach to learning is based. Fundamental tenet of whole language is that children best learn when they are in control of their learning and have authentic language experiences. They build on their own current knowledge, culture, values, interests and strengths. This makes their learning meaningful, purposeful and whole. According to Y. Goodman (1989), the history of the whole language approach can be traced as far back as the seventeenth century when John Amos Comenius stated that children can learn best by building on their own life experiences and exploring things that are familiar to them so that they can take charge of their own learning. When children posses ownership of their learning, they are better able to manipulate things around them, explore them and then reflect on their authentic explorations.

Learning Theorists

Many theorists, reading specialists, and curriculum experts since then have extensively contributed to the genesis of the whole language approach. John Dewey (1943) is one of the most prominent philosophers of the twentieth century whose work contributed considerably to the development of the whole language approach by emphasizing the power of reflections in pedagogy, learner-centeredness and integrated literacy learning. Dewey also stressed the importance of learners' interests and motivation in the learning process and provided the theoretical rationale for engaging learners with interesting and novel materials with which they have familiarity. He stated, "Relate school to life, and all studies are of necessity correlated … if school is related as a whole to life as a whole, its various aims and ideals – culture, discipline, information, utility – cease to be variants" (Dewey, 1943, p. 91). Dewey believed that children at school must have "the materials, the tools with which the child may construct, create and actively inquire" (p. 32). These materials must be familiar for the children so they can build on them, work with them and talk about them, which can improve and purify their language. Dewey (1938) believed that children of all ages needed to be in control of their own learning by solving real and important problems they encounter every day.

Piaget's (1977) study of children's learning, in particular his genetic epistemology, also exerted tremendous influence on the whole language movement. According to Piaget, children at all ages are engaged in a heuristic which involves their understanding of the world and their challenges in finding answers to their questions or problems that they encounter in their every day lives. He considered children as self-pedagogues. He believed that children are autonomous learners and knowledge seekers who do not wait to be taught. Rather they are more eager to cope with problems on their own and learn in the process. In this way, children develop their own interpretation of world phenomena and produce their own categories of thought and conceptualizations because they are active and intelligent learners. In coping with world phenomena, children shape it and are also shaped by it through processes of assimilation and accommodation. When they assimilate new data because they have familiarity with it, they are in a state of

equilibrium. In cases where they cannot assimilate new knowledge, they experience disequilibrium and must make adaptations by modifying their current schemas or building new ones. The teacher's role is of greatest importance during adaptation according to Piaget. The teacher must facilitate and scaffold students' learning by providing them with a stress-free learning environment and engaging them in activities which can support their learning.

Linguists

The whole language approach was also influenced by Halliday's (1978) functional theory of language development. In his theory, Halliday (1978) used the phrase "learning how to mean" to refer to the different personal/social functions of language use which help learners to learn language forms. Halliday's (1980) functional theory of language covered three aspects of learning: learning language, learning through language and learning about language. He stated that as learners use the wide variety of language functions and forms, they internalize and adapt to the social use of language in their community. This implies that learners develop both the procedural and declarative knowledge of language simultaneously as they interact and socialize with other people around them. Halliday also suggested that form follows function, and articulated the importance of children acquiring form through experience where they need language to work for them.

To Halliday (1975), language is a social tool that learners use for different personal, instrumental, imaginative, heuristic and social purposes. However, the norms and conventions of a society make language adapt to certain forms and functions. As Halliday (1975) stated:

> No two languages are ever sufficiently similar to be considered the same social entity. The worlds in which different societies live are distinct worlds, not merely the same world with different labels attached… We see and hear and otherwise experience very largely as we do because the language habits of our community predispose certain choices of interpretations. (p. 69)

According to Whorf (1964), people's perceptions of the world are influenced by their speech community. It is the social conventions of language that shape the

individuals' understanding of the norms in his community. Similarly, the components of language such as grammar, which regulates the use of language, could function as socially mediated tools. Ochs, Schegloff and Thompson (1996) stated:

> Grammar is part of a broader range of resources - organizations of practices, if you will - that underlies the organization of social life, and in particular the way in which language figures in everyday interaction and cognition. In this view, the involvement of grammar in such other organizations as those of culture, action, and interaction has as a consequence that matters of great moment are missed if grammar's order is explored as entirely contained within a single, self-enclosed organization. Grammar's integrity and efficacy are bound up with its place in larger schemes of organization of human conduct, and with social interaction in particular. (p. 3)

> Schegloff (1996) argues for a system of grammar that is interaction based and regulates the use and development of natural language as a result of individual and collective human activity. Therefore, to understand the nature of grammar better, the grammatical structures should be dealt with as adaptations to the communicative contexts not merely decontextualized abstractions. Thus, it would be helpful to re-conceptualize grammar as a tool for the understanding of language in interaction.

> Viewing language as a social tool or phenomenon in the whole language approach implies that its acquisition must include elements of a social practice. Two factors that appear to be significant in children's language acquisition are the richness of the contextualized language, and the immersion of the child into the language environment. Thus the language environments in which children are immersed facilitate their active integration of language through 'social input'. According to Gee (1995), four principles govern children's integration of language:

> 1. The *insertion principle* holds that "efficacious learning of a new complex system is a process involving socially supported and scaffolded insertion into an activity that one does not yet understand". (p. 336)

> 2. The *routine principle* holds that "early insertion into an activity one does not yet understand requires that the activity be to a certain extent repeated and reutilized or ritualized". (p. 336)

3. The *public principle* suggests that "the meanings of the parts of new systems, whether words, visual symbols, actions, or objects must initially be rendered public and overt, so that the learner can see the connection between the signs and their interpretations". (337)

4. The *context-variability principle* requires that:

   In learning the parts of a new system, the learner will initially tie meanings to specific contexts or experiences. Appreciating wider meaning is a matter of having multiple experiences, not (just) learning "general rules" and mastery requires practice at varying aspects of meaning so as to actively fit them to the context of use. People who know the "general meanings" and cannot vary these in context do not know the system, nor are they acquiring it in a useful way. (p. 346)

The basic assumption underlying children's integration of the language system through socialization is that children continue experiencing a world view that is richly represented in the types of interactions and experiences they become engaged with. According to Atkinson (2002), children's language acquisition is more than just an internalization process. It is a process of becoming and experiencing membership in the community.

Drawing on the social input principles that regulate children's language acquisition, Gee (1995) argued that parents and caretakers are interactional partners for children in their engagement with, and accomplishment of, the socio-cognitive tasks in the process of language acquisition. This accomplishment, which occurs in the zone of proximal development (Vygotsky, 1978), could not be realized without the scaffolding interactions of the caring adults. Vygotsky (1981), referring to the social origin of cognition stated that:

   Any function in the child's cultural development appears twice, or on two planes. First it appears on the social plane, and then on the psychological plane. First it appears between people as an interpsychological category, and then within the child as an intrapsychological category. (p. 163)

One significant aspect of Vygotsky's developmental theory is that it can account for why the role of contextual factors becomes less evident as children progress in their

language acquisition. The assumption in the first language acquisition research literature is that context disappears and becomes less important in the language learning process as children develop more language abilities. However, Vygotsky's (1978) developmental theory implies that context changes qualitatively and becomes integrated with the children's knowledge in the later stages of language learning as they are mastering the language functions they are engaged with. As children are mastering language functions, they master language-embedded culture and continue experiencing their membership in the social community which makes context less visible but dominating within their identities and membership in the community. This is the type of language proficiency that Cummins (1981) referred to as CALP. Cummins was the scholar who first made a distinction between two types of language proficiency: basic interpersonal communication skills (BICS) that are required for using a language for daily discourse and cognitive academic language proficiency (CALP) that is required for reading and understanding more complex special subject matter contents in higher grades in school.

Gee (1992) maintains that the Vygotskian view of language learning as a goal-directed process shows how such integration of context in the form of cultural models takes place as children experience membership in the community. According to Gee, learning does not occur if the learner does not establish meaningful relationships with the surrounding community. These relationships are so important that Gee prioritized students' relationships to their teachers and to their learning activities in class. It is these interactions and connections that bring about learning. Lave and Wenger (1991) commented:

> For Vygotsky, and for those who have extended and developed his ideas, learning is not a separate activity undertaken for its own sake, but an integral aspect of engaging in the ongoing activities of one's community and, in the process, gradually mastering the purposes of those activities and the means by which they are achieved. (p. 294)

Vygotsky (1978), in his theory of the zone of proximal development, argued that language learning is both social and cultural. Halliday (1973) stated that language is acquired because it is integral to our sense of belonging in our culture and society. He considered language functional and enumerated the different language functions that allow

language users to purposefully communicate with other individuals in different contexts and circumstances. Halliday (1975) argued that vocabulary develops in a functional context as well. The learning of new words facilitates the combination of language functions, which implies that the development of grammar also follows in a functional sense.

Language use is a means of establishing one's identity and social relations in what Lave and Wenger (1991) called a *Community of Practice*. The notion of the community of practice implies that language always occurs in a context to establish social relations (Vygotsky, 1978), discourse practices (Gee, 1990) and identity positions (Pierce, 1995). Cummins (1996) stated that, "Human relationships are at the heart of schooling. The interactions that take place between students and teachers and among the students are more central to student success than any method for teaching literacy or science or math" (p.1).

Reading Theorists

Reading theorists have also contributed enormously to the development of the whole language approach. Rosenblatt (1938) applied John Dewey's notion of experiential learning to reading and literature in her seminal book, *Literature Through Exploration* (Rosenblatt, 1938, 1976). She described reading as a transaction between the reader and the text and thus accounted for different interpretations of written discourse. K. Goodman (1970) further explored the nature of transactions between reader and text by studying the language cuing systems and the natural learning strategies readers use while engaged with texts.

The works of Kenneth Goodman, Frank Smith (Smith & K. Goodman, 1971) and Louise Rosenblatt were very influential in supporting the whole language approach and presented a new perspective that laid the foundation of a unified transactional model of reading. Whole language teaching recognizes the importance of the child in a particular context or setting of learning. K. Goodman (1989) wrote:

> In every language event in which a learner is involved, he or she is impacted and constrained by an overlapping group of influences. The language user in the classroom setting is influenced by all the members of the community including the

parents outside of the classroom as well as by the teacher and students within the classroom. (p. 3)

Goodman also stressed the importance of sharing power where teachers do not have to teach according to basal readers or pre-packaged skill and drill programs. They appreciate what their students can do and build on their strengths. They facilitate students' problem solving activities and heuristic based learning. This is accomplished by engaging students in meaningful and purposeful activities both in reading and writing. Students need to read authentic materials and write for a purpose. Goodman believed that both reading and writing can develop in students naturally. He coined the term "invention and convention" to describe the process all children go through, beginning with inventing language and then acquiring the conventions for its use. While students who are in control of their learning produce language both in oral and written discourse, their language functions and forms are also shaped by the conventions of the society or community they live in.

In the next section, I present a discussion about the nature of reading and the different interpretations of it. Some of these interpretations may not be consistent with the principles of the whole language approach, but they need to be acknowledged as contributing to an overall understanding of reading.

Nature of Reading

The word 'reading' has a wide range of interpretations, connotations and meanings. Some of these interpretations conflict with what language educators might mean today. When the former President Bush senior told correspondents, "Read my lips, no new taxes", he did not mean what is usually meant by 'reading' in a classroom. Similarly when a doctor says that he or she is reading the symptoms of a certain disease in a patient, or a detective is reading the forensic clues at a crime scene, they do not mean they are reading a book or a script. They rather refer to their experience in interpreting an expression or a phenomenon they have learned and known about. However, when teachers speak of reading, they usually refer to an act that consists of interpreting semiotic symbols that are printed on a piece of paper or appear on a monitor. This connotation of reading is

widely accepted in the academic world. Harris and Sipay (1985) defined reading as the comprehension and interpretation of written symbols on text. Rosenblatt (1978) defined reading as a complex interaction of cognitive and linguistic processes that help a reader generate meaning from a text as a result of shaping the text and being shaped by it at the same time.

Reading is also defined as an information seeking process (K. Goodman, 1967) and as a process of building a mental representation of text (Perfetti, 1985). Reading has been described as a high level thinking process (Smith, 1988). Smith stated that reading cannot be separated from thinking because it is a highly conceptual and interpretive process. Thus it requires higher order thinking as readers associate their experiences with the information in the text and interpret, generate inferences and make predictions.

Thorndike (1917) defined reading in terms of complex processes associated with learning, such as reflection, judgment, analysis, synthesis, problem solving, organization, comparison and contrast, identifying relations and critical analysis. These processes demonstrate the complicated nature of reading. Hildreth (1958) suggested that reading requires inference generation, and an understanding of the relative importance of ideas in the text. To him, comprehension was at the core of any reading activity. K. Goodman (1976) refers to comprehension as the fruits of reading which result in further learning. He also delineates comprehending from comprehension.

Reading is also defined as a linguistic phenomenon because it involves the recognition of symbols and words and an understanding of their meanings. McCormick (1988) stated that reading involves the application of lexical, syntactic and semantic rules to the phonemic output which has been decoded from print. So the spelling of a word must be associated with the graphophonic, syntactic and semantic representation. The psycholinguistic view of reading suggests that linguistic processes in reading are very important and a comprehensive picture of reading cannot be brought about without looking into it as a language process (Perfetti, 1985). K. Goodman (1976) defined reading as a psycholinguistic guessing game "by which a reader reconstructs a message encoded by a writer as a graphic display" (pp. 22-23). For Goodman, reading starts with graphic display as input, and it ends with meaning as output. Goodman suggested that readers pick up minimal cues that combine with their knowledge of language and world experience and

allow them to anticipate meaning. If readers cannot anticipate meaning correctly, their eyes regress to previous material for new clues. They reread the materials and make intelligent guesses using their knowledge of the world and of the topic of the passage.

Frank Smith (1988) pointed out that proficient readers maximize their use of the syntactic and semantic cues and reduce their dependence of graphic cues, analysis of surface structure and graphophonic processing. They process language at the level of deep structure and sample the surface structure by focusing on more important cues. Proficient readers make predictions and test their guesses. K. Goodman (1976) suggested that readers engage themselves in cycles of processes that start with scanning, fixating, predicting, forming, searching, tentative choosing, testing, and regressing, and end with decoding. Thus readers must always be in an alert and anticipatory situation.

Non-proficient readers maximize their use of the graphophonic cues and minimize their use of syntactic and semantic cues. Although they use the same type of strategies mentioned above, they might use them differently. According to Goodman (1966, 1967, 1976a, 1976b) and Frank Smith (1971, 1978, 1988), the following can be considered the implications of the psycholinguistic emphasis on the nature of reading:

- Reading is not a precise, exact sequential process, involving, merely word-by-word recoding
- Reading is a meaning centered process, and instruction should focus on a meaningful task
- Context is an important factor in reading
- Reading is language based
- Children read best when they hypothesize and predict, confirm or reject their predictions, and revise their improper guesses.

In the next section, I present a discussion of models of reading and focus on K. Goodman's (1994) sociopsycholinguistic model of reading as the model within which I conceptually frame this research study.

Models of Reading

Currently, there are three types of models that account for how readers construct meaning from text: bottom up, top down and integrated. Bottom up models maintain that the written text is hierarchically organized from the smallest element, a grapheme, to the largest component, a sentence. The reader first processes the smallest linguistic units and then builds on them to recognize and understand larger units. This form of reading according to Gove (1983), requires readers to do the following:

- Recognize each word in a sentence to understand it
- Primarily use graphophonic cues to recognize a word
- Acquire a mastery of word recognition skills for effective reading
- Develop knowledge of sub-skills in reading.

Conversely, in a top down approach, meaning does not reside in the text but occurs in the readers' minds as they interact with the text. In this approach, the reader is reconstructing meaning and not gaining it solely from the text. According to Gove (1983), the following are the characteristics of a top down approach to reading:

- Readers use syntactic and semantic cues to recognize new words
- Reading requires the use of meaning driven strategies and not a mastery of a series of word recognition skills
- Instruction focuses on authentic language, that is the reading of sentences, paragraphs, whole passages and stories
- The primary goal of reading is constructing meaning.

The most important aspect of reading is the new learning that results from the reading activity. Whereas Smith (1971) and Goodman (1970) in their top down view of reading stress the significance of hypothesis formation, testing hypotheses, and rejecting or approving hypotheses in a selective and tentative anticipatory process, advocates of the bottom up approach, such as Rayner and Pollatsek (1989), stress that visual processing of text should be very fast and readers' hypothesis-making is not significant.

The third type of reading model is the interactive model, which suggests that readers use knowledge from many sources to understand text (Stanovitch, 1980; Perfetti, 1985). According to this model, readers simultaneously use all levels of processing. Any

source of meaning can be primary at any time and the utilization of information from one source depends on utilizing information from other sources. In this model, the reader constructs meaning by the selective use of information from all sources of meaning without adhering to any set order.

Although K. Goodman's reading model is primarily known as a top-down model of reading, Goodman himself considers it as an interactive model. As my research study is framed within an interactive model of reading, I will discuss Goodman's reading model in more detail in the next section.

Goodman's Sociopsycholinguistic Model of Reading

K. Goodman (1970) describes reading as "a complex process by which a reader reconstructs, to some degree, a message encoded by a writer in graphic language" (p. 61). In Goodman's model of reading, the reader engages with text to reconstruct meaning. Goodman suggests, therefore, that authentic materials should be used for reading instruction. These materials should be motivating and interesting enough to keep readers actively engaged in the reading act. Goodman's study of text analysis and the use of original materials paved the way for the consideration of other factors in reading, such as readers' attitudes, interests and motivation while reading.

A rich body of literature on the motivational factors and purposes of reading has led to the consideration of readers' interests and goals as well as their self-regulation and active participation in reading activities (Almasi, McKeown & Beck, 1996; Goodman, 1986; Guthrie & Wigfield, 2000; Schallmert, Meyer & Fowler, 1995; Turner, 1995). The significance of considering motivational factors during reading is in the way they interact with other factors such as students' background knowledge, strategic abilities, socio-cultural background, and other features of the learning context. The inclusion of motivational factors in recent reading research has resulted in a reconceptualization of the reader as an engaged and motivated individual (Goodman, 1967; Guthrie & Wigfield, 2000). The view of a reader as an engaged motivated individual not only represents the complexities of the act of reading as students continue their academic growth, but also asserts that viewing reading as learning a set of discrete skills or as the natural acquisition

of language competence could not capture its ever changing complex nature (Alexander, 2003). As Alexander and Fox (2004) stated:

> It has become increasingly more difficult to ignore that reading is a domain that relates not only to the young or struggling reader but also to readers of all abilities and ages. Further, reading extends beyond the initial phase of acquisition and across the lifespan as readers engage in a range of reading-related, goal-directed activities". (p. 51)

A significant shift from reading as an individualistic decoding activity to reading for meaning occurred in reading theories as a result of numerous studies (Rosenblatt, 1938; K. Goodman, 1969, 1971, 1973, 1973b, 1976, 1987, 1994). This shift resulted in the development of a reading model that K. Goodman (1994) referred to as a "transactional sociopsycholinguistic model of reading" (p. 8). Rosenblatt (1938) coined the term "transaction" to emphasize the close interplay of all the parts of reading. K. Goodman's sociopsycholinguistic theory of reading, which now includes writing and the text, was built on Rosenblatt's work and goes far beyond the superficial and mechanical act of word recognition. He advocated a view of reading during which a reader transacts with the text to make sense of it. This view is supported by numerous studies Goodman and his colleagues conducted in the past four decades with readers of different language backgrounds, ethnicity and proficiency (K. Goodman, 1965, 1967, 1969, 1971, 1973, 1973b, 1976, 1982, 1987, 1994; K. Goodman and Burke, 1969, 1970, 1972, 1973). Reading, according to K. Goodman, is not just a simple act of retrieval of information from text. It involves constructing meaning from text as a result of an interaction between the reader and the writer who initially put meaning into the text. In his seminal work in 1967, Goodman defined reading as:

> an interaction between thought and language. Efficient reading does not result from precise perception and identification of all elements, but from skill in selecting the fewest, most productive cues necessary to produce guesses which are right the first time. The ability to anticipate that which has not been seen, of course, is vital in reading, just as the ability to anticipate what has not yet been heard is vital in listening. (p. 47)

The sociopsycholinguistic theory of reading has been very much influenced by other contemporary linguists and psychologists. Goodman's initial view of reading as a psycholinguistic guessing game was based on Chomsky's (1957) definition of reading as 'tentative information processing' as well as on Chomsky's notion of deep structure and surface structure explained in his seminal work *Syntactic Structures*. Goodman shifted the focus of reading from word recognition to constructing meaning from the text and said:

> Reading isn't simply recognizing words in succession. Something propels you forward as you read, helps you to anticipate so well what's coming that you simply use cues from the print to move constantly toward meaning. Your brain is not a prisoner of the senses; it's in charge of the process! It sets up expectations and instructs your eyes to glide over the surface of the print, using that input to make sense of the text. (P. 4)

According to Goodman (1994), both the reader and the text are transformed during the transactive nature of reading. The reader gets to the meaning while decoding the text and simultaneously recodes perceptions in a parallel text in the mind. It is this second text that the reader understands. This view allows for a systematic and scientific study of the text features and cueing systems that readers use to make sense of print.

This model of reading was also influenced by innatist views on human language learning. Goodman believed that children learn reading and writing as natural phenomena that occur in a sociocultural context to satisfy a specific need. Thus, he rejected behaviorist views on learning which treat the learner as a passive and empty-headed subject who learns as a result of responding to surrounding stimuli. Conversely, Goodman believed that learning takes place when the learner integrates new information with previous knowledge. Vygotsky's (1978) views on learning as a social process and the power of play in establishing authentic contexts shifted Goodman's focus from the individual learner to the social context of learning.

Goodman grounded his model of reading in the scientific analysis of the reading miscues of hundreds of readers from a wide range of ethnic and language backgrounds. In this model of reading – and now of writing and written texts – K. Goodman (1996) described the reading process in terms of the strategies readers use to transact with a text within a social context. Reading is a highly selective process and readers, as K. Goodman

(1982) argued, use the natural strategies of initiating, sampling, inferring and confirming to transact with the text. Readers use these strategies in accordance with the cueing systems they receive from the text. The cueing systems that operate during the reading process are the graphophonic, syntactic and semantic cueing systems. When these cueing systems are integrated with the social/cultural context in which they occur, they form the pragmatic system. As readers transact with the text, utilizing the language cueing systems and their natural strategies, they miscue on certain words resulting in responses that are different from the print. The analysis of these miscues provides for a deeper understanding of the reading process and the reading strategies used by the reader.

According to Goodman's theory, meaning is cued to the readers through the language of the text and the social-cultural context in which the transaction occurs. K. Goodman (1984) describes the transaction between the language cueing systems and the strategies used by readers:

> Readers develop sampling strategies to pick only the most useful and necessary graphic cues. They develop prediction strategies to get to the underlying grammatical structure and to anticipate what they are likely to find in the print. They develop confirmation strategies to check on the validity of their predictions. And they have correction strategies to use when their predictions do not work out and they need to reprocess the graphic, syntactic and semantic cues to get to the meaning. (p. 9)

Central to this transaction is the reader's efficiency in using the cueing systems. Goodman (1967) suggests, "Reading is a selective process. It involves partial use of available minimal language cues selected from perceptual input on the basis of reader's expectation" (p. 47). Various studies (Goodman & Burke, 1973; Goodman & Rakestraw, 2000) have supported Goodman's claims that readers use all types of cueing systems to understand the meaning of a text. According to Goodman's model of reading (1975), readers use graphophonic, lexico-grammatical, and semantic pragmatic cues in constructing their texts and comprehending the written language.

The graphophonic cues include graphic cues, phonological cues and phonic cues. The graphic cues consist of the letters, spelling patterns and patterns of words created through white space and punctuation. A word or suffix represents a graphic pattern; a

phrase or sentence is a pattern of patterns. Phonological cues include the sounds, sound patterns and patterns of patterns created through intonation such as pitch, stress and pause. Phonic cues consist of the complex set of relationships between the graphic and phonological representations of the language. Understanding both oral and written language requires the use of different and appropriate cues appropriate for each semiotic system.

The lexico-grammatical cues include sentence patterns or structures, pattern markers and transformational rules. Pattern markers consist of function words such as the, do and not; inflections or bound morphemes such as the past tense marker 'ed'; and punctuation-intonation which is made up of the system of markings and space distribution, and the related intonation patterns. The transformational rules are not characteristic of the graphic input itself but are supplied by the reader in response to what is perceived as its surface structure. They carry the reader to the deep structure and meaning. If readers are to recognize and derive meaning from a graphic pattern, they must bring these grammatical rules to the process.

The semantic pragmatic cues represent the whole system by which language can show highly complex social and personal processes and include the reader's experiences, current concepts and vocabulary. In transacting with printed materials, readers bring their prior experiences into play in response to the graphic input. They also organize the meaning they are reconstructing according to their existing concepts and reorganize experiences into concepts as they read. Readers sort out their experiences and concepts through the use of appropriate vocabulary in the context of the reading act.

In Goodman's model of reading, a reader uses all three cueing systems to reconstruct meaning from text: graphophonic, syntactic and semantic.

Readers might use one or more of their natural reading strategies and skills in conjunction with using their knowledge of the language cueing systems to construct meaning. Goodman (1970) has listed the following skills and strategies readers might use in reading:

1. Fixing: The ability to focus the eye on the line of print.

2. Selecting: The ability to select from graphic input those key cues which will be most productive in the information processing. For example, initial consonants are the most useful letters in words.

3. Predicting: The ability to predict input on the basis of grammar and the growing sense of meaning from prior decoding. (Prediction and selection operate together since each is dependent on the other.

4. Forming: The ability to perform perceptual images on the basis of selection and prediction. Readers must combine what they see with what they expect to see to form a perceptual image.

5. Searching: The ability to search memory for phonological cues and related syntactic and semantic information associated with perceptual images. Readers bring to bear their language knowledge and experiential and conceptual backgrounds as they read.

6. Tentative choosing: The ability to make tentative choices on the basis of minimal cues and related syntactic and semantic input. It is crucial that readers use the least amount of information possible to make the best guess possible. To do so, they need well-developed strategies that become almost automatic.

7. Testing-semantic and syntactic: The ability to test choices against screens of meaning and grammar. Literally, the reader silently says: "Does that make sense?" "Does that sound like language to me"? Readers who do not use these two screens will tend to have low comprehension and will make little effective progress in reading, though they may become good word callers (recoders).

8. Testing-graphophonic: The ability to test the tentative choice, if it has failed the prior test, against the recalled perceptual image and to gather more graphic information if needed.

9. Regressing: The ability to scan right to left and up the page line by line if a choice is found unacceptable on prior tests.

10. Decoding: When a successful acceptable choice has been made, the reader integrates the information gained with the meaning being formed. (p. 80-81)

According to Goodman's model (1996), readers engage in four different types of reading cycles or processes: the visual or optical cycle, the perceptual cycle, the syntactic cycle and the semantic cycle.

The visual cycle begins with scanning of and fixating on print. The human eyes receive the graphic stimuli and process it with regards to the readers' stored schemata. This process is more important than the visual input itself because readers blend the input with their background knowledge, experiences and expectations. Reading starts, as Kolers (1967) put it, with the visual input, but what readers do with this input is the difference between reading and seeing.

The perceptual cycle includes the selection of highly significant and distinctive features of print, and inferring the wholes they relate to. According to Miller (1956) readers' recall of information depends on their ability to organize the information into meaningful wholes. It is the readers' schemata that shape the meaning and facilitate its recall. When information is sorted into meaningful units, it can easily be recalled whether the recall is a word or a complete sentence. According to Cattell (1947), readers can use the similar and identical features to recognize letters as well as words and sentences. One aspect that is significant during the perceptual cycle is that learning what not to pay attention to is as important as learning what readers must attend to.

The syntactic cycle represents the readers' assigning of a grammatical structure to the text. Readers must identify both the surface and deep structure to construct meaning from print. According to Goodman (1996), inference and prediction strategies play an important role in the syntactic cycle. Readers use the syntactic features and cues in the text to make the necessary inferences and predictions. They use their knowledge of language structure to assign a syntactic pattern to the print and then use that pattern to assign values and perceive the data. Without this syntactic structure within the print materials, readers will not be able to recognize words. Halliday (1975) referred to this language structure as the lexico-grammar system because words in context must have both structure and lexical reference to bear meaning.

The semantic cycle is the most important of all cycles in language. It represents the end product of reading, which is comprehension. The semantic system of language represents the full range of thoughts, feelings and emotions of readers as individuals and

as members of a social community. Readers can comprehend written materials to the degree to which they share ideas, knowledge, styles, special text formats, terminology and cohesive devises with the writer. The more readers have in common with the writer, the better they are able to understand the works. When readers have the appropriate schemata for what they read, they can easily reconstruct and assimilate information (Piaget, 1971). When their schemata differ from what is implied or stated in the text, they must accommodate by revising or changing their schemata.

To Goodman (1970) reading is a meaningful act that results in understanding meaning from text, which becomes the means to achieve new goals. He said. "Though reading and the application of the fruits of reading are separable, it must always be remembered that reading is never pursued for its own sake even in literature (p. 73)." This is because if a reader gains no benefits from reading, the reading will stop. For this reason all the reading materials for children should be meaningful and interesting. Goodman (1970) also stressed that readers must develop their vocabulary from authentic language use and not in isolation, such as when memorizing words from a list. According to Goodman (1970), there are five possibilities for how this occurs in reading:

1. Readers encounter a printed form they do not recognize as a word in their oral vocabulary. This is the simplest vocabulary problem since the reader has experiences and concepts to relate to their oral vocabulary.

2. Readers encounter a printed form which is not familiar and not in their oral vocabulary, but the concept is a known one. The reader has other language forms to express it. In this case the problem is in associating new language with old.

3. Readers encounter a printed form which is unfamiliar, and for which they have no oral counterpart, and which represents a concept new to them. They may in fact lack relevant experience on which to base such a concept. This is a case where vocabulary must follow conceptual development. Otherwise, there is a fourth possibility.

4. A written form is familiar and may even have an oral equivalent, but readers have no meaning for it. Within narrow limits they may even use the form to answer test questions correctly without understanding what they are reading.

5. The final possibility exists as readers become proficient. They may encounter printed forms and come to attach concepts to them without ever encountering them in oral speech. One does not have to be able to pronounce a word to understand it.

In the next section, I present a discussion of the roles of text, learner and teacher in Goodman's model of reading.

The Role of Text, Learner and Teacher in Goodman's
Sociopsycholinguistic Model of Reading

According to Goodman (1970), written language is a parallel form of oral language with all the specifications of a language though it appears to be "a secondary form both historically and in the personal history of any individual" (p. 62). Nonetheless, it is language in its fullest meaning. Written language and oral language have both similarities and differences. However, these differences do not make one less important or inferior to the other. Goodman argued that written language has all the features of oral language that are appropriate to its form. In describing the features of oral language, Goodman agreed with Halliday (1969) who said," What is common to every use of language is that it is meaningful, contextualized, and in the broadest sense social" (p. 26). Goodman expanded this definition to written language as well. According to Goodman, both oral and written languages occur naturally in human communities. For Goodman, any literary event must be authentic to produce optimum learning. Text functions as a mediator for the reader's learning. Readers learn new words and meanings from authentic materials, and growth in both reading and writing occur as a result of engagement with such material. An authentic literary event is one that includes all the characteristics of text in real situations. According to Johnson and Morrow (1981) an authentic literary event provides readers with an information gap, choice, and feedback. The information gap creates a need for new knowledge and motivates learners to use the appropriate language forms to express their views in the way they most desire. Goodman noted that text must be whole with all the characteristics of real text in real situations. Similarly, Vygostsky (1986) noted that any use of the written language must consider the daily life and experiences of the learners in order to be meaningful to them.

According to Goodman (1994), written language is a medium of communication between authors and readers. However, a written message has only a potential to evoke meaning and has no meaning in itself. Meaning is not a characteristic of texts but is reconstructed by the reader. This does not imply that the characteristics of texts are unimportant. The way that a writer indicates meaning through a text certainly affects the way a reader reconstructs and comprehends it. Goodman's transactional view of the reading process posits that readers create their own texts in their minds as they are interacting with the original text. It is actually the second text they are reading.

He makes a distinction between comprehension and comprehending. Comprehending is the process of making sense from print, and comprehension is the end product. Comprehending might continue long after a reader has finished reading a text and thus it may affect his comprehension and learning at a later time. In a transactional view of reading, learning occurs as a result of perceiving, ideating and presenting (K. Goodman, Smith, Meredith & Y. Goodman, 1986). During the process of perceiving, readers focus on aspects of the world that are familiar and meaningful to them. Readers' perception processes are very efficient. Thus what they perceive is instantly given semiotic symbols and observable attributes and meaning. Readers interpret things based on their existing schemata. It is not that readers know what they see but that they see what they know.

During the ideating process, readers try to reconstruct meaning and make sense of the print (Goodman, 1988). In Piaget's term, readers either assimilate knowledge within their current schemata or they accommodate it. Readers change their schemas to make sense of the conflicting information. Problem solving is a form of ideating. Ideating involves cycles of perception and reflection. Reflection allows for a reconsideration of the readers' background knowledge and experiences, and adds insights to it.

During the presenting cycle, readers reconstruct their own text and show their learning as a result of transacting with the text. As Goodman (1988) stated:

> In the process of presentation we engage in transactions that help reconstruct perceptions and ideas. We transform as we present, and then we change again as we get response in the course of social transactions. Not only are perception and ideas changed, but we also modify the language in which we are expressing them as we experience social response. (p. 312)

As readers transact with texts during reading, and use their own resources such as background knowledge, strategies and knowledge of language to engage and learn from them, they put themselves in charge of their own learning process. They establish ownership of their own learning and monitor it. Thus the role of the teacher is that of supporting and mediating shared experiences.

> Teachers are professionals who bring to their classroom, knowledge of learning, development and language. They know their pupils and the strengths and needs they bring to the classroom. They plan experiences with their pupils and invite their pupils to participate, supporting and encouraging them and responding to their needs. (Goodman & Goodman, 1989, p. 381)

One way to support readers and strengthen their perceptions of themselves as readers is by making them familiar with the reading process and how they transact with the print. This can be accomplished with the use of retrospective miscue analysis (K.Goodman, 1982; Y. Goodman & Marek, 1989). In the next section, I discuss Goodman's miscue analysis and how it was developed and became a research tool for understanding the reading process.

Second Language Acquisition in Goodman's Reading Model

According to Goodman (1990), first language acquisition for children is a natural process. Children learn their native language because from earliest moments in their lives, there is a need for communication with parents and the people surrounding them. This need might be regulated by satisfying personal and immediate needs or a sense of curiosity that children have in interacting with the outside world.

Goodman (1990) believes that as children learn their native language naturally at home, they learn more complex concepts in school in the same way. There is no differentiation in the learning process between learning personal concepts at home and scientific concepts at school. In either context, children build schemas and use their experiences to relate the new concepts to already learned concepts and experiences.

According to Goodman (1990), children learn a second language in much the same way they acquire their first language. They realize a need for communication and build

schemas that can help them assimilate new experiences. Thus, children go through a single process in learning their first and second language. There are no differences between these processes. However, Goodman (1990) does not deny that there are certain conditions and factors that might facilitate second language learning. I will discuss these factors in so far as they relate to the current study.

The first factor that might affect the ESL students' second language acquisition is their being literate in their first language. Goodman (1990) believed that "Second language learning is indeed facilitated by the "advanced knowledge" of the first language" (p. 263). This notion that second language learners benefit from having learned literacy skills in their first language was proposed by Jim Cummins (1979b, 1980a) in his "linguistic interdependence hypothesis," which suggested that the level of competence a child attains in a second language learned in a school context reflects the levels of his already acquired competencies in the child's first language.

The second factor that may affect the ESL students' second language acquisition is their perception about themselves as learners. If the students do not have a good perception of themselves as a good learner or reader in their first language, it might as well affect their attitude towards learning a second language.

The third factor that might facilitate the ESL students' learning of a second language is the types of relationships that they develop among peers and teachers. The students who build a constructive and trusting relationship with their peers and teachers are more likely to be successful in learning a second language and might take less time to acquire certain language functions compared to those students who do not interact and have much less contact with their teachers, peers and school staff (Cummins, 1996; Wiltse, 2005).

There are other factors that might as well affect the acquisition of a second language such as the age of exposure, individual aptitude and learning strategies that will not be discussed in more detail as they do not relate to the context of present study.

What is Miscue Analysis?

Kenneth Goodman (1967) developed miscue analysis as a technique that could provide for a qualitative examination of readers' oral performances as they are interacting with texts to reconstruct textual meanings. He argued that readers process four types of data during the act of reading: graphophonic, syntactic, semantic and pragmatic. The system of miscue analysis provided a comparative tool for studying readers' observed oral responses with their expected oral performance (Goodman, 1969). Goodman and Burke (1972) later developed miscue analysis into a nine-item reading miscue inventory that could be used for a qualitative understanding of readers' oral performance as they interact with texts. The basic principle behind miscue analysis is that reading is an active and dynamic process not a passive one. A reader's oral performance is thus affected by prior experiences with language. So, as readers are reading the texts, miscues occur when the readers' oral responses deviate from the print. Cueing systems, which interact with the social-cultural context of learning operate and function interactively with one another during the act of reading. The four cueing systems are described below.

The Graphophonic Cues

The graphophonic cues relate to the sound-letter relationships in a language. They include the orthographic and phonological systems of the language and the conventions of text, such as punctuation, that can affect reading. Goodman (1994) stated that graphophonics is not an automated system. It is a selective and conscious system that readers may use more frequently when the syntactic and semantic systems do not provide them with sufficient data for the conscious and selective use of the sound-letter relationship.

The Syntactic Cues

The syntactic system presents the word order or the relationship of words and phrases in the text. The inter-relationship between the sentence elements is facilitated by grammar. The grammatical rules assist readers during reading by providing them with a

means to make predictions and infer relationships and meanings. According to Goodman, Watson and Burke (1987), reading passages that follow unconventional structures may lead readers to produce syntactic miscues.

The Semantic Cues

Semantics reflects the meaning system within a language. Language users bring with them their own experiences, background knowledge and their view of the world in developing their understanding of print. Goodman (1994) asserts that the meanings of words are shaped within the context and in interactions with the individuals' background knowledge.

Pragmatics

The pragmatic system refers to how language users function in different contexts. Written words and sentences in English may convey cultural, regional or specific socially situated meanings that ESL students are not familiar with. For example, when ESL students read in a paragraph, 'The United States went from peanuts to popcorn' they may not understand that this sentence refers to the 1979 presidential elections in the U.S. and Ronald Reagan taking office after Jimmy Carter. School texts might also refer to regional, historical, religious or cultural events that the ESL students do not share with their mainstream peers. Such texts may be a source of difficulty for these students. Their frustration with such texts will increase particularly if they have not yet developed the necessary language skills to cope with such demanding materials.

English texts might follow different structural patterns and employ vocabulary that varies from one type of writing to another. For example, a passage that is written in a newspaper to inform readers may follow a writing style that would be different if it were published in an academic journal. Texts are written for different purposes and readers have meta-knowledge about writers' purposes and intentions while reading a passage. Accordingly, readers might interact with texts in different ways. Certain uses of texts such as shopping lists, menus, and manuals employ specific features that are characterized by the type of vocabulary, syntax and style used in them. So readers may read different types

of texts in different ways suggesting that pragmatics is important in understanding the contextual dynamics during the reading process. K. Goodman's miscue analysis has been extensively used in making sense from the reading process with diversified groups of readers.

In the next section, I present a discussion of miscue analysis studies with monolingual readers.

Miscue Analysis and Monolingual Students

Goodman (1965) developed his taxonomy of reading miscues as a result of a study he conducted with one hundred students in grades one, two and three. He compared students' abilities in reading decontextualized word lists with their ability to read stories that contained the same words. Goodman found that children were better able to read the words in the context of the stories than in the lists. He also noted that every time these students regressed in the text, it was for the purpose of correcting a response. Goodman then classified all of the students' errors and coined the term "miscue" to refer to students' responses that were different from the text. This was intended to avoid the negative connotation associated with the word error or mistake. Thus, Goodman produced the original taxonomy of cues and miscues in reading. It included eighteen categories of miscues. The original taxonomy was later modified (Goodman & Burke, 1972) into a Reading Miscue Inventory to provide a research tool for classroom teachers and educators. The revised version of the taxonomy included nine categories which were graphic similarity, sound similarity, syntactic acceptability, semantic acceptability, meaning change, bilingual reader, dialect, correction, and grammatical function. Researchers have studied Goodman's model with regard to a number of factors external to the reader and within the reader.

In a study of grammatical restructuring, Burke (1969) found that miscues that changed the grammatical structure of the text tended to occur at pivotal points in the sentence structure. Acceptable choices were possible at these points. This finding was also confirmed in K. Goodman and C. Burke's (1968) and Goodman's study (1971).

Allen (1969) studied sentence structure on an operational level. He identified two levels: operations on surface structure and operations on deep structure. Allen reported

that phrase level substitutions constituted the largest number of substitutions at grades two, four and six. As these substitutions included larger chunks of syntax and meaning, he suggested that phrase might characterize the most significant unit of analysis in the reading process.

Goodman and Burke (1970) also reported that the percentage of occurrence for each grammatical function in the miscue was close to the percentage of the expected response in the text. The grammatical function of the expected response also affected the miscue type. For example, they reported that substitutions with omissions and insertions mostly occur for verbs, nouns, and function words and acceptable miscues were more likely to include syntactic change than semantic change. In order of frequency of occurrence, they reported that most miscues had a high percentage of syntactic acceptability and semantic acceptability.

Menosky (1971) reported that the number of miscues increased with the length of the passage. She also reported that as readers progressed sufficiently through the story and gained contextual support, the quality of their miscues changed. Readers became more dependent on previous material to predict meaning.

Y. Goodman (1971) in her longitudinal study of four Black American children explored differences between miscue patterns of slow and average readers during their second and third year of reading instruction. Among both slow and average readers, she found that miscues per hundred words varied among individual students as well as when they were reading different passages. The main difference between average and slow readers was not in the use of strategies but in how they used the strategies effectively. She concluded that the number of miscues per hundred words by themselves do not indicate a pattern of developing reading proficiency.

K. Goodman (1973) studied ninety-four students reading at proficiency levels ranging from low second grade to high tenth grade. He reported seven general findings:

1. Reading at all levels was consistent with his model of reading.
2. Low proficiency readers used the same processes as high proficiency readers but less effectively.

3. Less proficiency readers used strategies less effectively and overly used graphophonic, syntactic and semantic information, which resulted in the loss of meaning.

4. Readers of moderate to high proficiency had few differences in their ability to handle complex syntax.

5. The only consistent difference between groups at successive proficiency levels was their ability to comprehend materials they read.

6. The best indicator of reading proficiency was the percentage of miscues semantically acceptable before correction was attempted.

7. No evidence of a hierarchy of skills of reading development was detected.

While Goodman found no direct relationship between any measurable dimensions as readers gain proficiency, he noticed relationships among dimensions and patterns that hold true for proficient readers. His general findings included the following:

1. Regarding miscues per hundred words, the number of miscues was consistently lower as proficiency increased.

2. The range in the number of miscues per hundred words was narrowest for all higher proficiency groups and widest for lower proficiency groups.

3. These ranges appeared to overlap so that a reader's proficiency could not be judged simply by counting miscues per hundred words. He concluded that readers who were efficient seemed to produce fewer miscues.

Goodman reported that the means for the number of phonemic miscues were consistently lower than graphic means though the difference was not significant. The means for both graphic and phonemic miscues appeared to be similar across levels and across ranks within each grade level except for low readers in grade two and some readers in grade four. Therefore, only readers in the lower grades showed evidence of difficulty in using graphophonic cues in reading. According to Goodman, there is little evidence that phonics problems are of considerable importance in differentiating readers with varying proficiency. However, he found differences in patterns of graphophonic similarity by grade level. For sixth graders and above, high graphophonic similarity was associated with low comprehending, low semantic and low syntactic acceptability. However in the second and fourth grade, there was a positive correlation between these variables. In the second

and fourth grade, higher quality miscues were associated with higher graphic and phonetic similarity.

Goodman noted the significance of syntactic and semantic acceptability. He found that no group corrected more than 38% of its miscues. Given the different proficiency levels of the students, Goodman reported that low proficiency groups above fourth grade tended to show less correction than average and high groups. Means for semantic acceptability were lower than means for syntactic acceptability. Goodman concluded that variation in story difficulty affected semantic acceptability more than syntactic acceptability.

Goodman identified two measures of a student's understanding. The first one was comprehension rating, which reflected the student's oral retelling and the second was comprehending, which was represented in the percentage of all miscues fully semantically acceptable and the percentage of those not semantically acceptable but successfully corrected. The comprehending measure lent evidence to the reader's search for meaning. The comprehension patterns were roughly similar to the comprehending patterns on similar stories. Lower grade groups had higher means on comprehending measures whereas higher grade groups had higher comprehension ratings. It must be noted that readers may not express all of their ideas in the measure of comprehension and as well the measure of comprehending does not reflect students' silent correction strategies. The findings across all groups showed that:

1. Comprehending seemed to have strong positive relations with semantic and syntactic acceptability. Comprehending was related to the percent of correction and comprehension.

2. A relatively strong negative relationship was found between comprehending and miscues per hundred words and between miscues per hundred words and semantic acceptability. There were also some negative relationships between miscues per hundred words and correction for all groups.

3. Dialect related miscues appeared to not interfere with the reading process or the generation of meaning.

M.S. Burke (1973) studied the oral reading of first grade students who were taught according to the synthetic (phonics based) and analytic (whole language) method.

Students in the synthetic classes were found to focus on letter-sound relationships in reading and only minimally utilized cues from syntactic and semantic components of language. They showed weaknesses in the areas of comprehension and retelling. However the students in the analytic classrooms did not lose meaning as much as the students in the synthetic classrooms as evidenced in their retelling scores. Burke said that analytically taught students were less likely to use word-for-word processing because they were aware of the interaction of cueing systems.

Brody (1973) examined the oral reading miscues of proficient and 'retarded' (sic) readers who were reading at the fourth grade level. Brody found that retarded readers made more miscues than proficient readers in grade four. They were also using the graphophonic cues less efficiently. As the retarded readers progressed into the story, their miscues increased rapidly. Brody concluded that as these students got tired, they used graphophonic cues more than syntactic and semantic cues. For both groups of students, 38% of the miscues corrected resulted in overcorrection.

Garcia (1983) compared the reading miscues of twenty-four grade five students: half of the students attended bilingual schools; the other half attended regular schools. Findings of the study showed that the students in the bilingual classrooms made more miscues per hundred words than fifth grade students in regular schools. Although the oral reading performance of both groups was qualitatively alike, the students in the bilingual schools attained higher retelling scores than the students in regular schools.

Coll and Osuna (1990) studied patterns of miscues among three monolingual and bilingual third graders in Venezuela. Their purpose was to explore the reading strategies of the students in Spanish and compare the strategies used between Spanish monolingual and bilingual students. They confirmed their hypothesis that the reading strategies of these students would not significantly vary from one another in Spanish. All three students were native Spanish speakers with developed language proficiency in Spanish. One participant had resided in the U.S. for seventeen months prior to the collection of data and finished grade two in a private monolingual English school. All three participants read a Venezuelan folktale entitled "La Piedra del Zamuro" (The Vulture's Stone). The researchers used Procedure I of the Miscue Analysis Inventory by Goodman, Burke and Watson (1987) to analyze the students' miscues. The findings suggested that all the

participants were natural users of their language and they used all the graphophonic, syntactic and semantic cues to construct meaning from the written text. However, none of the participants was a proficient reader.

A proficient reader, according to Goodman, Watson and Burke (1987), produces syntactically and semantically acceptable miscues and thus makes effective and efficient use of the language cueing systems and natural reading strategies. The bilingual student in Coll and Osuna's study made more syntactically unacceptable miscues in Spanish but was reading with a more natural rhythm. The study demonstrated that miscue analysis is a powerful tool to evaluate the students' needs in the classroom as well as exploring ways to improve students' reading ability by providing them with strategy instruction as well as appropriate materials.

Christie (2001) investigated the miscue patterns of forty grade-two, forty grade-four and forty grade-six students from seven schools in the U.S. In each group, half of the students had high reading proficiency and half had low reading proficiency. Four graded passages ranging from grade-one to grade-seven were selected from the Ginn Reading 720 basal reader series. The findings of the study did not reveal any significant main effects for the subjects' combined graphic similarity but there was a significant interaction effect between ability and grade level. The low-ability subjects' graphic similarity scores continued to increase with grade level between grades two and six. The subjects with high reading ability showed a decrease in their graphic similarity scores between grades two and six. The analysis of acceptability in context scores revealed a main effect for ability with the high ability subjects making a larger percentage of acceptable miscues than the low reading ability subjects. The percentage of contextually unacceptable miscues increased with grade level. The analysis of contextually unacceptable miscues, and self corrected miscues revealed no significant main effect. However, a significant interaction effect between ability and grade level was reported. The low ability subjects corrected far more of their contextually unacceptable miscues between grades two and four than the high reading ability subjects. Findings of the study showed that students' reading ability and grade level are significant factors in affecting their miscue patterns.

Hammer (2003) explored the effect of oral reading fluency on the comprehension skills of thirteen grade three title I students. Title I refers to students from low income

families who are eligible for free lunch at school. For assessment of fluency and prosody, the participants were asked to read passages orally in English. Their reading was timed and the miscues were jotted down. The participants then answered eight reading comprehension questions: four were text implicit and four were text-explicit questions. The participants read a second passage but they were allowed to practice reading it three times before their assessment. All students showed an increase in the number of words read correctly per minute from the pretest to the post-test as well as in prosody. Six students showed gains in their comprehension scores. Three students made no gains but three students showed a decrease in their comprehension scores. Hammer concluded that although repeated readings of text do result in an increase in students' accuracy, there were other variables that could affect the results and obscure a significant correlation between oral reading fluency and comprehension. The implication of his findings suggested that accurate reading, or a mastery of sound-symbol relationships, is not sufficient for understanding the meaning of a text. Students might produce few miscues and yet not understand the passage they were reading.

Nelson, Damico, and Smith (2008), in their study, applied eye movement miscue analysis to the reading patterns of one ten years and ten months old bilingual Spanish dominant child with language impairment secondary to Down syndrome. Eye movement miscue analysis was used to evaluate the visual sampling and oral articulations of the participant while reading selected passages in English and Spanish. The results of their study showed that the participant miscued on 12.6% of the Spanish text. Some 8.4% of these miscues were of low quality, which meant if they remained uncorrected, they would change the meaning of the text either through syntactic or semantic substitutions, insertions and omissions. The remaining 4.2% of the participant's miscues were of high quality, which meant they would not alter meaning if they remained uncorrected. On the Spanish text, the participant was able to retell the story with or without the aid of the text. She was able to describe the theme of the story and the characters without the aid of the text. When aided with text, she was able to produce more information on the pictures and illustrations on each page. On the English text, she could not recall any part of the story. However, her aided retelling in English contained simple descriptions of the illustrations on specific pages. The participant was more confident in retelling the Spanish story than

the English one. Results of the eye movement fixations showed that Maria fixated on 77.3% of words in the Spanish text and 81.1% of words on the English text. The number of regressive fixations on the Spanish and English texts was respectively 11.2% and 15.2%.

The findings of this study indicated that the following common beliefs about reading are misconceptions:

1. Developing readers should fixate on every letter or at least every word while reading.

2. Most "errors" or miscues that developing readers produce tend to reflect words that were not fixated.

All of the studies noted above were conducted according to Goodman's miscue analysis. They support the following general conclusions:

1. Readers have distinct and varying miscue patterns. Both the percentage of miscues and miscue types vary from reader to reader. However all miscues are not of equal significance to the reader. Y. Goodman (1970) wrote, "There is no question that certain types of miscues are of a higher order than others; miscues of low order give way to miscues of higher order as children become more proficient readers (p. 455).

2. Certain miscue patterns were reported. High graphic similarity was seen in a high percentage of total miscues. Phonemic relations were involved in a low percentage of total miscues as well. Mean scores for semantic acceptability of miscues were usually lower than syntactic acceptability means. Dialect variation was seen in a low percentage of total miscues.

3. With respect to readers' syntactic knowledge, all readers showed strong control of syntactic structures. They were better able to control syntactic structure than meaning. A strong tendency for miscues retaining high syntactic and semantic similarity to the text was also reported.

4. Regressions appeared to be strategies readers use to correct their miscues. The percentage of correction of miscues by readers showed both individual differences and their group trends. When children attempt their own correction of miscues, they are successful 50% or more of the time. Semantic and syntactic screens are

important factors in using correction strategies. There has been a tendency to correct unacceptable structures and structures acceptable only within the prior portion of the text and not to correct acceptable structures. Thus children are less likely to correct a miscue when the resulting passage sounds like meaningful language. Dialect miscues are rarely corrected.

In the next section, I will present miscue analysis studies with ESL and bilingual students.

Miscue Analysis and ESL Students

A limited number of studies have been conducted using miscue analysis with ESL students. Goodman and Goodman (1978) conducted a comprehensive study of text analysis and miscues with 24 second-graders, 32 fourth-graders, and 32 sixth-graders. These students represented four English dialect groups from Tennessee, Maine, Mississippi, and Hawaii and four bilingual groups from the states of Arizona (Navajo), Michigan (Arab), Texas (Spanish), and Hawaii (Samoan). Analysis of the participants' miscues revealed the following: (1) Many text pronouns were read with few or no miscues, though others revealed identical substitutions by several subjects, indicating their shift to a different referent; (2) pronouns were substituted for other text words in rough proportion to their occurrence in the text; (3) readers tended to substitute pronouns with other pronouns from the same grammatical case, thus maintaining syntactic function and anticipating where pronouns would occur in noun positions; (4) non-pronoun substitutions occurred in few categories, indicating that readers expected pronouns in certain text positions; (5) determiners were frequently interchanged with possessives, indicating the maintenance and possible identification of cohesive relationships; (6) miscue patterns involving conjunctions and pronouns indicated the reader's manipulation of the surface structure using different options than the author.

Connor (1981) studied seven ESL high school students with different language backgrounds. Three participants were Vietnamese, two were Spanish and one was Arabic.

All the students were enrolled in the second term of their first year ESL program. Connor hypothesized that:

1. The variation in miscues would be less among ESL students with similar language background than it is among different language backgrounds;

2. The Vietnamese students would have a high percentage of grammatical unacceptable miscues since their language is a monosyllabic language without grammatical endings;

3. The Spanish students would have a high number of miscues due to interference from their first language;

4. The Arabic and Iranian students would have a slower speed of reading than the other subjects;

5. The participants in the study would not use correcting strategies since their language learning experience in the first language did not support using such strategies due to its authoritarian nature.

6. All miscues will not cause change in meaning (p. 45).

The results of the study suggested the following:

1. Miscue variation was not greater between different language groups than within same language groups.

2. The Vietnamese students did not have a higher number of grammatically unacceptable miscues than other participants.

3. Spanish participants' intonation miscues were not as frequent as unpredicted miscues of intonation among Arab and Iranian students.

4. Arab and Iranian students took more time reading than Vietnamese students.

5. The participants in the study did not attempt to correct their miscues.

6. Comprehension scores had a direct relationship with the score under "no meaning change" (p. 52).

Connor concluded that only some miscues caused a complete change in meaning and suggested using miscue analysis in a need-based pedagogy. He also reported that miscue analysis can provide teachers with special insights about their students and how they cope with the reading process.

Romatoski (1981), in a study of three Polish-English grade-five students with length of residence in the U.S. that varied from one year to three years, reported no relationship between the number of miscues and reading comprehension, or between the

length of residency and reading comprehension. She did, however, find that the students did not correct many of their miscues and some of the syntactical miscues were due to interference from the students' first language. She also concluded that a reader's familiarity with the content of the reading passages affected reading comprehension.

Hodes (1981) studied the reading performance of six bilingual children who spoke Yiddish as their first language and learned English at school. The participants in her study read stories from their English language basal readers and as well read selected stories in their first language. She reported that the participants relied heavily on graphic similarities in English and overcorrected their miscues. But their reading efficiency was not affected by orthography in the first and second language. According to Goodman (1973) readers who overcorrect "indicate a kind of inefficiency by correcting themselves when they do not need to do so. Only when the meaning is disrupted is there any real need for correction" (p. 406). According to Hodes, students who were more concerned with reading accuracy made fewer miscues but lost meaning, and students who made more miscues had better comprehension and retold the stories more effectively because they were over occupied with constructing the meaning from the text.

As part of a larger study of the oral reading of elementary school students representing eight linguistic populations in the United States, Altwerger and Goodman (1981) conducted a study to discover why readers make the same miscues at the same point in a text and to discover factors in the text that contribute to this phenomenon. Subjects were second, fourth, and sixth grade students who were Navajo, Hawaiian Samoan, Arab, and Texas Spanish second language speakers, as well as Maine, Appalachian Caucasian, Mississippi rural black, and Hawaiian-pidgin dialect speakers. They were instructed to read aloud whole stories of considerable length and to recall all they could remember about the stories. Sentences that generated the highest rates of miscues per word per reader were then analyzed for aspects that contributed to those rates. The analysis confirmed that syntactic complexity was not the only contributor to miscues. Other factors causing miscues were (1) lack of relevant prior knowledge, (2) unfamiliar or unusual use of terminology, (3) weak syntax, (4) unpredictable simple structures, (5) unusual stylized syntax, (6) complex syntax, and (7) combinations of the above. The findings suggest that text difficulty cannot be understood completely without some

investigation of the interaction between readers and the text, and that miscue analysis can provide data that reveal such interaction.

Using an adaptation of a miscue taxonomy developed by Cziko (1978), Rodriguez, Flora, Yirchott and Lynne (1983) compared the reading performance of: (1) English-monolingual and bilingual third-grade students reading in English; (2) Spanish-monolingual and bilingual third-grade students reading in Spanish, and (3) bilingual third-grade students reading in Spanish and English. The subjects were 23 children attending integrated schools in two school districts in Illinois. The oral reading samples were collected using videotape. The miscue coding system used for analysis was adapted by adding or deleting categories as needed, according to the study's purpose and the characteristics of the Spanish language. Inter-rater reliability was calculated to ensure that the categories were reliable and that the coders understood the categories and coded them properly.

Results showed that by third grade, the children were using mainly graphic rather than contextual information while reading. A trend toward increasing the use of contextual cues was found that seemed to be consistent with an interactive view of reading. In general, it was found that English-monolinguals used more contextual information than either the Spanish-monolingual readers or the bilingual subjects. The results raise the question of when second-language reading should be introduced to bilingual children: at the same time as first-language reading or after considerable development of first-language reading skills.

Devine (1984) studied the question of whether or not L2 readers have internalized models of the reading process. She was also interested in finding out the influence these models might exert on the students' reading behaviors. She tested and interviewed students of beginner and intermediate English proficiency with different native language backgrounds. She wanted to understand if the readers' conceptualization of the reading process might be sound-centered, word-centered, or meaning-centered. The subjects were interviewed about (a) the strategies they used when encountering difficulty in comprehending the materials, (b) their beliefs as to what it takes to become a good reader, (c) how they would help someone become a good reader, and (d) what they would like to improve in their reading. She also used the miscue inventory analysis as the readers read a

passage aloud. The students also wrote a summary of what they had read. The summaries were scored on a 6-point scale from poor to excellent.

Devine hypothesized that the internalized reading model that the students utilized during the reading process would affect them in both comprehending the text as well as deciding on what to focus while reading. She also hypothesized that meaning-centered readers would comprehend texts better than sound-centered readers. Based on their responses to the interview questions, the readers were grouped as sound-centered, word-centered, or meaning-centered.

Analyzing students' graphophonic, syntactic, and semantic miscues, Devine found significant disparities in the number of semantic miscues between meaning-centered and sound-centered readers. Meaning-centered readers made more semantically acceptable miscues while sound-centered readers made more phonemic miscues than both word- and meaning- centered readers. They also made more graphic miscues than word-centered readers. The sound-centered readers also received poor or very poor evaluations on their summary writings while meaning-centered readers had excellent summaries. The word-centered readers had received evaluations that varied from very poor to very good. Devine concluded that having a meaning-centered model of the reading process improved comprehension and suggested that teachers should encourage their students to adopt such a model.

Coll and Osuna (1989) compared the reading strategies in Spanish of three third-graders: two monolingual Spanish-speakers and one bilingual English-Spanish speaker. Procedure I of miscue analysis inventory (Goodman, Watson & Burke, 1987) was used for data analysis. Results indicated that the three readers performed below the proficient reader level, and their miscues followed similar patterns. The main characteristic found in the bilingual student's reading strategies was that his weaknesses were at the lexical level and his strength seemed to be at the syntactic level. However, in spite of lexical weaknesses, the bilingual student was able to summarize and narrate the setting, characters, and resolution of the story in a more cohesive manner than the monolingual students, confirming that his meaning construction strategies in Spanish were more developed than those of the monolingual students.

Malik (1990) studied the oral reading behavior of 15 proficient Iranian male college students at the University of New Mexico. All the subjects had a score of 80 or above on the Michigan Test of English Proficiency (MTELP). Analyzing the reading behavior of the students, Malik used two types of culturally familiar and culturally unfamiliar texts. The subjects' reading comprehension was determined on the basis of the recalled idea units. He used the *Miscue Analysis Profile* (Altwerger & Resta, 1985), a revised version of a reading miscue inventory (Goodman & Burke, 1972) to determine the reading strategies (predicting, confirming, correcting, and integrating) of the students. He reported that cultural schemata significantly affected the reading comprehension and strategies of the students. Readers were more able to integrate the culturally familiar content than the unfamiliar content.

Miscue analysis studies with ESL students have shown that ESL and bilingual readers manipulate text structure and produce miscues that are different from the expected responses. This confirms the use of a transactional and unified process of reading among the ESL students (Goodman & Goodman, 1978; Ney, 1980). Miscue analysis has been used as a research tool with ESL students and has shown it can provide information regarding the reader-writer transactions as well as about many other factors such as lack of background knowledge, difficult and unpredictable syntax and unusual terminology that provide data about the readers' miscues (Altwerger & Goodman, 1981; Connor, 1981)

Results of miscue analysis studies with ESL students have proved to be somewhat inconsistent with miscue analysis studies with monolingual readers. While Romatoski (1981) reported no relationship between readers' miscues per hundred words and their level of comprehension in a second language, several studies (Allen, 1968; Burke, 1969; Goodman, 1971) reported a positive correlation between a reader's number of miscues and reading comprehension. Their findings suggested that readers' comprehension suffers most when the number of their miscues increases. However, Goodman and Burke (1968) reported a negative correlation between readers' number of miscues per hundred words and their reading comprehension. The findings of their study revealed that readers who made more miscues per hundred of words had better comprehension and vice versa.

Less efficient ESL readers appear to rely more on graphophonic cues than do more efficient readers (D'Angelo, 1980; Hodes, 1981). Students who were more concerned with

reading accuracy made fewer miscues but lost meaning and students who made more miscues had better comprehension (Hodes, 1981). Poor readers used graphic distortions to make corrections. However, good readers relied more consistently on syntax and semantic cues to make corrections than did poor students (D'Angelo, 1980). Research by Rodriguez, Flora, Yirchott and Lynne (1983) also showed that by third grade, ESL students were still using more graphic cues in reading than contextual cues. However, English monolingual students used more contextual cues. Coll and Osuna (1989) reported that bilingual students who had strength at the syntactic level performed better than those students with a strength at the lexical level and they were better able to retell a story.

Devine (1984) reported that ESL students who tended towards internalized models of the reading process, such as sound-centeredness, word-centeredness and meaning-centeredness, used different reading strategies, had different beliefs about good reading, about the way they would help a struggling reader and how they would like to improve in their reading.

The use of culturally familiar content with ESL students reportedly affected their reading comprehension and strategies so that these students were better able to integrate such materials (Malik, 1990; Romatoski, 1981). Such materials also affected readers' correction strategies.

Although these studies have yielded significant data about the reading behavior and strategies of ESL students, there seems to be some inconsistencies with regard to the number of miscues per hundred words and level of reading comprehension. The use of culturally familiar texts reportedly improved the ESL students' reading performance. However, more studies are needed to explore ESL students' reading behavior in the reading of informational texts and special subject matter materials used in school content courses.

My study will explore the internalized models of reading behavior by using Malicky and Leroy's scheme (2006) for understanding the reading patterns of the students. In the next section, I will present a literature review on retrospective miscue analysis as a research and revaluing tool for readers.

Retrospective Miscue Analysis

Goodman and Marek (1996) developed retrospective miscue analysis as a strategy that could engage readers with different levels of language ability in revaluing their reading by reflecting upon the reading process through analyzing their oral reading miscues. According to Marek and Goodman (1981), it allows readers to shift from a "text reproduction" model of the reading process to a "meaning construction" model. This shift has at least three immediate benefits for readers:

1. It allows them to gain control of their learning and assume responsibility for their own understanding of a written text. They will no longer be dependent on instructional resources and teachers,

2. It helps readers to increase their knowledge of the reading process and demystify it,

3. Readers gain control over the reading process.

Retrospective miscue analysis is an empowering tool that allows readers to reflect on their reading performance and gain insights into their own strengths. Marek and Goodman (1981) stated, "Self reflection about their reading is an important step to demystifying and demystifying the common sense beliefs about reading that many readers hold. Through these processes, readers and teachers come to appreciate their own strengths, they recognize the knowledge they must have about language and their world, and they revalue themselves as readers" (p. 205). These reflections help readers become more confident in exploring the meanings of what they read. Although it is very important that readers ask their own questions, Goodman and Marek (1996) suggested asking the following questions during the retrospective miscue analysis sessions:

1. Does the miscue make sense?

2. Does the miscue sound like language?

3. (a) Was the miscue corrected? (b) Should it be corrected?
   If the answer to Questions 1 and 3a was "No", then ask:

4. Does the miscue look like what was on the page?

5. Does the miscue sound like what was on the page?

Goodman and Marek (1996) recommended asking the following questions about all miscues:

1. Why do you think you made this miscue?

2. Did that miscue affect your understanding of the text? (p. 45)

It is necessary to use two tape recorders during retrospective miscue analysis. One tape recorder is used to play the participant's initial oral performance. The second one is used to record the participant's reflections on the miscues committed. During the students' reflections, it is very important to engage them in exploratory talk to examine to what extent their miscues are graphophonically correct, syntactically acceptable and semantically meaningful. Retrospective miscue analysis utilizes the exploratory talk and conversation between a teacher or a researcher and a student in a social context to highlight the transactive nature of the reading process. It awakens the readers' sense of meta-cognition during the reading process and thus enables them to revaluing their reading performance, explore their strengths and weaknesses and monitor their own meaning-making acts. An outcome of these processes might be restructuring and changing readers' perception of the reading activity. Researchers must be very flexible in asking questions during RMA sessions so that the readers cannot anticipate the questions beforehand and prepare their responses.

Retrospective miscue analysis, according to Goodman and Flurky (1996), yields the following results:

1. Through retrospective miscue analysis (RMA) readers have the opportunity to discover and document their own views of the reading process as they talk about their own and other people's miscues with the support of a knowledgeable teacher/researcher.

2. Through RMA readers become consciously aware of what they can do as a reader and what they know about language and in this way build confidence in their own reading ability.

3. Through RMA readers have an opportunity to listen to themselves and talk about themselves in the process of becoming more effective and efficient as readers.

4. Through RMA readers begin to evaluate miscues qualitatively rather than

quantitatively and to see many miscues as supportive and necessary to the reading process.

5. Through RMA readers begin to build a transactional view of the reading process and demystify a narrow skills-based view of reading. (p. 104)

The purpose of using retrospective miscue analysis in the study is to tap into students' meta-cognitive potentials and gain an understanding of how they constructed meaning and resolved any comprehension difficulties they might have encountered during the reading process. In the next section, I will discuss retrospective miscue analysis studies.

Retrospective Miscue Analysis Studies

Retrospective miscue analysis has been initially used with monolingual readers as a revaluing tool to change their perceptions of the reading process and of themselves as readers. Moore and Brantingham (2003) used retrospective miscue analysis to study reader response by an eight-year-old third-grade boy who was reading at preprimer level. The boy was of mixed European and Hispanic heritage, and although English was spoken in his home, he also spoke Spanish. He had received special services in reading for three years including attendance at summer schools. He was not confident that he was a good reader and all reading interventions had failed to improve his reading ability. The patterns of his graphophonic, syntactic and semantic miscues, and a double entry journal in response to both miscue sessions and retrospective miscue analysis sessions were used in data analysis.

Findings of the study revealed that the boy's confidence and attitude towards reading had changed. His image of himself as a poor reader prior to the study changed during the course of the study to that of a good reader. The boy's perception of reading changed as well from "sounding out words" to "getting meaning from words". He became more effective in using strategies that worked for him. He felt empowered as a reader and learner, and he developed a sound understanding of his own reading process.

Martens (1998) used retrospective miscue analysis with a third grade student with a learning disability to understand why some children encounter difficulty in reading (English texts) and how they can be supported in becoming more proficient readers.

Michael was a third grader with a learning disability who Martens worked with twice a week. Michael initially viewed reading as an act of remembering words, which limited his ability to focus on meaning. Following the retrospective miscue analysis sessions, Michael listened to his audio-taped oral reading of the selected passages. Listening to his reading and miscues, he confidently explained that some of his miscues such as "over" for "around" and some of his insertions were good miscues and showed that he was thinking about the story. His reflections showed that his perception of reading had changed. No longer did he regard reading as merely recognizing words accurately. Retrospective miscue analysis helped him to understand the importance of meaning in reading and he was able to recognize his own strengths, build on those strengths and use reading strategies more effectively. He took control of his learning and felt responsible as a motivated and empowered reader.

Y. Goodman (1996) discussed two different procedures for retrospective miscue analysis: planned retrospective miscue analysis as an instructional tool and retrospective miscue analysis as an incidental reading instructional strategy. During the first procedure, the researcher asks students questions about their miscues after they listen to their audio-taped oral reading. This procedure is done in a face-to-face or small group setting. In the second procedure, the teacher or students themselves incidentally decide to engage in talk about their miscues and the reading process. In the first procedure, the teacher begins with high quality miscues that show the reader is using strategies to generate meaning. In later sessions, more complicated miscues, which suggest disruption in reading, are reviewed. This procedure is more supportive of students' revaluing themselves when two or more readers participate. The teacher gets involved in discussions in the last stage of revaluing to answer questions or raise issues that had not been covered in students' previous discussions. This procedure is also referred to as the Collaborative Retrospective Miscue Analysis (Costello, 1992).

Retrospective miscue analysis during critical teaching moments occurs when the teacher supports the reader's new perspective, which results in an intuitive learning experience. On the significance of critical moment teaching in students' and teacher's learning experiences, Y. Goodman stated that:

1. Critical moment teaching provides powerful learning experiences for teachers and kids and needs to be legitimized in planning for reading instruction.
2. Critical teaching moments not only document what knowledge students use as they read but also reveal the knowledge and capabilities of teachers.
3. These important moments show what teachers know about the reading process, about language, and about learning. They show what teachers know about their students' reading and how to select materials to meet their students' needs.

Germain (1998) studied the uses and effectiveness of collaborative retrospective miscue analysis (CRMA) with a group of four third and fourth-grade at risk elementary students. Findings of the study showed that the readers' perceptions of themselves as readers improved to varying degrees. The students' reading performance also improved. The students evolved as readers after the CRMA sessions and were able to write in their journals about the reading process, their strengths and weaknesses as readers and their experience in reading. Germain concluded that CRMA sessions provided the students with a safe environment and guiding questions to lead their inquiry into their own reading strengths and weaknesses so that they could set goals for themselves and take on an active role in their reading performance.

Wilson (2005) used retrospective miscue analysis with two seventh-grade struggling readers. The first participant, Matt, was a quite boy who was repeating grade seven. He used ineffective strategies in reading such as sounding out words. The second participant, Devon, did not like talking or reading while his reading was being taped. He perceived himself as a bad reader but was eager to learn. He also used ineffective strategies such as skip it, sound it out, and ask a teacher.

Retrospective miscue analysis sessions helped the readers to shift their self-image and perceive themselves as good readers so that Matt, at the end of retrospective miscue analysis sessions, said he did not know he was a good reader. The findings of Wilson's study showed that building a trustworthy relationship with her students and gaining their confidence was significant in helping them to revalue themselves as readers and shift their perception of reading and being a reader, which was not possible by teaching them reading strategies alone.

Studies with retrospective miscue analysis have shown that the procedure can be used as a revaluing tool, an instructional strategy and an incidental reading instructional strategy (Y. Goodman, 1996). Retrospective miscue analysis increased the self-confidence of a troubled reader, changed his perception of the reading process as 'sounding out words' to 'reading for meaning' and helped the reader to feel empowered and develop a sound understanding of his own reading process (Moore & Brantingham, 2003). Retrospective miscue analysis with one grade-three reader with limited ability to focus on meaning helped him to recognize his own strength in reading and build on them for better use of reading strategies. He also understood the importance of meaning in reading (Martenes, 1998). It also helped two grade-seven struggling readers who perceived themselves as poor readers change their self-image and regard themselves as good readers after they became familiar with the reading process (Wilson, 2005).

Most studies with retrospective miscue analysis were initially conducted with monolingual readers. A few studies with ESL students used retrospective miscue analysis as a tool for understanding and exploring the reading process, readers' perceptions of themselves, exploring readers' strengths and weaknesses and increasing their awareness of the reading strategies.

Y. Goodman and Paulson (2000) explored how retrospective miscue analysis changed readers' views of the reading process and helped them to develop a positive view of themselves as readers. The participants included seven readers with successful retrospective miscue analysis sessions representing several age/grade groups, ethnic groups, and linguistic backgrounds. One student had a Spanish background, two were Spanish-English bilinguals and four had an English background. Y. Goodman and Paulson identified four aspects of the RMA sessions that helped the participants develop a positive view of themselves as readers: procedural, language used, interactional and ownership/control. Exploring what language the readers used to talk about the reading process and strategies, they identified two subcategories that included the reading process and metacognition. Findings of the study showed, "a common thread through all of the readers' RMA sessions" which is "their movement toward central roles in the dialogue, toward equanimity and parity with the teacher/researcher's contributions to the discussion (p.12)."

Almazroui (2007) in her study of Salem, a nine-year old third-grade ESL student with an Arabic background in a U.S. public school also reported that RMA developed the reader's understanding of his miscues, and helped him to become a better reader by applying reading strategies that he acquired during RMA discussions. Her findings also suggested that the student became more dependent on his own resources and took responsibility for his own learning.

Studies with retrospective miscue analysis have shown that it can help readers to discover their own views about the reading process and of themselves as readers through self-reflection and through becoming more aware of what they do while reading (Goodman & Flurky, 1996). A newer form of retrospective miscue analysis referred to as collaborative retrospective miscue analysis provides a safe environment for guiding questions so that readers can revalue their perceptions about the reading process and themselves as readers through inquiry and reflection (Germain, 1998).

Chapter Summary

Chapter two presented the background in the literature and discussed a sociopsycholinguistic model of reading development. It discussed the principles of the whole the language approach, the nature of reading, models of reading and Goodman's model of reading, which was selected as the theoretical framework for reading development in ESL students in this study. Goodman's discussion of the language cueing systems and the role of the text, learner and teacher in whole language approach was analyzed.

This chapter also presented Goodman's miscue analysis as a tool for understanding and exploring the reading process and it presented studies with monolingual, bilingual and ESL students that were conducted according to his model of reading. This chapter concluded with a discussion of retrospective miscue analysis and studies that were conducted with both monolingual/bilingual and ESL students.

In the next chapter, I will present the research methods used for the study. I will describe the data collection, the procedures for data collection, coding and categorizing of the data, and the methods of data analysis.

CHAPTER THREE
RESEARCH METHODS

In this chapter, I will present the design of the study, methods of data collection, the procedure for data collection, coding and categorizing of the data, methods of data analysis, selection of the participants, researcher background and ethical considerations.

The Design of the Study

This qualitative study was conducted with one grade seven, and one grade eight ESL student enrolled in three different schools in Alberta. The research was designed as an exploratory study with multi-methods of data collection. The exploratory design permitted the study to be conducted with a relatively small sample, and the multi-method approach for data collection provided converging evidence for the findings.

Descriptions in my research study include the students' perceptions of their reading process and of themselves as readers. Descriptions also include the students' discussions of their miscues during the retrospective miscue analysis and their interactions with the texts. Descriptions of the participants' reading processes were made possible by analyzing the participants' miscue profiles, their elaborations during retrospective miscue analysis sessions, and the interview data. This research study does not aim to make causal explanations.

Methods of Data Collection

I used miscue analysis, retrospective miscue analysis, and interviews: semi-structured interviews and the Burke Modified Reading Interview to investigate the oral reading performance of the participants in the study and collect the necessary data about their perceptions. In this section, I will briefly discuss each data collection method and its relevance to this research.

Miscue Analysis Procedure

I used Procedure I of the Reading Miscue Inventory (Goodman, Watson & Burke, 1987) to analyze the students' reading miscues. Procedure I examines the readers' miscues separately with regard to their knowledge of the world and of the language in relation to the context of the miscue. Procedure I also examines readers' use and control of the language cuing systems as well as their reading strategies. It is very similar to the original Reading Miscue Inventory (Goodman & Burke, 1972) and was selected because of its potential for in-depth investigation of the readers' miscues. However, I used Procedure I with selected Graded Reading Passages from Steiglitz's Informal Reading Inventory (Steiglitz, 2002), which will be explained in more detail later in this chapter.

To profile the participants' miscues, I used Steiglitz's Graded Words in Context Tests and Steiglitz's Graded Reading Passages Tests (narrative and expository). I chose these passages for a variety of reasons. They were short and were suitable for ESL students who easily get tired reading long passages. They resembled subject matter texts that they usually read in school and included a variety of topics that they study in social studies and other school related content courses. The passages were graded on the basis of a publisher's determination of appropriate grade level, and were accompanied by comprehension questions that the publisher had tested on children as part of their test development.

I did not give the participants culturally familiar topics to read because it was unlikely that they would read such passages in school, especially in junior high. The curriculum at this level tends to focus on reading subject content matter, although students may read fiction and folktales in their own leisure time or they might read about their culture, language and country at home for entertainment purposes. Additionally, it seemed to me more likely that in Canadian schools, they might read texts with which they have little in common. Such texts if administered during data collection, I believed would better unmask the reading process of the ESL students. Although the students' choice in the selection of the reading materials was limited, they could express their level of interest on

each passage and thus it could give me a measure of how they process texts for which they have low or high interest. Having a choice of text usually promotes interest, as students usually choose materials they are most interested in. However, in selecting the materials, it is also important to understand the purpose for reading specific materials. I believed the students' reading process could be better explored if the materials they read for miscue analysis represented a fair sample of the materials they read for their content courses in school.

To begin the testing, I used the Steiglitz Graded Words in Context Test (SGWCT): Form B (Steiglitz, 2002) to find an entry level into the reading passages. The Graded Words in Context Test has two forms and covers preprimary level to grade eight. The preprimary and primer forms contain 10 sentences each. The grade-one through grade-eight levels contains 20 sentences each. Test results indicate a rough estimate of grade level reading ability of the students. I followed Steiglitz (2002) for the interpretation and analysis of the results of the Graded Words in Context Test:

1. At the independent level, the reader must be able to correctly recognize words in the passages 99 % of the time or better.

2. At the instructional level, the reader must be able to correctly recognize words 95 % of the time or better.

3. At the frustration level, the reader's correct recognition of words in the passages is below 90 %.

After the participants' grade level of reading ability was determined, the students were asked to individually read one grade level narrative and one grade level expository passage from Steiglitz's Graded Reading Passages Test (SGRPT): Form A (Steiglitz, 2002). Using SGRPT allows a researcher to compare how a reader interacts with different types of prose at the same level. The procedure for the interpretation and analysis of readers' miscues used in this study is the one suggested by Harris and Sipay (1990) and adapted by Steiglitz (2002) in her Informal Reading Inventory. She defines "errors" as follows:

1. Count as one error: (a) each response that deviates from the printed text and disrupts the intended meaning; (b) each word pronounced for the child after a 5 second hesitation.

2. Count as one-half error: each response that deviates from the printed text but does not disrupt the intended meaning.

3. Count as a total of one error, regardless of the number of times the behavior occurs: (a) repeated substitutions such as "a" for "the"; (b) repetitions; (c) repeated errors on the same word, regardless of the error made.

4. Do not count as an error: (a) responses that conform to cultural, regional, or social dialects; (b) self-corrections made within 5 seconds; (c) hesitations; (d) ignoring or misinterpreting punctuation marks (Harris & Sipay, 1990, pp 227-228; Steiglitz, 2002, p.7).

Steiglitz (2002) identified three categories of readers. At the independent level, readers are able to answer the comprehension questions or give complete retellings with 90% accuracy or better. These readers are fluent, expressive and rhythmical with few deviations from print. At the instructional level, readers are able to answer the comprehension questions or give complete retellings with 75% accuracy or better. Reading at this level is fluent, expressive and rhythmical with few deviations from print. Miscues made do not affect meaning and deviations from print are usually self-corrected. At the frustration level, readers cannot benefit from the reading material because it is too difficult for them. Comprehension is below 50%. Reading performance is laborious and non-fluent. It contains deviations from print that affect meaning.

As the students participating in this study read each passage individually, their miscues were recorded and then analyzed using procedure I of Reading Miscue Inventory (Goodman, Watson & Burke, 1987).

Retrospective Miscue Analysis

A retrospective miscue analysis session with each individual participant followed the miscue inventory in order to collect information on how the participants thought about each miscue and what strategies they used to resolve any difficulty in reading. Goodman and Marek (1996) developed retrospective miscue analysis as a strategy that could engage readers with different levels of language ability in revaluing their reading by reflecting upon the reading process through analyzing their oral reading miscues. Goodman and

Marek (1996) claimed that retrospective miscue analysis could help readers to shift from a "skill-based text-reproduction model of the reading process" (p. x) to one that is more transactional and meaning-oriented. Students achieve this goal by listening to their own miscues and thinking and reflecting on the process of making meaning from text as they are reading the passage.

It is necessary to use two tape recorders during retrospective miscue analysis. One tape recorder is used to play the participant's initial oral performance. The second one is used to record the participant's reflections on the miscues committed. During the students' reflections, it is very important to engage them in exploratory talk to examine to what extent their miscues are graphophonically correct, syntactically acceptable and semantically meaningful.

Researchers must be very flexible in asking questions during RMA sessions so that the readers cannot anticipate the questions beforehand and prepare their responses. The purpose of using retrospective miscue analysis in the study was to tap into students' meta-cognition and gain an understanding of how they constructed meaning and resolved any comprehension difficulties they might have encountered during the reading process.

Interviewing the Participants

I started with semi-structured interviews with each participant to collect background information about the participants' L1 literacy skills, their learning to read in English, their schooling background in their home countries and their learning preferences. I used the Burke Modified Reading Interview (Burke, 1987) to get information about the participants' perceptions about the reading process and about themselves as readers.

The interviews were conducted at the University of Alberta as well as in the participants' homes. Each participant was interviewed three times. The first and second interview focused on the students' academic and schooling background. The third interview included the Burke Modified Reading Interview. All the interviews were tape recorded and transcribed for use in the final data analysis.

Interview Procedure

I met the participants individually to talk with them about the study, get to know them and express my thanks to them for taking part in the project. To establish rapport with the students, I chatted with them about their literacy experiences in their home country as well as in Canada. My main purpose was to get to know them better, create a friendly atmosphere for data collecting activities and avoid off-the-cuff answers from the students. Establishing rapport helps the researcher to learn more about the participants, their stories and discourses. Merriam (1998) says:

> A good communicator empathizes with respondents, establishes rapport, asks questions and listens intently... hearing what is not explicitly stated but only implied, as well as noting that silences, whether in interviews, observations or documents, are an important component of being a good listener. (p. 23)

Misheler (1986) stated that interviews may consist of many narratives, and narratives provide a researcher one of the best ways to hear the stories of ESL students and understand what processes or difficulties they undergo as they attempt to learn from texts. Interviews provide participants "a chance to say things for which there had not been an appropriate audience" (p. 897). Merriam (1998) proposes asking for neutral descriptive information at the beginning of the interviews to pave the way for the questions that concern the interviewee's perceptions, opinions, and values. All of the interviews in this study were conducted in English. The final transcripts were used for the purpose of data analysis and answering the research questions.

The Procedure for Data Collection

The data collection procedure was completed in three stages and included the following:

1. Reading the passages
2. Conducting the retrospective miscue analysis
3. Conducting the oral interviews

Reading the Passages

Steiglitz's Graded Words in Context Test (Steiglitz, 2002) was used to identify the participants' reading grade level. Each participant individually read the test passages starting two grade levels below their current grade level at school until they reached an independent performance level on the test, as described earlier in this chapter.

The participants read different grade level narrative and expository passages. Sara only read two passages, both at a grade one level. Ali read from grade one to grade three, and Boshra read from grade one to grade four.

Collecting the miscues

As the participants individually read each passage, their miscues were written down on the researcher's sheet. When the oral reading was transcribed, I recorded the children's pronunciation as I heard it and represented what I heard in standard spelling. The miscues marked down for analysis included the participants' substitutions, insertions, corrections, partials (word parts) and omissions. The children's oral language was generally fluent and their accent did not affect the miscues.

Free Retelling

Following the participants' reading of each passage, they were asked to retell the passage in their own words. All retellings were tape recorded and, if necessary, the participants were probed and asked more questions to ensure they understood certain aspects of the piece. The retelling was done according to Procedure I. However, I used the comprehension questions following each passage for probed recall to explore how the participants were generating inferences and relating their knowledge of the world to their readings. These questions were coded according to the categories developed by Steiglitz (2002). Correct responses were assessed according to the instructions in the Steiglitz Informal Reading Inventory. The categories of the data are outlined as follows:

1. Literal: The question asks for explicit information that is stated in the passage.

2. Interpretive: The question asks for information that is implied by the passage but the reader has to read between the lines and paragraphs to understand it. The reader needs to integrate his or her background knowledge with text information to answer this question.

3. Critical: The question asks for information that does not exist in the passage and the reader has to rely on his/her own resources to produce the appropriate response.

Readers' Background knowledge and Interest level

The Steiglitz Informal Reading Inventory (Steiglitz, 2002) uses a 5-point Likert scale and a yes/no question to assess the readers' background knowledge and interest level about the topics. In the narrative passages, the readers' background knowledge is assessed by a yes/no question. Their interest level is measured by a 5-point Likert scale. For the expository passages, a 5-point Likert scale is used for assessing both the participants' background knowledge and level of interest about the passage they read.

Conducting the Retrospective Miscue Analysis

A retrospective miscue analysis session followed the participants' oral reading performance. The time required for each session varied for each participant from one to two hours. Before I started each session, I explained to the participant about Goodman's (1967) model of the reading process. I introduced the participants to dual texts in reading and explained that when readers are engaged in reading, they construct their texts or in simpler terms they are writing their own text in their minds. It is actually the second text that they are reading, not the printed words on the paper.

I also introduced the term miscue to each participant and then explained how it differed from a mistake. I explained to the participants that not all miscues are of the same value. Some are more important than others and are called high quality miscues. A high quality miscue or a good miscue in simpler terms does not change the meaning of the sentence or the story whereas a bad miscue always causes a change in meaning.

Goodman and Marek (1996) suggest that five to ten miscues be selected for discussion with readers. They recommend that retrospective miscue analysis start with high quality miscues in particular when the readers have a low self esteem so that they gain a better understanding of the reading process and their attention is shifted to their strengths. Goodman and Marek (1996) recommend that in selecting miscues with readers, the characteristics of the reader must be taken into account. During the procedure, each of the participants individually listened to their miscues, looked at the text and then reflected on what happened in their mind while they were reading that sentence. I engaged the participants in exploratory talk and asked them questions as they were reflecting on their miscues. The participants' reflections were recorded and analyzed according to Goodman and Marek's (1996) procedure.

Conducting the Oral Interviews

The oral interviews served two purposes: (1) to collect background information about the ESL students, and (2) to explore the ESL students' perceptions of the reading process and of themselves as readers. The ESL students' background was explored by asking semi-structured questions about the amount of schooling in their home countries, their literacy skills in their first language, and their literacy practices and learning preferences at home and in school. I used the Burke Modified Reading Interviews (Watson & Chippendale, 1979) to explore the ESL students' beliefs and perceptions of the reading process and of themselves as readers.

Methods of Data Analysis

In order to study the reading behaviors of the students, I conducted a qualitative analysis of the data. The research data included the audio-recordings of students' oral reading performances and transcripts of them, their audio-verbal reports and transcripts, researcher created student profiles of their oral miscues and retrospective miscue analysis while reading narrative and expository passages from the Stieglitz Informal Reading Inventory (Steiglitz, 2002), and transcripts of the student interviews.

Participants' Miscue and Retrospective Miscue Analysis

The participants' oral miscues, while reading selected narrative and expository texts, were profiled. The purpose of creating the students' profiles was to develop a profile of students' strengths and weaknesses, and to identify the different types of miscues they encountered in reading narrative and expository texts. Participants' retellings were also scored according to the guidelines in Procedure I (Goodman, Watson & Burke, 1987). The narrative passages were divided into 40 points for character analysis and 60 points for events. Character analysis included (a) recall of the characters and (b) information about each character. The events were divided into major and minor events with appropriate points allocated for each type of event.

For expository passages, the breakdown of points included 40 points for specific points, 30 points for general ideas and 30 points for major concepts. Upon reading all the narrative and expository passages by individual participants and completion of their retellings, a retrospective miscue analysis followed to determine how the students generated meaning from the texts and what types of strategies they used to resolve their difficulties.

Coding and Categorizing of the Data

All the readers' miscues were marked on the typescript following their oral reading of the passages and the retellings were completed. All the miscues were numbered according to Procedure I. A letter preceding each number represented the title of the story read. Miscues selected for transfer to the coding sheets included: substitutions (including reversals), omissions (including uncorrected partial omissions), insertions, repetitions, regressions, corrections and intonation shifts that caused changes to the syntax (Goodman, Watson & Burke, 1987). Miscues that were not selected for coding included: corrected partials if any, substitution of alternative sound variations involving phonological dialect, misarticulations and split syllables, and new miscues made during a correction attempt. All miscues selected for coding were numbered beginning with 0101 preceded by the first

letter in the title of the story. Six questions were asked during the miscue analysis as follows:

Question 1: Syntactic acceptability

Does the miscue occur in a structure that is syntactically acceptable in the readers' dialect?

Y (Yes) - The miscue occurs in a structure that is completely syntactically acceptable within the sentence and within the text.

N (No) - The miscue occurs in a sentence that is not syntactically acceptable.

P (Partial) - The miscue occurs in a structure that either is syntactically acceptable with the first part of the sentence or is syntactically acceptable with the last part of the sentence. Or, the miscue is syntactically acceptable within the sentence, but not within the complete text.

Question 2: Semantic acceptability

Does the miscue occur in a structure that is semantically acceptable in the readers' dialect? Semantic acceptability cannot be coded higher than syntactic acceptability.

Y (Yes) - The miscue occurs in a structure that is completely semantically acceptable within the sentence and within the text.

N (No) - The miscue occurs in a sentence that is not semantically acceptable.

P (Partial) - The miscue occurs in a structure that either is semantically acceptable with the first part of the sentence or is semantically acceptable with the last part of the sentence. Or, the miscue is semantically acceptable within the sentence, but not within the complete text.

Question 3: Meaning change

Does the miscue result in a change of meaning? This question is asked only if the miscues are both syntactically and semantically acceptable.

Y (Yes) - There is inconsistency, loss, or meaning change of a major idea, incident, major character, fact, sequence, or script.

N (No) - Within the context of the entire passage, no change in meaning is involved.

P (Partial) - There is inconsistency, loss, or meaning change of a minor idea, incident, character, fact, sequence or concept.

Question 4: Correction

Is the miscue corrected?

Y (Yes) - the miscue is corrected.

N (No) -There is no attempt to correct the miscues.

P (Partial) - There is either an unsuccessful attempt to correct, or the excepted response is read and then abandoned.

Question 5: Graphic similarity

How much does the miscue look like the text?

H (High) - A high degree of graphic similarity exists between the miscue and the text. The miscue has at least two graphic parts similar to the parts in the target word (more than 50% similarity).

N (No) - No degree of graphic similarity exists between the miscue and the text.

S (Some) - Some degree of graphic similarity exists between the miscue and the text. The miscue has at least one graphic part similar to a part in the target word in the text (less than 50% similarity).

Question 6: Sound similarity

How much does the miscue sound like the expected response?

H (High) - A high degree of sound similarity exists between the miscue and the text. The miscue has at least two phonemic parts similar to the parts in the target word (more than 50% similarity).

N (No) - No degree of sound similarity exists between the miscue and the text.

S (Some) - Some degree of sound similarity exists between the miscue and the text. The miscue has at least one phonemic part similar to a part in the target word in the text (less than 50%).

For the retrospective miscue analysis, I started with the participants' high quality miscues first and then proceeded with miscues with high graphic similarity, low graphic similarity and no graphic similarity to the expected responses. I started with high quality miscues because such miscues in reading the passages reflected their lexical strength for the level they were reading so that they could gain self-confidence and self-esteem as efficient readers. During the RMA activity, I tried to diversify my questions about the miscues so that the participants could not predict what I was going to ask them and so I prevented them from giving me premeditated responses.

Final analysis of students' profiles was made possible by adapting Malicky and Leroy's (2006) conceptual scheme for understanding students' reading patterns. Malicky and Leroy's (2006) conceptual scheme frames the students within five possible categories of readers that will be discussed in detail in the next section. These categories are:

1. Integrated reader,
2. Print-based reader,
3. Knowledge-based reader,
4. Poorly integrating reader, and
5. Emergent reader.

The data from the students' miscue analysis and retrospective miscue analysis were used in conjunction with the data collected from the interviews to facilitate answering the research questions.

A Conceptual Scheme for Understanding Students' Reading Patterns
(adapted from Malicky and Leroy, 2006)

The data gathered from administering the SGRPT (Steglitz, 2002) can be interpreted and coded according to the five conceptualizations of readers found in Malicky and Leroy's conceptual framework (2006) for understanding students' reading patterns. Malicky and Leroy developed their scheme not as a diagnostic instrument but as a means of understanding and developing curriculum materials for students' literacy activities. However, I only used the components devised for understanding the students' reading patterns and excluded the sections on the students' writing.

Integrated Readers
Integrated readers are able to effectively integrate print-based information and their background knowledge to understand unfamiliar words and sentences. Integrated readers demonstrate the following characteristics:

1. Their instructional levels of word identification and comprehension will show no more than one instructional reading level difference.

2. There will be less than a 20-percentage point difference between miscues with high graphic similarity (minimum 50% similarity in letters between text word and miscue) and high meaningfulness.

3. They self-correct 20% to 35 % of their miscues.

4. They correctly respond to 70% or more of the comprehension questions (literal, interpretive, critical/creative).

5. Their reading rate is in the normal/average range.

Print-Based Readers

Print-based readers focus too much on print as a source of information when encountering an unfamiliar word or text and do not make sufficient use of background knowledge as a source of information with which to recognize these words or text, or do not do so effectively. A print-based reader has the following characteristics:

1. Instructional levels obtained are higher by at least one instructional reading level for word recognition than for comprehension.

2. There will be at least a 20-point difference between scores for the graphic similarity of miscues to text word, and meaningfulness of miscues, with graphic similarity scores being higher.

3. The child will correct few meaningful miscues.

4. The child's responses to questions demanding literal information will be more successful than responses to questions that require interpretive and creative strategies.

Knowledge-Based Readers

A knowledge-based reader heavily relies on background knowledge as a source of information when trying to construct meaning with text and does not take advantage of other sources of knowledge available. The knowledge-based reader has the following characteristics:

1. Scores on comprehension are at least two instructional levels higher than scores on word identification.

2. A higher proportion of miscues are meaningful than are graphically similar. The difference should be of the magnitude of approximately 20 points.
3. Several non-meaningful miscues are corrected.
4. The child's performance is stronger on vocabulary and inference than on response to factual questions.

Poorly Integrating Readers

Less-integrated readers make some use of both print and background knowledge as sources of information in understanding unfamiliar words and sentences. However they experience difficulty using these sources together and/or successfully. A less-integrated reader has the following characteristics:

1. The child's instructional reading levels on word identification and on comprehension tests are similar and both sets of scores are below the child's current grade placement.
2. The child's reading rate is low (less than 200 words per minute).
3. The child's response to inferential questions is less accurate than to questions that ask for literal or creative responses.
4. The child self-corrects too little (0-20%) or too much (35% or higher).

Emergent Readers

Emergent readers are unable to make effective use of print or background knowledge based sources of information and strategies to identify unfamiliar words.

The emergent reader has the following characteristics:

1. Scores on word identification and comprehension are at the frustration level.
2. Most miscues have low graphic similarity and are not meaningful.
3. Few, if any, questions are answered correctly.

Analysis of Participants' Interviews

The first issue in the process of data analysis of students' interviews was learning about the ESL students' literacy background, which was obtained from semi-structured

individual interviews. The background information related to the ESL students' years of schooling in Canada and in their home countries, their literacy skills in their first language, and learning practices and reading preferences at home and in school. Data about the ESL students' beliefs and perceptions about the reading process and about themselves as readers was obtained through the Burke Modified Reading Interview (Watson & Chippendale, 1976), which was administered at the beginning of the study to obtain data about the students' beliefs and perceptions about the reading process and about themselves as readers. All the interview data were analyzed with regard to the research questions with an emphasis on the students' strengths, and their perspectives on the reading process and of themselves as readers.

Selection of the Participants

Six ESL students originally volunteered to participate in the study. Using a snowball process, the participants were recruited from grades five, six, seven, eight, and nine to represent a wide range of ESL learners. Three students dropped out of the study due to personal reasons: one student was from grade five, and the second was from grade nine. This study was therefore completed with the remaining three participants. Permission was obtained from the participants to have their oral reading performance audio-taped. Before the start of each session of data collection, the participants were reminded of their right to withdraw from the study without any consequences at any time they wished to do so. The participants were selected according to the following criteria:

1. I thought I could learn the most from them, anticipating for diversity in terms of class, gender, general ability, ethnicity etc.
2. The participants could easily express their thoughts in English and were fluent in speaking in English.
3. The participants were registered in a public school.
4. The students and their parents volunteered and consented to their participation.

Descriptions of the Texts

Goodman and Marek (1996) suggested the materials for miscue analysis must be unfamiliar to the readers. The materials must be challenging so that the readers produce a sufficient number of miscues for analysis. However, if the materials are too difficult, miscue analysis procedure might result in overrepresentation of miscues and misleading results. The reading materials must be challenging and novel for the readers and preferably at their instructional level.

In choosing the appropriate reading materials for the reading miscue analysis, Goodman and Marek (1996) stated:

> An entire cohesive printed text (story, article, chapter and so on) that is interesting and well written is selected. The length of the text may vary considerably, depending upon the age and proficiency of the reader, but if possible, passages should be at least 500 words long.

Since the quality of miscues readers make changes after they progress into the story (Menosky, 1971), it is suggested that the first hundred words of the reading materials not be coded for miscues to allow the reader to activate background knowledge and begin to use reading strategies more effectively. However when it comes to ESL students, text selection may not be as simple as stated here. Especially for elementary students, selecting stories of 500 or more words may be troublesome as it turned out to be in this study. None of the participants could finish one single story. Stories of 500 words or more were too long for them and before they could get a sense of the main ideas, they tired and lost interest.

The participants individually read narrative and expository passages from the Steiglitz Informal Reading Inventory (Steiglitz, 2002) and as each person was reading the text, his/her oral reading performance was audio-taped. The audio-taped readings were then replayed and listened to during the retrospective miscue analysis for exploring the participants' strategy use and knowledge of the language systems and of the world. The following is a list of passages that each participant read. The numbers in parentheses show the grade level of the reading passage.

Ali read the following narrative and expository passages:

- The narrative passages were (a) The Boy and the Fox (2), (b) The Crow and the Pitcher (3), (c) The Lesson (2), (d) The Blind Woman (3)
- The expository passages were: (a) Hide and Seek (2), (b) Hangnails (3), (c) Our Best Friends (2), (d) Ant Lion (3).
  Sara read the following narrative and expository passages:
- The narrative passages were (a) A Day by the Lake (1), (b) A Snowy Day (1), (c)The Boy and the Fox (2), (d)The Lesson (2)
- The expository passages were (a) Clouds in the sky (1) and (b) Light (1).
  Boshra read the following narrative and expository passages:
- The narrative passages were (a) A Snowy Day (1), (b) The Boy and the Fox (2), (c) The Crow and the Pitcher (3), (d) The Two Farmers (4)
- The expository passages were (a) Light (1), (b) Our Best Friends (2), (c) The Ant Lion (3), and (d) Hangnails (3).

Two passages that both Ali and Boshra read had universal themes and were common folk tales in Middle East and African countries. I still remember my father telling me those stories and asking me and my other brothers to take a lesson from them. The first grade-two level narrative was called *The Boy and the Fox* and told the story of a boy who saw a fox sleeping on top of a rock. The boy started thinking about how he could kill the fox and sell her skin, and use the money to buy and plant bean seeds. Then, he would sell the beans and use the money to buy the field across the way. He thought that he would plant bean seeds in his own field. The bean seeds would grow and people who passed by would see the beans and say, "Oh, what nice beans this boy has'. The boy was thinking that if the people said this, he would shout to them loudly, "keep away from my beans". The boy shouted so loudly that the fox woke up and ran away and the boy was left with nothing.

The children later said they liked the story and were familiar with it. The moral in the story (in comprehension question six) was "Don't count your chickens before they hatch". The story is followed by four literal questions and one interpretive question that can provide extra information on both the comprehending process and comprehension of the students.

The second passage that had a similar theme and which I was familiar with since my childhood was called *The Lesson,* a grade two level narrative. The story was about a father and his children who were always fighting with each other. The father wanted them to stop fighting, so he asked them to do something and take a lesson from it. He asked them to bring to him a big bunch of sticks. They brought the sticks and he called them one by one and gave them the bunch of sticks to break. No one could do that. Then, he gave each boy one stick at a time and the boys easily broke their sticks. The father then asked them to learn a lesson from that experience and said, 'only together are they not able to be broken". The moral behind this story (in comprehension question six) was to understand that people are stronger if they are united.

Other passages that Ali and Boshra read were *Hide and Seek,* an expository passage at grade two level, and *Our Best Friends,* a narrative passage at grade-three level. These passages, though by their titles appear to contain familiar content for the children, actually tell the story of how the game of Hide and Seek developed, and how domestic animals such as cats and dogs came to be friends with human beings. Hence, they were providing the participants with new information.

Ali also read two other passages: one grade three narrative called *The Crow and the Pitcher* and one grade three narrative called *The Blind Woman.* Both *The crow and the Pitcher* and *The Blind Woman* had a universal theme and presented new knowledge which was not culture specific. Other passages that Ali read included a grade three expository piece called *Hangnail* and a grade three narrative called *The Ant Lion.* Both of these passages represented typical content reading materials commonly used in schools.

Sara read two grade-one narratives: *Snowy Day* and *A Day by the Lake* and two expository passages: *Clouds in the sky* and *Light* for the reading miscue analysis. All the passages used themes representing typical school content reading materials and were not culture specific. The narrative passages were descriptive and included tales, humor and mysteries. The expository passages included topics about science, social studies and consumer education.

Although the passages used for data collection with these participants were not specifically related to their culture, the passages were all followed by a question that asked the participants about their background knowledge and familiarity with the topic. Their

level of interest was also assessed by a question which determined if they had a high interest or a low interest in the passage after they read it.

Researcher Background

As an ESL student and later a teacher, I have to a large degree acquired my own assumptions and judgments on how a second language is learned and what challenges a second language learner may face in learning from English texts. I have also gained valuable knowledge and experience during my graduate studies at the University of Alberta that have had tremendous effect on my pedagogy. It is very important for researchers to think about their own assumptions before starting a study, acknowledging their own background and being sensitive to the biases inherent in qualitative research. LeCompte and Preissle (1993) pointed out, "Qualitative research is distinguished partly by its admission of the subjective perception and biases of both participants and researcher into the research frame" (p. 92). The justification for acknowledging bias might be in the philosophical assumptions that there are multiple realities and the researcher's constructions of meaning and interpretations are suggestive of only one perspective. The subjective aspect of qualitative research might produce sensitivity as to how researcher assumptions and biases could affect the final results.

As a researcher I made deliberations on my beliefs and prejudices before any data collection procedure to avoid my background affecting the process of data collection. I kept thinking about the nature of the data collected and how it would affect the findings of the study. I checked and rechecked that I did not pick certain pieces of data and exclude the pieces that did not conform to my pedagogy. Furthermore, I transcribed the interviews on a daily basis and further confirmed my understanding with participants in follow-up interview sessions. The progressive analysis of data allowed me to constantly review and advance my own ideas and thus gain an in-depth understanding as an external observer.

Ethical Considerations

The study was conducted in accordance with the regulations and guidelines on conducting research with human subjects at the University of Alberta. The students' parents signed and returned a consent form to me with the option of withdrawing their children from the study if they wish to do so at any time and without any penalty. The participants also agreed to participate voluntarily in the study. The participants' identities were kept strictly confidential and pseudonyms were used in all notes and records. The database for the study includes all the recorded interview tapes and the transcripts of them, the participants' miscue profiles, their reflections during the RMA and the transcripts of those reflections, their audio-taped verbal reports and the transcripts of them. The participants' viewpoints were kept strictly confidential and were not shared with their parents or their teachers.

Chapter Summary

Chapter three presented the design of the study as a qualitative case study. It discussed in detail the methods of data collection, which included miscue analysis procedures, retrospective miscue analysis, and interview procedures. I also described the procedure for data collection, which included conducting the retrospective miscue analysis, conducting the Burke Reading Reflection Interview and finally the semi-structured oral interviews. Coding and categorizing of data according to Procedure I, categorizing the comprehension questions, and readers' background knowledge and interest level according to guidelines from Steiglitz Informal Reading Inventory as well as the retrospective miscue analysis data and interview data were also described.

I presented the methods of data analysis for each source of data collection and in detail described how I planned to use part of Malicky and Leroy's (2006) scheme for understanding the reading patterns of students. This chapter concludes with criteria for the selection of participants, descriptions of the passages students read, the researcher's background and some ethical considerations for conducting this study. In the next chapter, I will present the findings of the study.

CHAPTER FOUR
FINDINGS OF THE STUDY

This chapter presents the analysis of data and the findings of the study. The findings are presented in the same order in which data was collected from each student. The children's backgrounds are reported first. Then the data is presented for each child in this order: Beliefs and perceptions, analysis of miscues for cueing systems and strategies, retellings and the findings from retrospective miscue analysis. The findings for narrative passages and expository passages are presented separately for each child. The research questions guiding this study were:

I. What are the ESL students' beliefs and perceptions of the reading process and of themselves as readers?

    1. What are the ESL students' beliefs and perceptions about good reading?

    2. How do the ESL students perceive themselves as readers?

II. What knowledge and strategies do the ESL students use in reading selected narrative and expository passages independently in English?

    1. What knowledge of the language cueing systems do the ESL students use when reading selected narrative and expository passages independently in English?

    2. What strategies do the ESL students use when reading selected narrative and expository passages independently in English?

Data were collected from three ESL students registered in grades five, seven and eight in three different schools in Alberta. Two of the students were girls from the Sudan and one was a boy from Iraq. All of the students spoke Arabic as their mother language at home. Background information was obtained from these students in an interview at the beginning of the data collection procedure. It included personal information, grade level, first language literacy, the amount of schooling in their first language and the amount of English instruction they received in their home country.

The Burke Modified Reading Interview (Watson & Chippendale, 1979) was conducted at the beginning of the study to explore the students' beliefs and perceptions about the reading process and about themselves as readers. Then, the students independently read selected narrative and expository passages from Steiglitz Informal

Reading Inventory (Steiglitz, 2002). Procedure I of the Reading Miscue Analysis (Goodman, Watson & Burke, 1972) was used to create a miscue profile for each student. The students freely told about each passage after they read it. They also answered three types of literal, interpretive and critical questions following each passage. The answers to the literal questions could be found in the passage. The answers to the interpretive questions required making inferences from the passages. The answers to the critical questions required using logic and knowledge of the world.

A retrospective miscue analysis strategy was used to triangulate data obtained through miscue analysis and oral interviews. The data obtained from miscue analysis and retrospective miscue analysis helped explore the students' reading patterns using part of Malicky and Leroy's scheme for understanding the students' oral performance. In the next section, the findings about Ali are presented.

Ali

Background Information

Ali was the child of an acquaintance of mine. My wife knew his brother and parents who attended adult ESL classes with her. All the information regarding Ali and his background came from Ali. The questions regarding his learning to read, learning in general, and reading preferences were taken from the Burke Modified Reading Interview. At the time of data collection during the spring of 2007, Ali was 14 years and 7 months old and was registered as a seventh grader in a multi-grade ESL newcomers' class in a school in Alberta. All the data collection sessions with Ali were completed between March of 2007 and August 2008 at either my university office or Ali's home.

Ali's family, originally from Iraq, immigrated to Canada from Lebanon in 2003. Prior to going to Lebanon, they had resided for several years in Syria where Ali was born. He spoke both English and Arabic, however, he could not read and write in his mother tongue, Arabic, due to receiving little schooling in this language. His parents were adult ESL students enrolled in a provincially funded ESL program in a college in Alberta. Ali told me he finished grades two, three, and four in Lebanon. After his family was admitted to Canada, they settled in Saskatchewan. He completed grades three and four in

Saskatchewan and then his family moved to the Edmonton area where he was placed in grade four again. He repeated grade four and completed grade five in his new school. He attended regular mainstream classes in grades four and five. When they moved to a new neighborhood and a new school, Ali was placed in grade five again. Ali did not like the idea of being in the ESL program and thought he was not benefiting from it because most of the students in his class were not as good as he was in English. He described his frustration with his ESL class in this way:

> Now we are in newcomers' class. We do math and phonics. I don't like math, and phonics is boring for me. It is like ESL stuff. Some pictures and we write the names down. We read a story and write the different answers down. At times we draw pictures and write down the letters. Or we color some pictures with crayons. I think this stuff is good for those kids who just got here like a couple of months ago, not for me. We also get books from the library and we read at home and then we have to explain the story in class and say what happened in the beginning, the middle or the end. Sometimes, we have to go up front and read the whole book to the class and the students give marks to you. The teacher also looks at our books to see they are not too difficult for us. If we pick a difficult book, she asks us to change it.

Beliefs and Perceptions About Reading

The students' beliefs and perceptions about good reading as well as about themselves as readers and their knowledge of reading strategies were explored using the individual oral interviews plus the Burke Modified Reading Interview (Watson & Chippendale, 1979). The Burke Modified Reading Interview is a 14-item questionnaire that asks students about the reading process, their perception of themselves as a reader and their reading strategies.

Ali defined reading in terms of sounding out words. He said, "Reading is about words, saying the words." His perception of a good reader was a person who has good pronunciation and knows a lot of words. He wanted to be able to speak English like a native speaker of English and believed that being Canadian meant being able to speak

English with a native-like accent. To him, his friend Jasem was a good reader because he could read very fast and maintain a good accent and pronunciation. He said that his friend would never come to a word he couldn't read because he knows a lot of words. He said that if Jasem came to a word he didn't know, he would figure it out very quickly.

Ali's perspective of reading was typically a bottom-up perspective. In this type of reading, readers believe that all meanings come from the words on the page and so they put emphasis on precise reading. I asked Ali how he learned to read in English. He said that he learned to read in English by pointing to words and sounding out the words when he was in school in Lebanon. I asked him how he learned and improved his reading in Canada. He mentioned two types of reading activities that they had in class that provided good opportunities for the students to learn to read in English: listening to oral reading by the teacher and silent independent reading. Ali was familiar with oral reading by the teacher in class. He experienced it when he was a student in Lebanon. However, there were differences in reading in Lebanon and reading in Canada. Ali differentiated between his English reading experiences in Lebanon and in Canada in this way:

> In Lebanon, the teacher was reading the lesson to us. Then for a second time, she read the lesson sentence by sentence and we were repeating and read after her and write the words and sentences ten times to learn them. If we did not understand the meaning, the Arabic teacher translated into Arabic for us. If she was not there, we had no way to figure out the meaning. I usually went back in the text and read it again and again until I got the meaning.

Apparently, meaning was facilitated by Arabic translation and not by student engagement with the text. Ali said he had no support available except asking the bilingual teacher to translate for him. The reading seemed to be more superficial and included drill, practice and repetition activities. By the way he described it, the main purpose of reading was on the mechanics of the language; the teacher wanted the students to learn the correct pronunciation of the words. The meaning of the text was not the purpose of the reading act. However in Canada, the focus was on meaning and understanding the content of the text. Ali further explained about the activities they did in their class in Lebanon and how it helped him to learn to read English in this way:

The teacher read the whole chapter. We had to follow her. We were just listening and we had to put our fingers on words she is reading. When she asked us repeat it, we started to repeat after her. She asked us some questions but that was not all the time. Then, she taught us English grammar, how to write and say English sentences correct. Because our English teacher could not speak Arabic, we did not understand what she was talking about. There was usually another Arabic teacher in class too who could speak English. She translated for us into Arabic so that we understand what was going on. When the class was finish and we came home, we had to do the homework and write down a chapter or a lesson of the book. The next day when we go to class, she ask us to read from the book and give us a mark in her notebook.

I asked Ali if he liked to read or if he read at home when he was in Lebanon. He said that when he was in school in Lebanon he liked to read books "about science, trees, birds, stuff like that." I asked him if anybody helped him. He said that his mother was reading Arabic books to him about one hour per day. I asked Ali if he read English books at home. He said that sometimes he gets books from school and reads but nobody can help him because his mother cannot read English and his sister is usually busy. I asked if he remembered a book he liked to read very much. He said that he could not remember but he liked science fiction stories.

Ali's perceptions of good reading seemed to be very much influenced by his past schooling experiences in Lebanon. He defined good reading in terms of sounding out words precisely and knowing a lot of words. According to Ali, classroom reading activities in Lebanon were basically read-aloud activities with little attention to meaning. Whorf (1964) stated that peoples' perceptions of the world are influenced by their speech community, and Ali's perceptions of good reading might have initially formed when he started practicing ritualistic reading in Arabic as a part of his overall religious practices, and that might have influenced his informational reading in school in Lebanon.

From my own experience with reading pedagogy in particular Middle Eastern and African countries, such as Lebanon and the Sudan, I can attest that in these countries, one widely accepted perception of reading is that of an act of oral performance with correct pronunciation and neat articulation of texts that has little to do with understanding

meaning during reading. This type of reading is common among Muslim as well as non-Muslim countries and is more associated with reading of religious scripts. Children who learn this type of reading in their childhood either at home or in religious schools called Madresse or Maktab bring with them their literacy experiences to the public school. Their experiences are then reinforced at school as almost all public schools in these countries follow a very traditional approach in teaching foreign languages. Students spend a lot of time learning grammar rules. They use their knowledge of English grammar to complete passive drills and exercises in class. The students also learn how to translate from Arabic to English by memorizing word meanings. Little time is devoted to interactions and understanding the culture in English speaking countries. As a matter of fact, some text features that represent cultural features about the everyday life style of people in English speaking countries are deleted or changed and some sections of books may not be taught at all for representing anti-Islamic concepts. Even some public universities in some Middle Eastern countries require their English instructors to censor and leave out some sections because they find those materials and the learning associated with them to contain anti-Islamic values. Certain words in a dialogue between two persons might be omitted and new words are inserted that make the dialogue meaningless. For example, wine is changed to tea; dated is changed to married and beer is replaced with Pepsi. This can make the whole text meaningless in either culture. Conversely, reading in Canada is more associated with understanding meanings, and language learning follows the pedagogy of interacting with people and understanding their cultures. Students with a different perception of reading fail to notice the difference and become disadvantaged.

Ali believed that he was a good learner but not a good reader. He explained, "I learned to read in English by learning how to point to words and then sound them out." He said that he was not a good reader because there are many difficult words in English and he cannot sound them out. To him, learning the spelling of words and learning how to articulate them correctly were very important and that constituted reading. He said, "when I learn something new, I test myself in using this new learning." He explained that he liked reading but not school materials; for entertainment he liked real life stories and science fiction. Ali's conception of the reading process was that of an exact and precise act. The readers must sound exactly like native speakers of English. They should know a

lot of words. These conceptions were likely brought about by his learning experiences and the instructional approaches implemented in his class in Lebanon. They might also have been unintentionally reinforced in Canada.

One of the most useful reading strategies that Ali said he knew about was skipping difficult words and not interrupting the reading process if he did not know the meaning of a word in a part of the story. He said, "If there is only one word that I do not know, I probably skip that word and don't mind I don't know what it means. I continue reading and later when I have time, I may come back to that word to learn it."

Ali also mentioned that he used sounding out to learn difficult words. I asked him how he used this strategy. This is a part of our conversation that shows his knowledge and use of the strategies. I asked him if he tried to sound out all the letters in a word, he said that he only looked at the first two and last two letters to sound it out. He also said that by looking at the initial letters, he usually gets the word right. Ali said if he wanted to help someone to read a word, he would teach him to break up the word and sound out the syllables separately and then try the whole word.

Narrative Reading
The Cueing Systems

Ali read four stories: *The Boy and the Fox* and *The lesson* at grade-two level; *The Blind Woman* and *The Crow and the Pitcher* at grade-three level. He made 57 miscues out of 556 words that he read. Goodman, Watson and Burke (1987) suggested that an average of 25 miscues is needed for a thorough examination of the reading process. As Ali continued through higher grade-level passages, his number of miscues increased. His miscues per hundred words (MPHW) in *The Boy and the Fox* at the grade two level was 6 words, in *The Lesson* at the grade two level was 6.8 words, in *The Blind Woman* at the grade three level was 10 words, and in *The Crow and the Pitcher* at the grade three level, it was 14 words. His average MPHW in the narrative passages was 11 words and his reading rate was 74.95 words per minute. His oral reading was slow and unrhythmic. He made ten high quality miscues out of 556 words. According to Goodman and Marek (1996), a high quality miscue is a response that semantically fits the sentence and the

context of the story. The following are the high quality miscues that Ali made during reading the narrative passages. The complete passages are included in the appendices.

In *The Boy and the Fox,* Ali read 'sleep' for 'sleeping'. The miscue did not change the meaning of the sentence and it fit the context of the story.

<div align="center">sleep</div>

B0101   One day a boy saw a fox *sleeping* on top of

B0102   a rock.

<div align="center">loudly</div>

B0103   The boy said out *loud*, "If I kill the fox, I

Since these miscues did not change the meaning of the sentence, Ali did not make any attempt to correct them. They also fit the context of the story. These miscues occurred due in part to high graphic similarity to the expected words. Smith (1971) stated that readers use minimal distinctive features in the words to identify them. Ali used his graphophonic knowledge and only identified key letters in the word to identify it. According to Goodman (1994), "The integration of all of the language systems (grammatical, graphophonic, semantic and pragmatic) are necessary in order for reading to take place" (p. 235). Thus, Ali used his knowledge of English syntax and semantics with minimal graphic cues to identify the word. Goodman (1979) referred to this as efficiency in reading. Readers use minimal cues to generate their meanings.

Similarly in *The Lesson,* Ali read 'fathers' for 'father', 'the' for 'each' and 'sticks' for 'stick' as follows:

<div align="center">fathers</div>

L0102   their *father* tried to get them to stop.

<div align="center">fathers   stick</div>

L0105   The *father* asked, "Bring me a bunch of *sticks*."

                The

L0112   *Each* child took a turn. No one could

<div align="center">sticks</div>

L0115   child. "Now try to break your *stick*", said

Ali substituted 'fathers' for the singular noun 'father' twice. Although there is a slight meaning difference between the two, we can say he understood the main idea and

no change of meaning occurred. However, in producing this miscue, Ali might have also used his schemata. According to Goodman (1994), "A schema as we define the term, is an organized cognitive structure of related knowledge, ideas, emotions, and actions that have been internalized and that guides and controls a person's use of subsequent information and response to experience (p. 237)." Ali might have concluded that he needed a plural noun after the word 'their'. Thus, he said 'their fathers' instead of 'their father'. According to Goodman (p. 237), readers develop overarching schemata for creating new schemata and modifying old ones. Ali's perceptually driven miscue occurred as he formed new schema and subsumed it to his schemata network. On the basis of newly formed schemata, he predicted that there followed a plural noun after the word 'their'.

In the next line, he substituted the definite article 'the' for the indefinite determiner 'each' which was acceptable and fit the context of the story and did not require correction. Goodman (1987) referred to this type of miscue as a deictic miscue. According to Goodman (1987), "Deictic miscues tend to involve dialogue and the deictic reference is to something in the speech act, not in the published text (p. 192)." In this way, Ali made the meaning more explicit.

In line L0115, Ali substituted a plural noun for a singular noun just the opposite of what he did in Line 0102 and line 0105. He was probably concerned with meaning when he made these substitutions. When he substituted 'stick' for 'sticks' in line L0105, he used his overarching schemata to make the miscue due to syntactic cues. He concluded that the word 'bunch' was sufficient to imply plurality. However, in the next line, he used 'sticks' instead of 'stick' because he was referring to a bunch. The indefinite article 'a' before the phrase 'a bunch of sticks' might have worked as a backward pointer in his peripheral vision to build new schemata and predict 'stick' as a singular noun.

In *The Blind Woman,* he made two high quality miscues: He inserted a pronoun where not required and substituted 'eyes' for 'sight'.

B0102   She promised that if he could cure

      2. would

      ©1. will

B0103   her, she *would* reward him well. If

she
B0112   ⱽthe woman made up a reason for not

B0114   I did promise to pay the doctor if he gave

                          eyes
B0115   me back my *sight*.

Ali's first miscue in this story showed an overcorrection because the miscue did not cause any meaning change but Ali corrected it. According to Goodman, Watson and Burke (1987) effective readers do not overcorrect as they realize that a change in meaning has not occurred. According to Goodman (1987), the insertion of a pronoun may be incidental, but not random, and can only occur at pivotal points in the sentence because the reader expects a pronoun to fill in that point which is cued by his knowledge of the syntax. Thus, he produced more cohesion by inserting a pronoun though it was not needed. Or, it might be a linguistic interference from his mother language, Arabic. In the next line from *The Blind Woman*, Ali substituted 'eyes' for 'sight', which made sense and also fitted the context of the story. In this situation, it is making a reference to and putting emphasis on the woman's sight. Ali did not correct it because it made sense.

Ali also made one high quality miscue in *The Crow and the Pitcher*. He said 'had' instead of 'held' which made sense.

                          had
C0104   She found that it *held* only a little water.

Ali corrected one of his high quality miscues in the story *The Blind Woman*. According to Goodman, Watson and Burke (1987), efficient and effective readers correct more that half of their low quality miscues. Low quality miscues are responses that cause a change of meaning. Effective readers, they argued, do not usually correct their high quality miscues because these miscues do not disrupt meaning. However, Ali corrected one of his high quality miscues in *The Blind Woman* where he had read 'will' for 'would'. These high quality miscues showed that Ali effectively used his knowledge of English syntax and semantics. Moreover, he was able to successfully use predicting and confirming strategies while reading.

In reading the narrative passages, 59% of Ali's miscues were syntactically acceptable. This means that he sufficiently used his syntactic knowledge of the English

language in reading these stories. However, only 37% of his miscues were semantically acceptable. This suggested that Ali focused more on graphophonic and syntactic cues to make sense of the stories. He made 48 low quality miscues that resulted in partial or complete change of meaning within the sentence. According to Goodman, Watson and Burke (1987) effective readers correct more than half of their low quality miscues. Ali only corrected 17% or his low quality miscues. He was not reading for meaning.

Ali's low quality miscues included substitutions, insertions, omissions and partials that occurred due to insufficient use of the syntactic and semantic cues in those parts of the passage where meaning was disrupted. Although 59% of Ali's miscues were completely acceptable syntactically, only 37% of them were semantically acceptable and did not cause a change in meaning. This suggested that 63% of his miscues changed the meaning of the text. Ali had only one insertion in the story of *The Blind Woman* as follows:

W0111   Every time he asked for his payment,

           she

W0112   ᵛthe woman made up a reason for not paying him.

Ali inserted the pronoun 'she' before 'the woman'. This is not a typical miscue that shows meaning generation; it is a sign of language interference. Arabic speaking students more frequently produce this miscue because in vernacular Arabic, a pronoun precedes a noun for more emphasis. It is how they say such things in Arabic. Ali had nine insertions in total. However, his insertions were directed towards making or producing new meanings. The following are some examples:

A0106   When they went outside, they made

                 snow

A0107   two large ᵛballs. (from *A Snowy Day*)

Overall, Ali was making stronger use of graphophonic cues than of meaning cues. The average rate for complete semantic acceptability was 37%. For complete syntactic acceptability, it was 59%. The percentages for graphic similarity (93%) and sound similarity (88%) suggest strong use of graphophonic cues when meaning is not disrupted. In case of meaning change, these figures reveal the readers' overuse of graphic cues to understand the text.

Ali started *The Boy and the Fox* with predicting and confirming strategies. In the first few lines, he made two high quality miscues that showed he was concerned with meaning. He substituted 'sleeping' with 'sleep' and 'loudly' with 'loud'. Both of these miscues suggested that he used the fewest graphic cues for sampling and fixating, and then used syntactic and semantic cues to predict and confirm his responses. As Goodman (1994) stated, "Reading involves the interrelationship of all the language systems" (p. 235). In the same story, he made a miscue but corrected it. These miscues occurred in the following lines:

<div align="center">sleep</div>

B0101   One day a boy saw a fox *sleeping* on top of a rock.

<div align="center">2. listen</div>
<div align="center">©1. list</div>

F0111   'Keep away from my beans.' They won't *listen*

<div align="center">shoot</div>

F0112   to me, so I will *shout* (to them) loudly, 'Keep

F0113   from my beans.'"

In the first line, Ali used fixating and selecting strategies and with his graphophonic knowledge made the first miscue, 'list'. Then he could not confirm it. So he used syntactic and semantic knowledge to predict 'listen'. He used confirming, rejecting and predicting strategies effectively in correcting this miscue. However, in reading the next line, he made another miscue on 'shout'. He read it as 'shoot'. He did not modify his response because this miscue was a perceptually-induced response (Goodman, 1994), which occurred either as a result of strong concepts or as a result of building overarching schemata (Goodman, 1994). The concepts of hunting or killing the fox and creating story-like schemata of how to do it might have caused Ali to produce this miscue.

In reading *The Lesson*, Ali also had a good start in using his predicting, confirming and correcting strategies. The following are the examples from this story:

L0105   Finally the father asked his children to do

2. teach

© 1. touch

L0106   something to *teach* them a lesson.

L0111   the child tried. He could not break

2. each child

©1. the child

L0112   the bunch of sticks. *Each child* took a turn.

In reading line L0106, Ali used fixating and selecting to produce the first response, but it was not confirmed with regard to semantic cues. Thus Ali used correcting strategies to make the correct response, which was 'teach'. Likewise in line L0112, Ali made the meaning more explicit by substituting 'the' with 'each'. According to Goodman (1987), when readers put the article 'the' for another determiner, they show their concern for ambiguity and try to make the meaning more explicit. However, Ali overcorrected this high quality miscue. He used regressing to look back at the text and correct a miscue that did not cause any change in meaning. According to Goodman, Watson and Burke (1987), proficient readers do not correct their high quality miscues because these miscues do not interrupt meaning. However, they correct more than half of their low quality miscues because these miscues are not semantically acceptable.

Ali used the strategies of scanning and fixating on minimal graphic cues along with his syntactic and semantic knowledge of the English language to correct his miscue in the following line:

2. easily

©1.east

L0117   Each child *easily* broke a stick in two.

In the above example, Ali used initiation and sampling, and selecting strategies efficiently to scan the word and produced the miscue 'east' with high graphic similarity to the expected response but his syntactic knowledge of the English language rejected that miscue. He regressed, and used his knowledge of the word meaning and syntax to correct the miscue which disrupted the meaning in the sentence.

As Ali proceeded through higher grade-level passages and they became more difficult lexically and conceptually, he shifted his use of the language cuing system from a

focus on syntactic/semantic strategies to graphophonic strategies. He started having problems at that point, as he was no longer able to use predicting and correcting strategies without the use of the syntactic and semantic systems of the language. The following are some examples:

B0105   He went to the woman's apartment. He

   2. partend

   $1. part

B0106   would *pretend* to treat her eyes.

          fricture

B0107   But he would also steal *furniture* and

B0108   other objects.

He used graphophonic strategies and produced two miscues that were somewhat graphically similar to the expected word but because he was not able to confirm or disconfirm his response semantically, he could not effectively use his predicting and correcting strategies. Ali overly depended on the graphophonic cues, which were not sufficient to disconfirm the response. He needed to activate his semantic strategies. He produced 'fricture', a non-word miscue instead of 'furniture' in a similar way. But he could not use the semantic cues to predict the correct word.

In the next story, *The Crow and the Pitcher*, he continued overly using the graphophonic strategies and thus was not able to effectively use predicting, confirming and correcting strategies. The following are some examples:

   3. casing

   2. cas

   $1. ca

C0115   She kept *casting* pebbles into the pitcher until

C0116   she was able to dip her beak into the pitcher.

In the above example, Ali used graphophonic knowledge of the English language along with fixating and selecting strategies. However, he was not able to proceed to predicting, confirming and correcting strategies to encode the word because he did not make sufficient use of the semantic cues. He appeared to use his knowledge of syntax because his third response was syntactically similar to the expected response but still did

not make sense. He was working at this and knew she was doing something with the pebbles into the pitcher.

Ali started with a good use of the syntactic and semantic knowledge of the English language, which resulted in effectively using predicting, confirming and correcting strategies in reading the narrative stories. A look at his background knowledge about these stories showed that he had little prior knowledge of the topics of the passages; however, his interest was good on those passages. In reading the higher grade-level passages, he then shifted to relying more heavily on graphophonic strategies although he had stated, similar to the lower grade passages, that he had no background knowledge but a good interest in the stories. Ali's patterns of meaning constructions were those of a print-based reader who shifts his strategies when dealing with more demanding materials. In fact, on more difficult tasks, he reverted to least effective strategies.

Ali's Retellings

Ali's retelling of the stories showed that he was able to remember the characters in the narrative passages and some of the major and minor events. However, the nature of his retelling varied from one story to another. For example in the story of *The Boy and the Fox,* he could only remember the two characters, the boy and the fox, and one idea unit or event regarding each character. Probed recall of the story showed that he was unable to make the expected inferences from the story. When he was asked, "What can you learn from the story?" he was unable to critically relate to the story and provide a logical response such as "Don't count your chicken before they hatch" or an equivalent. His retelling score for this story was 34 out of 100 points. His retelling of the story, *The Blind Woman* was similar to *The Boy and the Fox,* and his retelling score was again, 34 out of 100. Both of these stories were at the grade-two level. Ali had mentioned that he had no background knowledge about either of the grade-two level stories but his interest in the two stories was very good (3 on a 5-point Likert scale). It made sense that he was unable to do well on these two stories.

In *The Lesson,* which was a grade-two level narrative, he was able to retell about all characters and major events. In probed recall, when I asked him "Why did the

children's father want to teach them a lesson?" he said that, "because he wanted his children no longer fight", which was the correct response. However, at the critical level, he was unable to respond to, "What can you learn from the story?" He could not make any inference from the story or relate the story to the real world. Ali's retelling score for this story was 85 out of 100. He had stated he had no background knowledge about this story but his interest level was very good (4 on a 5-point Likert scale). However in *The Crow and the Pitcher*, a grade-three narrative, Ali's retelling proficiency was quite low, at only 17 out of 100. He could remember only one character, the only character in the story, and one event. He had stated that he had no background knowledge about the story and his interest level compared to the previous story *The Lesson* was lower. It appeared that when Ali encountered more complicated themes and events such as those in *The Crow and the Pitcher*, he lost interest in the story and this affected his retelling. Thus understanding the story might have positive correlations with the readers' interest level.

Ali's mean score of correct answers to the free and probed recall for the four stories was 42.5 out of 100. His understanding suffered most at the critical level because he could not critically comment on what he was reading, or explain the purpose of it. He was greatly challenged in making inferences from the stories. His score for critical understanding was 0 out of a possible 68 for the four stories read, and his ability to 'read between the lines' was 17 out of a possible score of 68. As he had stated that he had no background knowledge about these stories, the reason for low performance on inference generation and critical understanding could be due to lack of prior knowledge. His interest level in these stories fluctuated between good and very good which is three to four on a 5-point Likert scale. Given his average MPHW for the four stories, 7.5 words, he had a strength in using the graphophonic cues. However, it does not mean that he was not using syntactic and semantic cues at all. Readers who rely heavily on print cues do not seem to access sufficient syntactic and semantic cues from the context of the stories. For this reason their predicting and confirming strategies often produce partially semantically acceptable miscues or responses that are at times totally unacceptable semantically.

Expository Reading
The Cueing Systems

       Ali read five expository passages: *Light* at the grade-one level; *Our Best Friends* and *Hide and Seek* at the grade-two level; and *Hangnails* and *Ant Lion* at the grade three level. Ali made 58 miscues out of 612 words on the expository passages. His average MPHW for all of the texts was 9.5 words. His reading was slow and usually unrhythmic. His average reading speed in reading the expository passages was 73 words per minute.

       Ali made five high quality miscues on the expository passages. However, four of those miscues included grammatical forms such as singular nouns instead of plural nouns and vice versa, and third person singular verb forms such as these:

              place

L0107   Most *places* have some light. (from *Ligh*t)

              pets

L0115   One well known *pet* does not fit this picture.

           hangnails   hangnails

H0101   What is a *hangnail*? First of all, a *hangnail* (from *Hangnails*)

H01113   Don't pick it. Don't bite it off. That will

             makes

H0114   only *make* it worse.

       Ali made only one high quality miscue which included substituting a full meaningful word of his own choice for the expected word in the text as follow:

             waited

S0107   They *wanted* to know if spring was on the way. *(from Hide and Seek)*

       According to Goodman (1976), "An effective reader uses the least amount of information necessary to reconstruct the writer's message (p. 132)." Ali used minimal graphic cues with sufficient use of syntactic and semantic cues to recognize the word. Because his response made sense to him, he assimilated it and did not scan graphic cues again for correcting his response. This was a topic Ali had high personal experience with, and he was familiar with the concepts and events in the story. He had also stated that his interest in the topic was high. However, the number of Ali's high quality miscues in

reading the expository passages was fewer than that on the narrative passages. This suggests that Ali's use of the syntactic and semantic cuing systems of the English language was sharply reduced in reading expository passages compared to his use of such systems in the narrative passages. Perhaps he resorted to using more graphic cues when the content of the passage became more difficult to understand.

Ali's Strategies

Ali's strategies were predominantly graphophonic in reading the expository passages. According to Goodman (1970), readers use their knowledge of the language cuing systems simultaneously and interdependently. However, if a reader does not make sufficient use of the semantic and syntactic cues, he may compensate by overly focusing on the graphophonic cues. In reading the expository passages, Ali did not make sufficient use of semantic strategies and relied more on graphic similarities to identify the words. The following are some examples from *Light* at the grade one level:

	from	neget
L0108	Think *of* your room at *night*. Can you see a	

	you lap
L0108	little bit when *your lamp* is out? If you can,

	leget
L0109	there is some *light* getting in.

Ali miscued on two simple words *night* and *light*. Although Ali knew these words orally, he was unable to read them as he was not familiar with the silent 'gh' sound in these words. Ali's miscues showed that he focused on graphophonic cues without sufficient use of semantic strategies. This might also be due to his perception of the reading process. Readers who believe that good reading is the precise perception and identification of all graphic cues try to sound out all the letters and in this way make a miscue on a word which already exists in their oral language. In the next passage, *Our Best Friends*, Ali continued using graphophonic strategies but in some instances he made few corrections and half miscues. Half miscues are reader's responses that partially change the meaning of a word such as 'lives' for 'live'. He inserted the definite article

95

'the', which shows he is concerned with meaning and wants to make it more explicit (Goodman, 1987). His insertions and omisions in the following sentences show that he wanted to build the structure of the sentence and make it sound like English language:

<div align="center">the   lives</div>

B0112   Some were *taken* [∨] in (to) *live* with the hunters.

<div align="center">2. come</div>

<div align="center">©1.came   woold</div>

B0114   Most pets *come* from families of *wild*

B0115   animals that live in groups.

Ali inserted 'the' after 'taken', deleted 'to' and substituted 'lives' for 'live'. He was apparently trying to make sense out of the sentence. In the next line, he miscued on 'come' but was able to correct it. However, in reading 'wild', he was not able to encode the word using graphophonic strategies because he did not make sufficient use of the semantic cues. Ali had also stated that he had little background knowledge about the topic but his interest level was good.   In reading another passage at the grade-two level for which he had a lot of background knowledge and a high interest level, he was excessively using graphophonic strategies. The following are some examples:

<div align="center">tried</div>

H0106   People were *tired* of the cold and (the) long nights.

<div align="center">2. their 2. village</div>

<div align="center">cold   love ©1.the ©1.whyllage</div>

H0108   Grown-ups *would leave their village* and go into the woods.

Ali substituted 'tried' for 'tired'. These two words had high graphic similarity but the meaning is completely different. The miscue did not fit the context of the sentence. In encoding 'would' and 'leave', Ali used graphophonic strategies without activating any semantic clues from the context of the sentence. Because of this, his substitutions did not make any sense. However, he was able to use predicting and confirming strategies in reading 'their' and 'village' and was able to correct his miscues. Though he attacked these words with graphophonic strategies, he was able to successfully decode them because he had activated his knowledge of the semantic clues within the sentence.

In reading *Hangnails* from the grade-three level, Ali continued using graphophonic strategies with infrequent use of his semantic knowledge. He had stated that he had some background knowledge about this topic and his interest level was good too. It appeared that when Ali had moderate to high background knowledge and interest in a topic, he would reduce slightly his use of graphophonic strategies and used his knowledge of the semantic system of the language as well. Some examples are as follow:

<div align="center">2. first</div>

<div align="center">©1. forest</div>

H0101   What is a hangnail? *First* of all, a hangnail

<div align="center">tah</div>

H0102   is not really a nail. It is a *tough*, little piece of

In the first miscue, he was able use his semantic knowledge of the sentence and he successfully predicted, confirmed and encoded the word 'first'. In the second line, Ali could not make sufficient use of the semantic cues and as a result produced a response that was a non-word meaningless substitution but could function as a syntactic place holder, an adjective. We see the same trend throughout this passage. For example in *Hangnails*,

H0112   What do you do with a *hangnail*? *Don't*

<div align="center">3. bite</div>

<div align="center">2. bit</div>

<div align="center">©1. beat   makes</div>

H0113   pick it. Don't *bite* it off. That will only *make* it

<div align="center">inside</div>

H0114   worse. *Instead*, cut if off with scissors or nail clippers.

Ali substituted 'hangnails' for 'hangnail' and this slightly changed the meaning because he did not use the syntactic cues in the sentence. In reading 'bite', he was able to use semantic cues and predicted the word. However, he did not use the semantic cues in reading 'instead' and produced a word that did not fit the context of the sentence. Patterns of Ali's meaning constructions suggest that he was not following the meaning of the sentences within a broader context of the passages and arbitrarily focused on meaning in language chunks that occur in the pivotal portions of the text. Because he did not process the text as a whole and focused on phrases, he was unable to make sufficient use of his

semantic strategies simultaneously with his knowledge of the graphophonic and syntactic cues.

The following miscues from *Light* shows that Ali could not sufficiently use the semantic cues and effectively use correction and confirming strategies to produce meaning in the expository passages.

L0101   Where does light come from? You

          kenow

L0102   *know* it comes from the sun. It comes from

              sars   fear   leget

L0103   the *stars* too. A *fire* makes *light*. A lamp

            leget

L0104   makes *light*. What is the same about

           the

L0105   all *these* things? They are all hot.

                     Plaque   on

L0106   Have you ever been in a *place* with *no*

          Leget   leget

L0107   *light* at all? Most places have some *light*.

             neget

L0108   Think of your room at *night*. Can you see a

           you

L0109   little bit when *your* lamp is out? If you can,

          leget

L0110   there is some *light* getting in.

          leget

L0111   Without *light*, we could not see. We

           leget

L0112   see things only when *light* falls on them.

As seen in this passage, most of these words exist in Ali's oral English. He was using his knowledge of syntax. However, he made too little use of the semantic cues even for words that existed in his oral English. This might be due to his perception of the

reading process. He overly used graphophonic strategies that were of no use since he did not make sufficient use of the semantic strategies such as predicting, confirming and correcting to encode the unfamiliar words.

Ali appeared to use graphophonic strategies excessively in reading the expository passages. For passages about which he had high background knowledge and interest, he seemed to use some semantic strategies and in some cases was successful in correcting his responses. He also made sufficient use of syntax on these passages.

Ali's Retellings

In reading the expository passages, Ali did very well on *Light,* a grade one-level passage. He remembered some major and minor points. However, he was not able to answer a critical question about the article. When he was asked why his teacher would ask him to read an article like this. He could not give a specific response but simply said "to learn something". His retelling score for this article was 68 out of 100 points. Of course it must be noted that Ali was a grade seven student reading a grade one level article. He had mentioned he had no background knowledge about the topic but his interest was good.

In reading the grade two level article, *Our Best Friends*, Ali's comprehension was similar to his comphrehension of the grade one level article. His total retelling score was 68 out of 100 and there was evidence that he was able to understand the inferences implicit in the article. For example, when he was asked why hunters long ago grew to like the wolf, he answered, "because the wolves were smart animals". Ali stated he had very little background knowledge about the article but his interest level was good.

 In reading another grade two level article titled *Hide and Seek*, Ali again scored 85 out of 100 in retelling. But this time, he was also able to critically comment about the article. When he was asked why 'hide and seek' was different today, he said, "because it was no longer a custom", which was the correct response. Ali had lots of background knowledge on this article and his interest level was very good.

Ali's retelling score dropped when he retold a grade three level article. In retelling *Hangnails,* he scored 68 out of 100 points but he was able to draw logical inferences from the story. For example when he was asked why a hangnail hurts, he said, "because the

skin was sore and red", which was the correct answer. He stated that he had some background knowledge about the article and his interest level was good. However, in retelling the other grade three level article, *The Ant Lion*, he was able to score 51 out of 100, but he was unable to draw any inference from the story. Similar to the previous story, he had some background knowledge about the article and his interest level was good too.

Ali's average retelling score in the expository passages was 51 out of 100 in general. His score for critical understanding was 50 out of 100 and the score for his ability to draw inferences from the articles was 25 out of 100. Ali's overall performance on the expository passages was better than his performance on the narrative passages. One reason might be that he had a strong background knowledge and very good interest in one of the expository articles, and the article he read was a grade one level article that might have been easier to understand. Overall, this suggests that narrative passages that have informational content are not necessarily easier than expository passages. Thus narrative passages that teach special subject matter content in the school curriculum are structured differently than stories the students read for entertainment purposes and are quite challenging.

Retrospective Miscue Analysis with Ali

I started with Ali's high quality miscues. Ali listened to the tape of himself reading *The Boy and the Fox* and as he finished the line, I stopped the tape recorder when he read 'sleep' for 'sleeping' in the following sentence:

<div align="center">sleep</div>

B0101   One day a boy saw a fox *sleeping* on top of a rock. (from *The Boy and the Fox*)

I asked Ali why he made this miscue. He said he was probably reading fast because he wanted to learn more about the story and did not notice 'ing'. Ali said that he did not notice he had missed something. He did not notice the miscue when he made it. Ali had mentioned in his interview that he usually looked at the first two letters and last two letters in a word in order to read it. Here, he only attended to the initial letters, which is an aspect of efficient reading. I asked Ali the difference between 'sleep' and 'sleeping'. He said that he did not know the difference and thought they were the same. He further

added that 'sleeping' means sleeping right now and 'sleep' means the same thing. Results of his miscue profile showed that his miscues had high graphic similarity with the expected words with regard to the initial letters. A similar miscue occurred in the story of *The Blind Woman*, where Ali substituted 'will' for 'would' in the following sentence.

B0103   She promised that if he could cure

                              will

B0104   her, she *would* reward him well.

      I showed him some of the miscues he made due to graphic similarity and where he used his graphophonic knowledge with regard to the semantic cues to encode the word as in the following sentence:

           3. promised

           2. pro

      ©1. prom

B0102   She *promised* that if he could cure

B0103   her, she would reward him well. (from *The Crow and the Pitcher*)

      He had mentioned in his interview that a good reader can read all the words and sound them out precisely like a native speaker of English. I asked Ali what he was doing in reading this word. He said that he could not sound it out at first. Then he tried to break up the word to make it easier to sound out, then he remembered the word and could say it. I asked Ali if he knew the meaning of 'promise', he said, "Yes like promise you something". Ali showed his strength not only in graphophonic strategies in the context of this sentence but in using syntactic and semantic cues along the way to confirm his response.

      Ali also made sufficient use of his graphophonic strategies and semantic cues in predicting and correcting the following miscues:

           2. their 2. village

           ©1. the ©1. vyllage

H0107   Grown ups would leave *their village* and

H0108   go into the woods.

Ali said that he just looked at the first two and the last two letters and then sounded out the word. Then the words came to his mind. I asked why he changed his first miscue 'the'. It

made sense before 'village'. Ali said, "when I break up the word, I say each part like separately and then together to read it." I asked if he knew the difference between the two words. He said that he was not sure about the difference but he realized he made a mistake and corrected it.

I also discussed a miscue from *Hangnail* when Ali read 'bit' for 'bite' and then corrected his miscue.

<div style="text-align:center">

3. bite

2. beat

©1. bit

</div>

H0113 Don't pick it. Don't *bite* it off. That will only make it worse.

I asked Ali how he made this miscue. He said that he first read the word as 'bit' but as he looked at other words, he realized it did not fit the sentence. Then he corrected and said 'beat'. He said it still did not make sense, as "you can't beat hangnails." With sufficient use of the semantic and syntactic cues, he was able to correct and confirm his response. However Ali was not always successful in encoding words that had high graphic similarity to the expected response because he did not make sufficient use of the syntactic and semantic cues in those instances as shown in the following sentence:

<div style="text-align:center">

kerd   cold

</div>

B0116 However, how can I be *cured*? If I truly *could* see,

<div style="text-align:center">

fricture   blondings

</div>

B0117 wouldn't I see *furniture* and other *belongings* in my house?

As seen in these two sentences, Ali's miscues are due to overuse of the graphophonic cues with insufficient attention to the semantic cues. I asked Ali why he made the first miscue. He said he could not read it but was able to sound out the beginning and end letters. I asked if he knew this word. "Never heard it before", Ali said. I asked, "if I read it correctly for you, do you think you'd understand it?" He said, "Yeh, maybe." I pronounced the word 'cured' correctly and he said, "Oh, cured like the doctor cured me." This could be what Y. Goodman (1996) referred to as a critical teaching moment. Apparently, Ali had the word in his oral discourse but he could not retrieve it because he over-relied on his graphophonic strategies. I asked if this word affected his understanding

of the meaning of the sentence. Ali said he had no idea at the time what the sentence was about.

Ali made similar miscues in these two lines that showed he did not make sufficient use of the semantic cues. I asked him if he knew the difference between 'cold' and 'could'. He said, "Yes, cold like when you catch a cold but could is like doing something." When I asked him why he made this miscue then, Ali said he was reading fast and did not notice 'u' after 'o'. This might also be due to his misconceptions of the reading process. He may think, at times, that he has to precisely sound out all the letters in a word. Ali also made the next miscue due to graphic similarity and insufficient use of the word meaning. He said that he did not understand the sentence the way he read it. I asked him if the word 'belongings' made sense to him. He said that he knew that word too and said, "like thing belong to you".

Having discussed all these words with Ali and ensuring he had learned them, I asked him to read the sentence and concentrate on meaning. However, he still was not able to understand the sentence, though he knew all the words. I asked him if he knew what the old woman meant in this sentence. He was unable to answer because that required generating inferences from the story. Obviously, Ali did not understand the 'meaning behind the meaning' of the sentences or the connotations implied in them. He could not draw that inference from textual information. I explained to him that the old woman was actually cured and could see everything. She said that she could not see as an excuse for not paying the doctor because when the doctor was treating her, and she could not yet see, he was stealing her furniture. The woman was saying sarcastically, "Where is my furniture? I had a lot. So I am still blind because I can't see my furniture." This was her excuse for not paying the doctor.

Apparently, in order to understand the meaning 'between the lines' and to generate inferences from textual information, knowledge of the word meanings is necessary but it is not sufficient. Readers need to use their logic, judgment and knowledge of the world to make sense of such connotations.

I discussed another similar miscue with Ali. Ali substituted 'break' with 'broken' in the following sentence:

<center>break</center>

L0120   Only together are they not able to *be broken*.

I asked Ali what he was thinking about when he said 'break' instead of breaking.

I asked him if the two words are the same. Ali said that he knew the word but did not know the difference in the structure. I asked him if he knew what the meaning of the sentence was. He was unable to express the meaning. I asked Ali if he knew the grammatical structure of the sentence. He said, "I don't know."

Ali could not understand the connotation implicit in this sentence. The lesson for the brothers in the story is that if they get along and do not fight and stay together, no one can harm them. However, Ali did not understand this point due to three reasons. Firstly, he made the miscue because he only used the graphophonic strategies to encode it; secondly, he was not familiar with the passive structure in this sentence. Accordingly, he was unable to use syntactic cues to correct his miscue. Thirdly, he was unable to generate inferences from textual information regarding the meaning of the meaning of the sentence and make generalizations.

Most of Ali's miscues occurred due to an overreliance on graphic cues. When he was unable to make sufficient use of the syntactic and semantic cues, these miscue changed the meaning of the sentence as in the following:

<center>*plak   on leget*</center>

L0106 Have you ever been in a place with no light at all?

<center>place</center>

L0107 Most *places* have some light.

I asked Ali why he made the first miscue. Ali said he was not sure how to say it. He tried to sound it out. But in the next line, when he got to the same word, he read it correctly. He said he knew the meaning of the word so he did not correct it. But when he got to the second occurrence of 'places', he read it correctly but in singular form. I asked Ali if 'leget' sounded like language or it made sense. He said he had no idea what it is. I read it correctly and he suddenly said, "Oh yes. It is light yeh light." This miscue also shows that Ali's perception of the reading process as exact pronunciation and identification of the words was conducive to producing such miscues.

I also discussed one of Ali's miscues with him because it was an interesting miscue. He substituted ' shoot' for 'shout' and 'shooted' for 'shouted' in the following sentence:

shoot

B0112 So I will *shout* (to) them loudly, "Keep away from my beans."

shooted

B0113 The boy shouted so loudly that the fox woke up and ran away.

I asked Ali the meaning of 'shoot'. Ali said, "shoot like shooted like shot like shot him" I asked him if he was thinking about a gun when he was reading that line. He said yes. I asked him if he knew the meaning of 'shout'. Ali said, "shout like yell at him". I asked Ali why he did not correct his miscue. Ali said, "That time I was thinking that the boy was going to kill it the fox with a gun." I asked why he deleted 'to'. Ali said he probably did not see it. I asked Ali what he was thinking about the second time when he said 'shooted' for 'shouted'. Ali said, "I was thinking he shot the fox but couldn't get it and it got up and ran." He was reading what he expected to be there.

Sara

Background Information

The second participant in this study is referred to here as Sara who was admitted with her family to Canada in 2003 as a Christian refugee from the Sudan. Before coming to Canada, the family lived in Egypt for a few years. Upon arrival in Canada, they stayed in Ottawa for three weeks and then moved to Edmonton. Sara and her family were living in our neighborhood and they knew my wife. My wife told me about her and so I went to her home, a few houses away from ours, invited her to participate in my study and then obtained consent from the parents. Luckily, Sara's uncle, a minister from New Brunswick, was visiting them and he translated my English words to Arabic for Sara's parents who could hardly understand and speak English. She agreed to participate.

In the summer of 2007, Sara was 11 years and 5 months old and was registered in grade five in an Alberta school. Sara did not go to school either in the Sudan or in Egypt. Her experience with schooling began in Canada. She was able to speak her mother

language, Arabic. However, she could not read and write in Arabic. She could communicate in English well. Her pronunciation was clear and she comprehended and answered any questions I asked her about her school and class activities. She told me she never went to school in their home country or while they were in Egypt waiting their asylum petition from the United Nations Organization Bureau.

Beliefs and Perceptions about Reading

Sara knew that reading in English is essential for learning and success at school. She said, "Reading is like expressing your feelings. People read so they can learn. The thing I like about reading is that if you know how to read, you can be better in math or something that you like and has reading in it." Sara defined a good reader as a person who can read hard words or "big words". She referred to her friends Casandra and Chris as good readers because she said that they never give up and keep trying to read anything. She said that if her friends come across difficult words, they sound them out very easily. Sara also defined the act of reading as expressing one's feelings and learning from it. However she said she learned to read in English by learning how to spell words. This made her view of learning to read in English a narrow view. Even though she viewed reading as expressing feelings, her view of reading strategies was that of a bottom-up approach that posits that meanings come from the text and not from the readers' interactions with the text or the interaction of the readers' background information with the text. Sara believed that her friends Chris and Casandra who are good readers might even come across a word they cannot read or understand because there are so many English words. However, she stated that her sister would get it right by using her dictionary or thinking it over.

I asked Sara how she learned to read in English. She said, "my teacher tells me to sound it out and you have to try your hardest and just going not give up." I asked Sara if she thought she was still learning to read. She said, "a little bit, like reading like hard book." I asked Sara if she liked to read at home. She said:

I read the Jack and the … what was its name? I read this book like about this boy that has a cow and his mom said the cow doesn't bring any meat or milk and they need corn and that's why they have to sell the cow, yeh.

I asked Sara what her class read in school everyday. She said, "We read like poetry reading, group reading and research chapter books, story books we get them from the library."

Sara's perceptions of good reading were not related to her past schooling because she did not go to school in her home country, the Sudan, or while she was in Egypt. Her learning-to-read experiences in Canada, which she said had started with learning how to spell words in English, reflected some of her literacy experiences in Canadian schools. What was significant in Sara's beliefs was her stance towards reading. She defined it as a way of expressing one's feelings, which reflects an aesthetic stance towards reading (Rosenblatt, 1975). This was at odds with the emphasis she placed on words. Her view of reading was not well-integrated.

Sara believed she was a good reader because she read every night after school. She believed that a good reader asks questions and understands what she is reading. She said, "When I read a book, I ask myself questions about it. If I cannot answer those questions after I read a few pages, I think the book is not good for me and I change it". Sara said that she liked Christmas songs very much but she couldn't read or understand them. She said, "I like to become an artist reader to read everything about art, something about art, like, to read about everything about cleaning and stuff and cooking."

Sara said that if she was stuck on a difficult word, she would ask someone to help her. I asked what she would do if she was in class. Sara said that she would ask her teacher or other students. When alone, she said, she tried to sound out the word and then it would come to her mind. She also said that sometimes she wrote down difficult words and that helped her to learn the words. She also mentioned that if there is only one word she doesn't know, she usually skips it and may come back to it later or just ignore it. I asked Sara how she would help someone who can't read. She said that she would read to her or sound it out for her. I asked Sara how she would help a friend learn to read in English. Sara explained that she would read along with her. Sara had mentioned a great idea of how to help her friend. She said that she had a reading buddy who came to their home and

helped her in reading. She said that she would become a reading buddy for her friend and also ask her to find more reading buddies. She said that becoming a reading buddy would greatly help her. I asked her how many reading buddies she had. She said that she has one reading buddy for English and she has another for Spanish. The English buddy is one of her classmates and the Spanish buddy is one of her mother's friends.

<div align="center">

Narrative Reading

The Cueing Systems

</div>

Sara read three stories: *A Day by the Lake* and *A Snowy Day* at the grade one level and *The Boy and the Fox* at the grade two-level. She made 45 miscues out of 276 words. Her average MPHW on the three passages was 16.3 words. Her oral reading was word-for-word and her average reading rate on the stories was 34 words per minute. She could not finish the grade-two level story, *The Boy and the Fox*. She made three high quality miscues on *A Snowy Day* as follows:

> waited

A0102   They *wanted* to go out to play.

Although her miscue is different from the expected response, it showed that she was generating meaning and it was semantically acceptable. It was an exophoric (extra-linguistic) reference to the situation in the speech act. This miscue shows that Sara used minimal graphic cues with sufficient use of syntactic and semantic cues. She made one high quality miscue in *A Day by the Lake* as follow:

> 2. stayed
>
> $1. sat

D0101   Pat *stood* by the lake. A soft wind blew.

Sara substituted 'sat' for 'stood'. But she looked back and said 'stayed'. Sara did not correct this miscue and it did not disrupt the meaning. Sara made one high quality insertion while reading the following line:

> green

D0102   Across the ᵛ *grass*, ducks swam near the shore.

This miscue suggested that, as she was reading, she was creating a mental representation of the story and the context. Like Ali, she was creating her own perceptually-driven schemata. She generated new meaning in this phrase by adding the word 'green'. According to Goodman (1967), meaning is not reconstructed through word recognition or letter identification; it is the reader's perceptions that generate the meanings and the letters act as the first trigger only to form the appropriate perceptions. She made her high quality miscue on both stories on which she had high background knowledge.

Sara only made three high quality miscues. According to Goodman, good readers produce more high quality miscues and they also correct more than half of their low quality miscues. Sara had few corrections. This suggested that she did not make sufficient use of her syntactic and semantic knowledge of the English language to monitor what she read. Accordingly, she was unable to effectively use predicting and confirming strategies while reading the narrative passages except in a few circumstances.

Sara's use of the language cuing system was similar to Ali's but only with regard to the use of graphophonic cues. She showed her strength in using graphophonic cues by producing miscues with 82% graphic and 69% sound similarity to the expected responses. On the other hand, the syntactic acceptability of her miscues was at 47% and the acceptability of semantic cues was at 35% for the stories she read, which are below the minimum 50% to suggest her success with these cuing systems. Like Ali, Sara was more focused on graphophonic and syntactic cues to make sense of the stories than on semantic cues.

Sara's Strategies

Sara used more graphophonic strategies in reading the stories than Ali did. As she did not use her knowledge of English syntax and semantics sufficiently, she was unsuccessful in predicting and encoding the expected response. Most of Sara's miscues were low quality miscues with high graphic similarity to the expected response. The following are some examples from Sara reading *A Day by the Lake*:

        2. acore   2.wasam

        $1.aco $1. sam

D0102   *Across* the grass, ducks *swam* near the shore.

The miscues that Sara produced for 'across' and 'swam' were meaningless substitutions. They had high graphic similarity with the expected word, but lacked any semantic acceptability. Sara used chunking of letters, as she had mentioned in her interview, but did not effectively use confirming and predicting strategies because she was overly dependent on the graphophonic cues. According to Goodman (1970), the simplest problem readers encounter in reading is that they have oral knowledge of the word and have the concepts and experiences to relate to the oral vocabulary but simply cannot encode the word because they have not encountered the word in written discourse sufficiently.

In another line, Sara used a different approach to decode the word because she knew that using graphic cues alone was insufficient to help her identify the word. Thus she started with semantic cues and syntactic cues but when her semantic strategies failed, she went back to use graphophonic strategies as shown in the following sentence:

3. st

2. shaw

$1. shoe

D0105   Two *stood* on the grass near Pat. Pat

                        3. pen

    2. opened   2. pair

    ©1. open-ned $1. pay

D0106   *opened* a *paper* bag.

In the first example, Sara used her graphophonic knowledge to encode the word. She used fixating and selecting but did not make sufficient use of the semantic cues and her third response for the word 'stood' was a partial 'st' that suggests she was getting closer. In line 0106, she was trying to read the word relying on graphophonic system. Perhaps it did not sound right (syntax) and so she tried again. She continued reading the rest of this story heavily using graphophonic strategies that resulted in low quality miscues as in the following lines:

3. bird

                        2. bits 2. bra

                        ©1.ba $1. ber

D0107   It came out full of *bits* of *bread*. She

            2. drained   2. ground

            $1. drain   © 1.grr

D0108   *dropped* some bread around her on the *ground*.

         In reading these lines, Sara used graphophonic strategies: chunking and sounding out to read the word. She was not successful in reading 'dropped' as she was not using semantic cues: however, she could read the next word 'ground'. She was using syntactic cues as "drained", is a verb as is 'dropped.'

         In reading *A Snowy Day*, Sara continued using graphophonic strategies: chunking and sounding out in the following sentences:

                                 3. want

                                 2. went

                                 $1. wa

S0104   Bill and Kim could not *wait* to build

              2. something with

         ©1.some with

S0105   *something* with the snow.

                           2. slide   2. skate

                           $1. sed $1.ska

S0109   then Bill and Kim *used* some *sticks* and stones.

         In reading these lines, Sara could only correct strategies in line S0105 and produce the expected response. All her other attempts to chunk out and sound out the words failed because she was not making sufficient use of semantic cues along with her use of syntax. Sara had stated that she had high interest in these topics but her background knowledge was low. She started reading *The Boy and the Fox* at grade level two but could not complete it. The following sentences show how she used graphophonic cues in reading this story.

F0103   The boy said out loud," If I kill the fox,

                                                                      111

3. mon

2. slain   2. man

$1.sley $1.mon

F0104   I can always *sell* her skin. I can use the *money*

Sara was unsuccessful in encoding these words. She was using graphophonic strategies and her knowledge of syntax with insufficient use of semantic cues.

Sara had nine insertions. Her insertions were directed towards making or producing new meanings. The following are some examples:

A0106   When they went outside, they made

                      snow

A0107   two large $^\vee$ balls. (from *A Snowy Day*)

Sara inserted 'snow' after "large" and generated the new meaning of 'large snow balls'. She made an inference using her background knowledge and experience in making a snowman to produce this response. Having lived in Alberta for several years, she was familiar with the concept of 'snowman' and had the experience of building one. She used her knowledge and experience of the world to make this prediction. Sara did the same thing in another story that follows:

                      green

D0102   Across the $^\vee$ *grass*, ducks swam near the shore. (from *A day by the Lake*)

Sara inserted 'green' and produced the new meaning 'green grass' that was generated due to her own perception of the grass being green all the time. Sara was more descriptive in reading this line and that was part of the image in her head.

Sara had only one substitution and one insertion of the article 'the' as follows:

                      the

D0103   There were big ducks and $^\vee$ baby ducks. (from *A Day by the Lake*)

In the story of *The Boy and the Fox*, Sara made a similar substitution like her sister and inserted 'the' for 'a' in the sentence:

                     the

F0101   One day *a* boy saw a fox sleeping on top

F0102   of a rock.

This shows that, as Sara was reading this story, she was generating meaning and reconstructing the story in such a way that made more sense to her. Besides inserting the definite article 'the', she inserted full meaningful words as we saw in the story of *A Snowy Day* to give new meaning to the story.

Sara's Retellings

Sara's retelling of *A Day by the Lake* was slow but she remembered a good deal of information. Her retelling score was 51 out of 100 and she could correctly answer one question that required generating inferences from the text. I asked her how she knew Pat was having a good time. She said "because she was laughing" which was correct. She had no background knowledge about the story but her interest level was very good.

In retelling *A Snowy Day*, Sara's comprehension suffered. She could only remember the characters and could tell about only one event. She said she had no background knowledge about the story but her interest level was very good. Sara could not retell *The Boy and the Fox* as the story was too difficult for her and she stopped at the end of the second paragraph. Sara's average retelling score on the narrative passages was 51 out of 100. She was able to correctly answer one question that required inference generation but she could not correctly answer any question that required the application of her knowledge of the world, her logic and judgment to formulate an acceptable response.

Expository Reading
The Cueing Systems

Sara read two expository passages: *Light* and *Clouds in the Sky,* both at the grade-one level. Her average MPHW in the expository passages was 11 words and her reading rate was 30 words per minute. Her oral reading was slow and word-for-word. Sara made 19 miscues in the 173 words she read. She made seven high quality miscues on the two expository passages. She had the highest number of high quality miscues relative to the number of words she read. The following are examples of Sara's high quality miscues from *Light* at grade level one:

<center>I know</center>

L0101   Where does light come from? *You* know

L0102   it comes from the sun.

Sara substituted 'you know' with 'I know'. This is a complex miscue because a phrase is used to replace another in the sentence. Sara did not correct herself as the miscues did not result in meaning change.

<center>room   lights</center>

L0106   Have you ever been in a *place* with no *light* at all?

Sara substituted 'room' for 'a place' and 'lights' for 'light. Both of these miscues made sense in the passage and showed that she was connecting to the text at an experiential level. She was reading for meanings.

<center>of order</center>

L0108   Can you see a little bit when your lamp is out$^{\vee}$?

<center>©let</center>

L0109   If you can, there is some *light* getting in.

<center>flashes</center>

L0112   We see things, only when light *falls* on them.

Sara inserted 'of order' after 'out' in line L0108 and although her response produced a new meaning, it fit the context of the passage. In line L0109, she said 'let' for 'light' but corrected herself and in line L0112, she substituted 'flashes' for 'falls' and produced a new meaning. Her response fit the context of the passage and did not require correction. In *Clouds in the Sky*, Sara made three insertions in one line to generate the meaning she had in mind.

<center>any other sunny</center>

C0107   On $^{\vee}$ *another* $^{\vee}$day we may see nice big ones.

Sara made the insertions to produce her own meaning. This shows that she used her knowledge of both syntax and semantics to reconstruct the meaning here at these points in the text. The reason for meaning generation may be her engagement with the text at a highly perceptual, experiential and personal level, which allowed her to use her knowledge of the world in a more creative way to produce meaning. According to Goodman (1994), "Perception does indeed depend on selecting highly significant and

distinctive features and inferring the wholes they relate to (p. 34)." Sara created strong perceptions in transacting with the texts and that affected her stance towards reading. She connected with written discourse at a personal level and expressed her emotions through reading as she had stated in her earlier interview. Sara had stated that she did not have any prior knowledge about this passage but her interest level in the topic was very good (four on of a 5-point Liker scale).

Sara's Strategies

Sixty eight percent of Sara's meaning constructions were acceptable semantically which was due to her having experience and familiarity with the themes and events in the expository passages. Sara, in reading *The Light,* interacted with the text at a personal and experiential level using her knowledge of the world. Accordingly, she was more effective in using the semantic cues.

The following are Sara's miscues in the same passage.

<div align="center">I know</div>

L0101   Where does light come from? *You know*

<div align="center">fur   ma</div>

L0103   A *fire makes* light

<div align="center">some/sum</div>

L0104   What is the *same about* all these things?

<div align="center">room</div>

L0106   Have you ever been in a *place* with no

<div align="right">out of order   </div>

L0108   Can you see a little bit when your lamp is *out*?

<div align="center">flashes</div>

L0113   We see things only when light *falls* on them

Because Sara used her knowledge of the world and personal experience, she was more successful in understanding and making sense of the passage. Though her miscues slightly changed the meaning of the text, the changes could be regarded as a personal

touch in the passage or establishing her ownership of the topic she reconstructed. One sentence from *Clouds in the Sky* better shows her perception of the topic.

C0107   On$^\vee$ *another* $^\vee$ day we may see many clouds.

                             any other   sunny

                             cover   still   though

C0108   The sun *cannot shine through* as well.

Sara inserted 'any' and 'sunny' to give new meaning to the phrase, she substituted 'another' with 'other' to create her own text. However in the next line, she appeared to use some semantic strategies and produced miscues that were different from the expected responses but they showed she was generating her own meaning. Sara had stated she did not have any background knowledge about the topic but her interest about the topic was very good.

Sara's Retellings

In the expository passages, Sara scored 68 out of 100 in retelling about *Light* from grade one level. Her background knowledge about this story was very little (2 on a 5-point Likert scale). Her interest level was fair (2 out of 5). In retelling about *Clouds in the Sky*, Sara could only recall the color of clouds. Her retelling score was 17 out of 100. She had littlebackground knowledge about this story but her interest level was very good.

Sara's mean comprehension score for the expository passages was 41 out of 100. Almost fifty percent of Sara's retelling score loss was due to her inability to correctly answer inferential and critical questions about one story. Sara slightly performed better on the narrative passages than the expository passages. That might be due to having higher interest in the narrative passages or focusing more on semantic strategies in reading narrative passages versus using more graphophonic strategies in reading expository passages.

Retrospective miscue analysis with Sara

I started Sara's retrospective miscue analysis session with a high quality miscue she made in the following sentence.

> 2. stayed
>
> 1. sat   and   blowing
>
> D0101   Pat *stood* by the lake. ˅A soft wind *blew*.

I asked her why she said 'blowing' instead of 'blew'. Sara said that she thought the wind was blowing at the time and blew did not make sense to her. Sara in her interview had told me that she liked to be an artist reader. This was how she was aesthetically interacting with the text.

Another example that Sara was using semantic cues can be shown in the following sentence.

> any other sunny
>
> C0104   On ˅ another ˅day we may see many clouds.

I asked her why she inserted 'any'. She said that 'any other' was a phrase that she was very familiar with and used a lot. I asked if she knew at that time that her miscue was different from the expected word. She said that she read it very fast and probably did not notice the difference. I asked Sara why she inserted 'sunny'. She said because 'sunny day' makes more sense to her. I explained to her that what she did was giving new meaning to the text. She was generating her own meaning and this is how readers transact with the text. Two other meaningful miscues that Sara made can be seen in the following examples:

> flashes
>
> L0112   we see things only when light *falls* on them.

In the next sentence, she substituted 'outside' for 'out'.

> outside
>
> S0102   It was snowing. They wanted to *go out*
>
>   and
>
> S0103   ˅to play.

I asked her why she made this miscue. She said that outside is like "outside in the yard" and "out is like going to town". She said that she always uses 'outside' and not 'out'. She said, "It sounds better if I say outside." I asked her why she added 'and' after outside. Sara said, "Because I always say so like go out and play."

Although most of Sara's miscues occurred due to relying on graphic cues too heavily, some of her miscues maintained some meaning and syntax though shaped in a different perspective as shown in this example.

<div align="center">cover   though</div>

C0109   The sun *cannot* shine *through* as well.

I asked Sara why she made this miscue. Sara said that she was thinking about the clouds that covered the sun and thought the sun could not shine well. I asked Sara if she knew the difference between 'through' and 'though'. She said she did not know these words. This shows that even though Sara cannot encode the word, she is trying to make her own meaning. Another example can be seen in the following line.

<div align="right">out of order</div>

L0108   Can you see a little bit when your lamp is out ˅?

I asked Sara why she made this miscue. Sara said that the sentence sounded incomplete to her and she added 'out of your order' to complete the meaning of the sentence. I asked Sara if she knew the meaning of 'the lamp is out'. Sara said it made no sense to her. But she stated that she knew "out of order" and used it a lot. Nonetheless, this strategy did worked for her. It shows she was making use of her knowledge of language to make sense of the text. In the following sentence, she made a miscue that changed the meaning of the sentence completely.

<div>   when</div>

L0111   *Without* light, we could not see.

I asked Sara why she made this miscue. Sara said she looked at the word and suddenly the word came to her mind. It was 'when'. I asked if she knew the meaning had changed. She said, "No." I said it means that when there is light, you cannot see which is not correct. Without light, we cannot see.

We also discussed her miscue in the following line.

I know

L0101   Where does light come from? *You know*

L0102   it comes from the sun. It comes from

I asked Sara why she said 'I know' instead of 'you know'. Sara said, " I thought like a question that asked me and I answered it." I asked if she thought there was a change in meaning. Sara said that "No". I asked if she really read that part or she just answered the previous question. Sara said that she just answered it but when she saw that on the text. She did not see the word 'you' because it came to her mind very fast and made sense. This miscue is a complex miscue because it consists of a phrase substituting another phrase.

Sara deleted some words when she was reading aloud and, as she had stated in her interview, she would skip a word if it was difficult for her. However, the words that she skipped were not difficult words or "big words", to use her term. They were simple easy words as in the following sentence and it made sense.

S0101   Bill and Kim looked (out) the window. They

I asked Sara why she deleted the word 'out' after 'looked'. Sara said that she probably did not see it because she looked ahead in the text. I asked Sara if the sentence without the word 'out' sounded and looked like language. She said, "Yes." I asked her if there was a meaning change because of the miscue. Sara said that she knew they were looking out of the window not at the window so she did not try to reread and correct it. I asked Sara how she knew that they were looking out the window if she deleted 'out'. Sara said, "Because it was a snowing day and they were like watching the snow." I asked Sara why she thought it was snowing. She said the title of the story was *A Snowy Day* that she just read before the first sentence and she could remember it. Sara had told me in her interview that she looked at pictures and other things in a story to understand the meaning of a sentence.

In another instance, Sara deleted two words and even deleted a whole sentence which is shown in the following lines:

L0104   What is the same about (all these) things?

L0106   Have you ever been in a place with no light at all?

L0107   (Most places have some light).

I asked Sara why she deleted the words 'all these' in line 104. They were not difficult words. Sara said that it did not make sense to her "Because it was only fire and lamp not all these." I asked her if she thought those words were not necessary. Sara said that the meaning of the sentence was complete and with these words, it would be more complicated. I asked Sara why she deleted the whole sentence in Line 107. Sara said, "Because I may lost my look away and could not remember what I was reading."

Another example that shows Sara was perceiving meaning in her mind and her miscue occurred due to not using the graphic cues can be seen in the following sentence.

2. along

1. away

L0112   We see things *only* when light falls on them.

These miscues were interesting because they did not resemble the expected response. I asked Sara why she made that miscue. Sara said that she first read 'away' "because if there is lights on something, you can see it even if it is away from you." I asked why she reread and then changed her response. Sara said that 'along' was probably a better word because you can say it for everything whether near or far. This miscue occurred due to not making sufficient use of graphic cues and meanings. Sara was thinking about the meaning and that is how she made it. I discussed these miscue with Sara and her use of the semantic cues to produce them.

Some of Sara's miscues occurred due to her reliance on graphic cues without sufficient use of semantic cues and she was unable to correct herself as in the following example:

2. slide   2. skate

$1. sed   1. ska

S0109   Bill and Kim *used* some *sticks* and stones.

I asked Sara how she made these miscues. Sara said that she was trying to sound out the words but was not sure if she was reading properly. I asked Sara if she knew the meaning of the words. She said she had no idea what these words were. I read the sentence correctly. To my surprise, Sara knew both 'used' and 'sticks'. I expected her to not know the meanings of one or both of these words. However, she knew both. This suggests that

ESL students cannot correctly encode words that already exist in their oral discourse unless they sufficiently activate their background knowledge.

Boshra
Background Information

The third participant in this study is referred to here as Boshra, Sara's sister whose case was discussed previously. She was admitted with her family to Canada in 2003 as a Christian refugee from the Sudan. Before coming to Canada, the family lived in Egypt for a few years. Upon arrival in Canada, they stayed in Ottawa for three weeks and then moved to Alberta. Boshra and her family were living in our neighborhood. My wife told me about them and so I went to their home, a few houses away from ours, and then obtained consent from the parents, and invited them to participate in the study. The sisters agreed to participate.

During my initial interview with Boshra, she said, "We never went in school in our country because of war and other problems. We did not go to school in Egypt because the school was very far and it was expensive too."

Upon arriving in Canada, Boshra was placed in grade five though she had no prior schooling in her home country. She completed grades five, six, and seven in an Alberta school. In the summer of 2007, Boshra was 14 years and 5 months old and attended grade eight. She spoke both English and Arabic but she was not able to read and write in Arabic as she never attended school in her home country. She was also taking a Spanish class at school. It must be noted that data collection for all of the participants started in the summer of 2007 and continued through August 2008.

Beliefs and Perceptions About Reading

Boshra defined reading in terms of learning from books such as learning math and social studies in school. Her description of a good reader was a person who reads many books and can follow along as she reads. She mentioned her friend Grace as a good reader because Grace understands as she reads. She said that if Grace comes across a difficult

word, she can guess that word because she has read a lot and probably has seen the word before. I asked Boshra how she learned to read in English. She said, "sounding out words, like matching pictures with names and we match, we have a sentence or word we matched it with the right name". I asked Boshra what she liked to read. She said she liked *Mystery* and she started it two days ago. I asked her what else she liked to read, she said:

> Some fun stuff like Christmas stuff we do, I like. We did, you have to do it and perform it like turn on the lights on the Christmas tree and read it up in a different way.

Boshra thought she could have learned better had she been in an ESL classroom. She said that when she was presenting in her mainstream class, she got very nervous because "when you mix up a word, they will be staring. You get nervous." I asked if she could learn some English from native English speakers in her class. She said, "no I don`t think so because most of the things you do by yourself." I asked Boshra if there was a book that she liked to read or a special book, she said she didn't know.

Boshra believed she was not a good reader because she couldn't read or correctly sound out big words. She said, "I am not a good reader because I can't read all the words. I don't get used to English. I don't rhythm." She said that she not only wanted to improve her reading skills in English but she wanted to learn Arabic as well. She explained:

> I like to learn more Arabic. When we arrived in Canada, it was the first time in my life that we went to school. I never went to school in my country and I cannot read and write in Arabic. I like to learn reading in my mother language. I think if I had school in my country and learned more Arabic, I had a better feeling about myself as reader. Now I think that I am not a good reader because I can't read in my mother language and have not learned good English either. My elder sister sometimes helps me out with my English and tries to teach me Arabic too. My parents cannot help me because they had no schooling in our country. They don't know English either.

A significant aspect of Boshra's views on reading was that she very much liked to do online reading as well as read children's storybooks. She said:

> I like improve my reading and other kinds of learning activities and games on the web. Everyday I learn lots of new different things on the computer. I like to read

about everything and I also like to typewrite on the computer. When my teacher gives us homework, for example asks us to write a composition, I read everything in detail about the topic on the computer and then start writing my own paper. I like all homework that we have to do on the web. We do book reading in class too. Some students who got the same books are paired and those that have different books read by themselves. But I like reading on the web more because I have more options there. I can listen, watch and read all at once. If I have a question, I can search it. If I cannot read a difficult word, I can listen to the talking dictionary and learn that word.

Boshra also said that she liked reading more children's literature books and poetry. She said she enjoyed reading poems and practiced reading them aloud. However, she was frustrated with what she called "big words". She said she wanted to improve her reading so she could read everything in English.

I asked Boshra what she would do if she could not read a word. She said that she would ask the teacher. I asked if she was reading alone, what would she do? She said she would skip that word and maybe come back to it later or ask the teacher or a friend in class. She also stated that she would try sounding out the word or find a similar word with similar sounds to help her to read that difficult word. She also mentioned that she would think about the word and if she could not get it, she would use a monolingual dictionary to look it up.

I asked Boshra how she would help a friend who could not read a word. She said that she would read with her together and that would help her friend to learn the difficult word after she reads it. She also said that she would also ask her friend to start reading and check her reading and then she would teach her the difficult words.

Narrative Reading
The Cueing Systems

Boshra read five stories: *A Snowy Day* at the grade one level; *The Lesson*; *The Boy and the Fox* at the grade two level; *The Crow and the Pitcher* at the grade three level and *The Two Farmers* at the grade-four level. Boshra made 87 miscues out of 666 words. Her

average MPHW for the stories was 13 words and her average reading speed 85 words per minute. Her oral reading was slow but her pronunciation was good. Boshra made 11 high quality miscues on the narrative passages. The following are examples of her high quality miscues. She inserted 'really' after 'were' and said 'outside' for 'out' in the following lines in reading *A Snowy Day*.

<div style="text-align:center">really</div>

S0101   Bill and Kim looked out the window. They were [∨]very happy.

<div style="text-align:center">outside</div>

S0102   it was snowing. They wanted to go *out* to play.

Her insertion of the word 'really' suggests that readers' intake is not merely graphophonic as Goodman (1965) stated, "graphic information (letters, letter constituents, and patterns of letter) is by no means the sole input in the reading process" (p. 131). This miscue is similar to the insertion of 'green' by Sara before 'grass'. It is the readers' perceptions that produce the meaning not recognition of the letters in the words. Boshra perceived the children to be very happy. This was a perceptually-driven schema that caused this miscue. She made other similar miscues. For example, in reading *The Lesson*, She substituted 'boys' for 'children. This miscue made sense in the context of the story and did not require correction.

<div style="text-align:center">boys.</div>

L0101   There were once some *children* who were always fighting.

Boshra's miscue had no graphic similarity to the expected response. It was a schema-driven miscue that shows assimilation (Piaget, 1977) because the reader's schema was so strong, the miscue was accepted immediately.

In reading *The Boy and the Fox*, Boshra made three high quality miscues: two substitutions and one insertion. This showed that she was concerned for meaning and was trying to bring coherence to the story. According to Goodman (1994), "Maintaining the syntactic acceptability of the text allows readers to continue reading and at the same time to maintain the cohesion and coherence of the text" (p. 234). Boshra inserted the definite article 'the' to make the meaning more explicit. She inserted 'was', which implied she was processing meaning at the level of deep structure.

	the was the
F0101	One day *a* boy saw a fox ⱽsleeping on ⱽ top of
F0102	a rock.

In reading *The Crow and the Pitcher*, Boshra made two high quality miscues in one line that showed her sophistication in using the syntactic and semantic cues, predicting and confirming strategies along with her knowledge of English syntax and semantics. Both of these miscues showed that she made sufficient and effective use of the syntactic cues in coordination with predicting strategies.

	to trip
P0106	The crow tried *and tried*. Finally, she gave up.

Boshra did not make a miscue when she first read 'tried'. She made the miscue when she wanted to read the second one. According to Goodman (1994), the integration of all of the language cuing systems are necessary for reading to occur. Boshra assimilated the word 'tried' the first time she scanned it but could not make sense of it along with the second one, as she had activated her overarching schemata to put meaning in this line. She created the perception in her mind that the crow was trying to push or make the pitcher fall on one side so it could drink the water. She used her knowledge of English syntax to construct the proper structure. This implies that even ESL students have some sophisticated knowledge of the syntax and semantic cuing systems in the language. Although these miscues did not fit the context of the story and only made sense in the sentence, they showed how Boshra manipulated her knowledge of syntax and semantics and made predictions to generate these responses.

Boshra made two high quality miscues with proper names. She read 'David' as 'Dave' and 'Joseph' as 'John' throughout reading *The Two Farmers*.

	Dave John
F0101	Once there were two farmers, *David* and *Joseph*
	decide
F0102	who *decided* to form a partnership. They

Boshra repeated these miscue to the very end of the story and never corrected her miscues. She knew these were just names and did not change the meaning in the story.

She also substituted 'decide' for 'decided'. The miscue could be considered a high quality miscue though it does not correspond with the previous sentence grammatically.

Similarly Boshra made sufficient use of the graphophonic cues by producing responses from which 78% had high graphic similarity to the target words. Sixty four percent of her miscues had high sound similarity to the expected responses. Furthermore, Boshra made sufficient use of syntactic cues. Sixty six percent of her miscues were syntactically acceptable. Forty eight percent of her miscues were also semantically acceptable. This means that her use of semantic cues was sufficient enough to make sense of the stories. She was also engaging all of the cueing systems more fully.

Boshra's Strategies

Boshra's reading strategies were more similar to Ali's. She started reading the first story with sufficient use of syntactic and semantic strategies. Her first few miscues were insertions that fit the context of the story and were high quality miscues. They did not change the meaning of the sentences and showed that she was using predicting/confirming strategies effectively. The following are examples:

2. went

really $1. want

S0102   They *were* [∨] very happy. It was snowing. They *wanted*

outside

S0103   to go *out* [∨] to play.

In reading the story at the grade one level, Boshra made more meaningful miscues that showed she was using predicting, confirming and correcting strategies with the use of her syntactic and semantic knowledge of the English language. However, as she started through grade two and three level passages, she focused more on graphophonic strategies and used fewer predicting, confirming and correcting strategies. The following are more examples that show how she switched strategies as she proceeded to more difficult passages.

2. loun

$1.lou

F0103   The boy said out *loud*, Ìf I kill the fox, I

2. money

©1.many

F0104   can always sell her skin. I can the *money* to

2. sed

$plaint $1. ben

F0105   buy and *plant bean* seeds.

   Boshra's reading process stopped at the recognition initiation stage (Goodman, 1975) in reading line F0103. She only used the graphophonic cues to sound out the word but she did not make sufficient use of semantic cues. According to Goodman (1994), "Reading is a cyclical psycholinguistic process. Perceptual processing depends on optical input, syntactic processing operates on perceptual input, and semantic processing depends on syntactic input" (p. 35). Boshra did not make sufficient use of the semantic cues and thus was unable to predict meaning.

   Boshra's approach in reading this passage was basically using graphophonic strategies without sufficient use of syntactic and semantic cues available in the text. She did not have sufficient background knowledge about this story but her interest level was very good. Boshra continued using graphophonic strategies through grade three and four level passages. She tried to use chunking and sounding out like Sara did. This strategy worked with words that she had in her oral language but if the word did not exist in her oral language, she could not use syntactic and semantic cues to identify the word. The following are some examples of her chunking and sounding out strategies:

2. pitcher

©1.pitch

C0102   She finally found a water *pitcher*. When the

2. beak

©1.beck

C0103   crow put its *beak* into the mouth of the tall

C0104   pitcher, she found that it held only a little water.

<div align="center">2. cheer</div>

<div align="center">$1.chair</div>

C0105   She could not *reach* far enough down to get at it.

Boshra used graphophonic strategies for the first two miscues and could correctly predict the word. However, for the third miscue, she could not use chunking effectively and, as she made insufficient use of the semantic and syntactic cues, her response caused a meaning change. As mentioned earlier, readers need the use both syntactic and semantic strategies with their knowledge of graphophonic cues to identify the word.

Boshra's insertions were similar to those made by Sara. They added new meaning to the story. For example, she added 'together' in the following sentence after 'something' as follow:

S0104   Bill and Kim could not wait to build

        together

S0105   ^ᐯsomething with the snow.

Boshra's miscue stresses the fact that the characters were building the snowman together. Though this inference was implicit in the lines, she made it explicit as it was apparently important for her. In the story of *The Boy and the Fox*, Boshra made a similar miscue that gave new meaning to the sentence.

F0105   Then I will sell the beans and use the money

                rice

F0106   to buy the ^ᐯ field across the way.

Although, it was stated earlier that the boy was going to plant bean seeds and consequently it would be 'bean field', she inserted 'rice' and produced the meaning 'rice field' that was not implied in the text.

Boshra had the highest number of insertions in the form of definite and indefinite articles. She substituted the definite article 'the' instead of 'a' and also inserted it in places where there was no article in the text at all. The following are some examples as she was trying to shape meaning.

                 the   the

F0101   One day *a* boy saw a fox sleeping on^ᐯ top

F0102   of a rock. (from *The Boy and the Fox*)

This could be the result of trying to make sense of the story. As well they could be a sign of how article use from her first language Arabic is influencing her use of articles in English. Since in Arabic the definite article is shown by a prefix of 'Al' and the indefinite article is usually embedded with the word, there is a greater tendency to use a definite article for an indefinite article. This shows the reader's concern for meaning as she is engaged with the text.

Boshra's Retellings

Boshra's retelling of *A Snowy Day,* a grade-one level story, was very good. She could remember the characters and all major events. There was only one question she could not answer at the critical level of understanding. When I asked her if this story could have happened, she simply said, "I don't know." She could have made a logical response such as, "yes, because the events sound real." Her retelling score for this story was 85 out of 100. She had stated that she had no background knowledge about this story but her interest level was very good. Boshra's retelling in *The Lesson,* a grade-two level story, was similar to the previous one. Her retelling score was 85 out of 100.

When retelling *The Boy and the Fox*, a grade-two level story, Boshra experienced gaps in recalling the characters and some events. Yet, she was able to generate inferences about the story. Her retelling score for this narrative was 51 out of 100. She had no background knowledge about this story but her interest level was very good.

In the story of *The Crow and the Pitcher*, though Boshra's background knowledge and interest level were similar to the previous story, her retelling was superior to the previous story. She could remember the characters and two major events in the story. Her retelling score in this story was 68 out of 100. However she could not recall information about the main character or generate inferences from the story. It seemed that the differences in Boshra's retelling and comprehension of the stories could be more related to how strategically she approached the reading of each narrative. When she focused more on graphophonic strategies, she lost more meaning than when she used more semantic strategies.

In retelling *The Two Farmers*, a grade-four level story, Boshra could recall all characters and major events. She could produce inferences from textual information and

was able to comment critically about the events. Her retelling score was 100 out of 100. She had no background knowledge about the story but her interest level was very good. Boshra's mean average retelling score for the narrative passages was 85 out of 100. This suggests that Boshra made sufficient use of the semantic cues in reading the narrative passages.

<div align="center">

Expository Reading

The Cueing Systems

</div>

Boshra read six expository passages: *Light* at the grade-one level; *Our Best Friends* and *Hide and Seek* at the grade-two level; *Hangnails* and *Ant Lion* at the grade three level, and *Smelly Stickers* at the grade four level. Boshra made 103 miscues out of 775 words she read. On average, she made 13 miscues per hundred words. She made 20 high quality miscues out of a total of 103 miscues on five expository passages: ten of her miscues included using different verb forms and occurred due to graphic cues. For example, she substituted 'liked' for 'like'; and 'has' for 'had' in *Hide and Seek* in the following sentences:

                liked

H0101   Many children *like* to play "hide and seek."

                search

H0109   They tried to find or "*seek* out" birds and flowers.

                      has

H0112   If one did, this was a sign that spring *had* really started.

None of these miscues needed correction as they made sense in the context of the story although the past verb form 'liked' did not fit syntactically with the rest of the text. It was meaningful nonetheless.

The other ten high quality miscues that Boshra produced occurred due to an overreliance on semantic cues. This suggests that Boshra, in reading these lines, used her knowledge of the semantic and syntactic cues to identify the words. According to Goodman (1970), "The cuing systems are used simultaneously and interdependently. What constitutes useful graphic information depends on how much syntactic and semantic information is available (P. 250)." Boshra used minimal graphic cues and predicted the

text with sufficient use of the syntactic and semantic cues. Thus she generated a meaningful response though it was different slightly from the expected word. For example in *Light*, Boshra made the following three high quality miscues:

                                 must

L0103   A fire *makes* light. A lamp

L0110   Can you see a little bit when your lamp is out?

                          could   coming

L0111   If you *can*, there is some light *getting* in.

      Boshra substituted 'must' for 'makes' in line L0103. She also substituted 'could' for 'can' and 'coming' for 'getting' which made sense in the context of the passage. As Boshra continued reading through higher grade-level passages, she made more low quality miscues and fewer high quality ones. Her high quality miscues usually occurred in specific portions of the passage. These portions or pivotal points, as Goodman referred to them, included concepts and themes that she found herself familiar with such as the following that she produced in *Hangnails*:

             when

H0106   *Then* a piece of skin might start peeling off

                                 running

H0107   Soon the piece of skin starts *rubbing* against

H0108   your fingers or against objects that you touch

                             you

H0112   What do you do with a hangnail? ⋁ Don't

                 2. peel

              ©1. pinch

H0113   pick it. Don't *bite* it off

      Boshra substituted 'when' for 'then' which made the meaning more clear and transparent and it made sense in the sentence and the context of the passage. She said 'running' instead of 'rubbing' which fits the meaning implied in the sentence. In the next line, Boshra interacted with the text at a personal experiential level by inserting 'you' before 'Don't' and created a regulatory speech act as if she was talking to her sister about her hangnails. Whenever the students experienced a more personal and emotional

interaction with the texts, they were more successful in encoding the words by coordinating between their knowledge of the English language syntax and semantic and their use of predicting, confirming and correcting strategies. In the last line, Boshra first substituted 'pinch' and then she thought for some reason that a hangnail cannot be pinched, so she regressed and said 'peel' which made sense in the context of the passage.

Boshra's Strategies

Boshra showed that she was very concerned with meaning in reading the expository passages. On average, 51% of her miscues were semantically acceptable. She also made sufficient use of syntactic cues. For example, in reading *Light* at grade one level, she made sufficient use of semantic strategies. Her miscues were either corrected or they only slightly changed the meaning of the sentences:

	the
L0101	Where does ᵛ light come from? You
L0102	know it comes from the sun. It comes from

                                2. fire

              star   in the ©1.fur must

L0103	the *stars* too. ᵛ(A) *fire makes* light. A lamp
	must
L0104	makes light. What is the same about (all)
L0105	these things. They are (all) hot.

Boshra inserted 'the' before 'light'. This insertion did not cause any change in meaning and it could be due to language interference between English and Arabic. In Arabic, this noun has a definite article. She substituted a single noun 'star' for the plural form, which slightly changed meaning but did not cause any major change in meaning. She inserted 'in the' at the beginning of the next sentence and deleted the indefinite article 'a' from the sentence. She used graphophonic strategies to produce 'fur' but she used her semantic knowledge and did not confirm that miscue. She predicted, confirmed and corrected her miscue. However, she did not read 'makes' and produced the miscue 'must' which was syntactically correct but semantically only made sense in part of the sentence.

It made sense up to that point in the sentence. At the end, Boshra deleted the word 'all' twice which did not make any meaning change. Boshra made sufficient use of semantic strategies of predicting, confirming and correcting in reading this passage although she had stated she did not have any background knowledge about the topic. Her interest level was very good.

In *Hide and Seek*, Boshra focused on graphophonic strategies and did not make sufficient use of semantic cues which was seen throughout the passage as follows:

<div align="center">head   cheek</div>

H0101   Many children like to play "*hide* and *seek*."

      head   cheek

H0102   *Hide* and *seek* did not begin as a game. It

<div align="center">fair way</div>

H0103   started many years ago in a *far away* land.

Boshra said 'head and cheek' instead of hide and seek twice. She did not activate her semantic knowledge of the context of the story to predict and correct her miscue. Instead, she continued focusing on graphophonic strategies, which were not effective in encoding the word for her. Likewise, in reading the next line, she said 'fair' instead of 'far' and 'way' instead of 'away' which had graphic similarity with the expected words but she did not use her knowledge of the semantic system within the sentence to disconfirm, predict and correct her miscue. In regard to this story, Boshra had stated she had low background knowledge but high interest in the topic. However, her performance showed that she was not making sufficient use of syntactic and semantic cues. The passage explained the history of 'hide and seek' as a game, not how to play it. Although she had familiarity with the game, she did not know much about the history of the game. She might have expected to read about the game itself and how children play it, something Boshra had experience with. However, the story unfolded in a way that she did not expect and consequently she had little knowledge about it. This may have killed her interest too. Accordingly, she did not make sufficient use of the semantic cues in the passage. However in the next passage, *Our Best Friends*, Boshra had both high background knowledge and interest, and she was more successful in using predicting, confirming and correcting strategies.

2. wayvel

$1.way   after

B0110   *Wolves* often followed ⱽhunters. They

3. they want some of the meat

2. wouldn't come to hunt

©1.would

B0111   *wanted* some of the meat.

Boshra used graphophonic strategies in reading 'wolves' without using semantic cues. She knew that they were things that followed the hunters. However, she did not use her knowledge of the world to make a prediction or an inference, which could have made her name an animal she knew even if she could not correctly predict the word 'wolves'. She could not encode the word that might have existed in her oral language. However, as she proceeded, she used more predicting strategies. She inserted 'after' before 'hunters' to suggest that she understood the wolves were going after the hunters. In reading the next line, she regressed twice and each time predicted and corrected the whole phrase until she produced 'they want some of the meat' that semantically fitted the context of the sentence though it was slightly syntactically different. It was still syntactically correct English.

In *The Ant Lion* at grade three level, Boshra heavily used graphophonic strategies. She also used predicting, confirming and correcting strategies. However, she was more successful with using syntactic cues in her corrections than using semantic cues simply because they were easier to fixate on, select the right form and then encode it. The following are some examples:

2. ants   2. trap

An   lion feeds ©1. ant   ©1.trip

A0102   ⱽAnt *lions feed* (on) *ants*. They *trap* them

A0103   in holes that they dig in dry, loose soil.

Boshra inserted 'an' before 'ant' but as it did not make a change in meaning, she did not correct it. She also deleted the 's' after 'lion' to make it grammatically correct with 'an', the indefinite article. So, she is using what she knows about syntax so that her reading sounds right. However, she deleted the preposition 'on' after 'feed'. This miscue caused a change in meaning and she did not correct it because she did not activate the

meaning of the two words with and without the preposition. In the next line, she used graphophonic and syntactic strategies but her response was not confirmed semantically. Because of this, she regressed and corrected it. Although Boshra was successful in making corrections and using semantic knowledge in coordination with graphophonic knowledge, when she could not make predictions, she would ask me, just as she had stated in her interview, that if she came across a difficult word she did not know, she would ask her teacher. The following are the examples:

<div align="center">3.shaped hole</div>

2.at	2. what's that? I don't know
©1.as	$1. soon

A0111   *at* last, it reaches the center of its *cone*-shaped

<div align="center">2. heads</div>
<div align="center">$1.dig</div>

A0112   hole. The ant lion then *hides* in the soil at the bottom.

<div align="center">4. jaws</div>
<div align="center">3. what's that?</div>
<div align="center">2. joes</div>

the	trips	©1. jaw

A0116   The waiting ᵛ ant lion *traps* the ant in its *jaws*.

Boshra made a miscue on 'at' but she looked back and used graphophonic strategies to correct it. Or it might not have sounded right to her and made her reread it. On the next word, she could not make sufficient use of the semantic cues. Thus her predicting, confirming and correcting strategies were not effective. On her second attempt, she seemed to be asking me what the word was. I did not answer because I wanted to see what she was going to do next. In her third attempt, she basically omitted cone, that only changes meanings slightly. Likewise, she tried to use the syntactic and semantic cues within the sentence to encode 'hides' but was not successful although her responses suggested she was concerned for meaning. In the next line, her miscues suggested she was reconstructing meaning but when she reached the word 'jaws', on her third attempt, she asked me what the word was and finally she was able to predict it with regard to the semantic cues she used in the sentence. As the passages got harder, Boshra continued

using both graphophonic along with predicting and correcting strategies to encode the words.

H0101   The rubbing bothers the hangnail and makes the skin red

                    2. sore

                    ©1. shoe

H0102   and *sore*.

                                        2.taking

                                        ©1.talking

H01116   You can avoid getting hangnails by *taking*

H0117   good care of your hands and nails.

Boshra used graphophonic strategies to read 'sore' but her first response was 'shoe', which was graphically similar to the expected response but did not make sense. However she was successful in using the semantic cues and correctly predicted the word. Likewise, her second miscue was very similar to the expected word graphically, but did not make any sense. She was able to use predicting strategies with regard to the meaning of the sentence and correct her miscue. These show she was continuing to strive for meanings.

Boshra's Retellings

In reading the expository passages, Boshra did well on *Light*, a grade one level expository passage. She only missed one major point about the article. Her retelling score was 50 out of 60. She had mentioned that she had little background knowledge on this article but her interest level was very good. However in reading *Hide and Seek*, a grade two level article, Boshra's retelling score dropped. She missed two major points that included generating inferences from the text and using her knowledge of the world and logic to relate to the story, which included critical thinking. Her retelling score for this article was 68 out of 100.   However, she had mentioned she had high background knowledge and very good interest in the article.

In reading *Our Best Friends*, a grade-three level expository pasasage, Boshra's retelling performance improved compared to the previous level. She obtained a retelling score of 85 out of 100. But she had stated that she had a good amount of background

knowledge about the article and her interest level was very good too. Her retelling performance in *The Ant Lion*, a grade three level was similar to the previous level and the score obtained was 85 out of 100. However her background knowledge and interest level was slightly lower compared to the previous article. She had stated that she had some background knowledge about the article and her interest level was good. However in reading *Hangnail*, another grade three level article, her retelling performance suffered more compared to the previous article. But she had stated that she had very little background knowledge about the article and her interest level was very low too. Her retelling score for this article was 17 out of 100.

In reading *Smelly Stickers*, a grade-four level article, Boshra's retelling was still low. Her score was 34 out 100. However, she had stated she had no background knowledge about this article and her interest level was low too.

Boshra's retelling of *A Snowy Day,* a grade one level story, was very good. She could remember the characters and all major events. She could not answer a question at the critical level of understanding. When I asked her if this story could have happened, she simply said, "I don't know." She could say a logical response such as, "yes, because the events sound real." Her retelling score for this story was 50 out of 60. She had stated that she had no background knowledge about this story but her interest level was very good. Boshra's retelling of *The Lesson,* a grade two-level story, was similar to the previous one. Her retelling score was 85 out of 100.

In retelling *The Boy and the Fox*, a grade two level story, Boshra experienced gaps in recalling the characters and some events. Yet, she was able to generate inferences about the story. Her retelling score about this narrative was 50 out of 100. She had no background knowledge about this story but her interest level was very good.

In the story of *The Crow and the Pitcher*, though her background knowledge and interest level were similar to the previous story, her retelling was superior to the previous story. She could remember the characters and two major events in the story. Her retelling score in this story was 68 out of 100. However she could nor recall information about the main character and generate inferences from the story. It seemed that Boshra's differences in retelling and comprehension of the stories could be more related to how strategically

she approached reading each narrative. When she focused more on graphophonic strategies, she lost more meaning than when she used more semantic strategies.

In retelling *The Two Farmers*, a grade four level story, Boshra could recall all characters and major events. She could produce inferences from between the lines and comment critically about the events. Her retelling score was 100 out of 100. She had insufficient background knowledge about the story but her interest level was very good. Boshra's mean average retelling score for the narrative passages was 78 out of 100. This suggests that Boshra made sufficient use of the semantic cues in reading the narrative passages. Findings from the retelling did not show consistency with the miscue analysis in terms of comprehension and number of miscues. When comprehending and comprehension were both high, the number of miscues that was supposed to be low, as these two measures had an opposite correlation, was high too. Usually when comprehension is high, the number of miscues is low. This suggests that some of the words that readers miscued on in reading the passages were familiar concepts and already existed in the students' oral language. This produces a discrepancy between results from miscue analysis and students' retellings.

Her patterns of retelling about the articles showed a descending performance as the level of articles went up and her amount of background knowledge and interest went down. She was more successful in generating inferences and critically interpreting the article when her background knowledge and interest level were both high.

Retrospective Miscue analysis with Boshra

I started Boshra's retrospective miscue analysis session with one of her interesting miscues. In reading *The Two Farmers* at the grade-four level, Boshra miscued on the names of the farmers and was consistent throughout the story. She substituted Dave for David and John for Joseph. They are nouns and meaning is kept.

1. Dave   2. John

F0101   Once there were two farmers, *David* and *Joseph*.

I asked Boshra why she did not correct the miscue. She said that she knew these were names of people and it did not matter if she could not say them correctly.

Some of Boshra's high quality miscues occurred due to reliance on graphic cues, such as the following:

<div align="center">liked</div>

H0101   Many children *like* to play "hide and seek."

<div align="center">has</div>

H0112   This was a sign that spring *had* really started.

I asked Boshra why she said 'liked' instead of 'like'. She said she was thinking about the past and so said 'liked'. I asked her if the meaning had changed because of the miscue. She said, "Not really." I asked Boshra why she said 'has' instead of 'had'. She said that "Because it is spring now and it has started." I told Boshra that we were talking about the story and not spring time in Canada. She said she was thinking about the spring and so said 'has started'. I asked Boshra if she thought the meaning of the sentence changed because of her miscue. She said, "No."

Some of Boshra's high quality miscues had no graphic similarity to the expected word and suggested they occurred due to semantic cues as in the following:

<div align="center">really</div>

S0102   They were ˅ very happy. It was snowing.

I asked Boshra why she inserted 'really' in the sentence. She said that she did it because it made more sense and she was thinking that the kids were really happy. I asked if that changed the meaning. Boshra said, "There is one word more but not a change in the meaning". It is also fine syntactically.

In reading the next paragraph, Boshra miscued on a proper noun and then made two more high quality substitutions and one insertion as follow:

Billy   make

S0104   Bill and Kim could not wait to *build*

2. something

©1. some   together

S0105   something ˅with the snow.

I asked Boshra why she said 'Billy'. She said that she usually called her friends in a different way "Because it is more friendly and this name is one the names I heard a lot like Billy." I asked Boshra why she miscued on 'something'. Boshra said that she tried to

sound it out. She first chunked the word into two parts and then read it. Boshra had said in her earlier interview that she chunks big words and then sound them out. I asked her why she made the last miscue. She said, "Because I was reading and thought this word is missing." I explained to her that she was producing her own meaning from the text and from her knowledge of the world. Her meaning generation and using her knowledge of the world is more obvious in her next miscue in this story where she inserted the word 'snow' in the sentence she read.

<div align="center">snow</div>

S0106   When they went outside, they made two large $^\vee$ balls.

I asked Boshra how she made this miscue. She said that as she was reading, she thought they were making a snowman. So she added 'snow' to the text to make it more meaningful. She was using her knowledge of the world to shape the text in the way she perceived.

Some of Boshra's miscues were cued by graphic and syntactic similarity such as 'walks' for 'walking' in the following story.

<div align="center">walks</div>

A0114   An unlucky ant *walking* on the edge slides

I asked Boshra why she made this miscue. She said that she just saw it as 'walks' and it made sense to her. I asked if she thought she changed the meaning. Boshra said that 'walking' and 'walk' have the same meaning and there should be no meaning change. I asked if she would correct it had she seen the 'ing'. Boshra said, "No because I got the meaning."

Some of Boshra's miscues had no graphic similarity with the expected word and were cued by semantic and syntactic cues such as the following one.

<div align="center">2. peel it</div>

<div align="center">©1. pinch it (oh, no)</div>

H0113   Don't pick it. Don't *bite it* off. That will only make it worse.

I asked Boshra how she made this miscue. She said that as she was reading and she got to the word, she could not read it, so she said 'pinch' instead. But she realized that a hangnail can not be pinched and so she changed it and said 'peel'. I asked Boshra if the meaning was changed. Boshra said she could read 'bite' and did not know what it was.

But she knew what peel means and it made sense to her. She had reproduced the text in her own words and it is not really important to read exactly the printed words on paper.

Most of Boshra's miscues occurred due to a reliance on graphic cues. In some cases, she used sufficient knowledge of semantic cues and was able to correct and confirm her responses. In cases, where she was unable to make sufficient use of the semantic cues, she heavily used graphophonic and syntactic strategies and thus missed the meaning as in the following examples:

<div align="center">plaint ben   sed</div>

B0104   I can use the money to buy and *plant bean seeds*.

I asked Boshra how she made this miscue. She said that was trying to sound out these words but had no idea what they meant. I asked Boshra if she knew the meaning of these words. She said she did not know the words and that is why she did not try to correct. Another example that shows Boshra's miscues occurred due to graphic cues and insufficient use of semantic cues as in the following sentences:

<div align="center">2. benfor</div>

<div align="center">$1. ben</div>

F0113   This year I have *benefitted*. Next year it will be your turn.

I asked Boshra how she made this miscue. She said she tried to chunk parts of the word and sound out them separately and then read the word. I asked Boshra the meaning of 'benefitted'. She said she did not know. In the next line where Boshra focused on semantic cues, she was successful in making a high quality miscue.

<div align="center">kid</div>

L0109   One *child* held out the bunch of sticks.

I asked Boshra how she made this miscue that does not have full graphic similarity to the expected response. She said that she was thinking about the story as she was reading and said 'kids' because that word was a very common word for her. She noticed that she made a miscue but did not go back to reread and correct because it was making sense and it sounded fine (syntax). I asked Boshra the difference between 'children' and 'kids'. She said they were the same thing but she prefers to use 'kids'.

I discussed two miscues that Boshra made in one line. One was a meaningful insertion and the other one that occurred due to graphic cues.

2. wayvel

$1. way   after

B0110   *Wolves* often followed ⱽhunters. They

    I asked Boshra how she made the first miscue. She said that she tried to sound it out but it did not make any sense to her. I asked why she inserted 'after' before hunters. She said that "these wayvels were going after hunters." Therefore, she wanted to make the meaning more transparent. I asked her if she knew what 'wayvels' were. She said she didn't know. I said what she thought about 'vayvels'. She said, "I think they are some kind of animal or pets." Boshra guessed they were some kind of animals that followed hunters but did not exactly what they were because she could not sound out the word that most likely existed in her oral language. However, she continued reading along because things made sense to her. When she came to the same word in singular in the next line, she read 'wolf' correctly and knew what it was.

    I discussed a couple of Boshra's miscues with her that showed she was most successful when she used both graphic and semantic cues in making sense from print in the following sentences:

3. scratch

2. scrash

©1. stre

S0113   When you *scratch* the sticker, you break

          container

S0114   open some of the *containers*. That releases

         squash

S0115   the smell. But don't *scratch* too hard.

    I asked Boshra how she made the first miscue. She said that she first sounded out the first part and then tried to sound out the whole word. I asked her if she needed to make this correction. She said, "Yeh, it was not making any sense to me." I asked her how she made the second miscue. I asked Boshra why she did not correct the second miscue. Boshra said that she thought it was about one container when she was reading and she did not notice the plural form. I asked Boshra if she had to correct this miscue. Boshra said, "No, it is ok to say some container." I asked Boshra how she made the third miscue.

Boshra said that she was thinking about the container and as soon as she saw 'sc' the word squash came to her mouth and it made sense because if you squash a container, it bursts and releases the smell. I asked Boshra if she needed to correct her miscue. She said that she did not know at the time that this was a miscue but she would not correct if she knew it was a mistake because it made sense in the story. In the next section, I discuss a synthesis of the findings of the study.

Synthesis of the Findings

The students varied in their perceptions of reading and in their views of themselves as readers. For example, Ali defined a good reader as a person who can read all the words but he said he was not a good reader because he could not sound out difficult words. Yet, Ali had at least one characteristic of a good reader. He said that he tests himself when he learns something new and so he considered himself a good learner. Ali's perceptions of himself as a reader might be affected by his inability or lack of interest in reading school related materials. He said that he liked reading science fiction and real life stories but not school texts such as social studies because it is so difficult to read these books.

Unlike Ali, Sara defined a good reader as a person who can learn from her reading and she stated that she was a good reader because she read every night. Sara seemed to refer to an aesthetic stance in her view of reading and regarded reading as a means of expressing one's feelings. However, Boshra, who had a similar perception of the reading process and purpose of reading, did not view herself as a good reader. Boshra's definition of a good reader was a person who can read fast and understand, but her reason for not being a good reader was that she couldn't read "big words". This view seemed to be at odds with her perceptions of reading.

Table 01 on page 145 shows the ESL students' beliefs and perceptions about themselves as readers.

Table 01: The ESL Students' Beliefs and Perceptions about Themselves as Readers

	Are you a good reader or not?	Why/why not	What would you like to do better as a reader?
Ali	Good learner not a good reader	Cannot sound out difficult words	Read real life stories and science fiction Sound like a native speaker
Sara	Good reader	Read every night	Become an artist reader Can read everything about art Read about everything, about cleaning and stuff and cooking
Boshra		Can't read all the words Can't rhythm any words Can't get used to English	Learn more Arabic Read more online Read children's books

The participants shared knowledge of some common reading strategies, such as skipping a word and asking the teacher. However there were differences between them. Both Sara and Boshra mentioned contextual strategies such as looking at the pictures and meta-cognitive strategies such as thinking about words. Ali did not know about or did not mention these kinds of strategies. Boshra also provided an analogy strategy that the other two did not know about.

There were sharp differences between the students in the ways they believed they would help a struggling reader. Sara mentioned 'buddy reading' as her way to help a struggling friend. Boshra also said she would read along with her friend to help her. However, Ali's response suggested he would use graphophonic strategies such as 'sounding out' to help a struggling reader.

Table 02 on page 146 shows the ESL students' reading strategies and their ways to help struggling readers.

Table 02: The ESL Students' Reading Strategies and Their Ways to Help
Struggling Readers

	Strategies participants knew	The way participants would help a friend
Ali	Skipping a word Sounding out Sounding initial letters Ask the teacher Ask a friend	Help him to sound it out Ask him to break it up
Sara	Ask the teacher Ask a friend Write it down Read again Chunk it Skip it Keep trying-never give up Look at the pictures	Ask her to try again and not give up Read to her Sound it out for her Reading buddy
Boshra	Ask the teacher Skip it Cut it in half Think about it Find a similar word with similar sounds Sound it out Use a (monolingual) dictionary Read again	Read with her Check her reading Teach her the difficult words

With regard to their reading levels, all of these participants were identified to be at the instructional or frustration levels on the basis of the number of semantically acceptable miscues relative to the total number of miscues made on each passage. All of them relied more heavily on text cues than on their background knowledge. This does not mean that these traits are stable and unchangeable in these readers. However, the traits indicate that these readers have internalized models of the reading process that are by-products of their past or current literacy experiences. Their internalized models of the reading process show their tendency towards using some cuing systems more than other systems.

Another difference between Sara and Boshra, on one hand, and Ali on the other hand was in the type of miscues they made. Ali made more whole word substitutions, which showed his strength in English vocabulary. He had fewer whole word insertions, but Sara and to a lesser degree Boshra, made more whole-word insertions that shaped the story in a more personal and emotional way. The significance of insertions is in the fact that such miscues show how the reader is reconstructing text in his or her mind.

Patterns of meaning construction showed that Both Sara and Boshra had lower percentages of meaning loss than Ali. The average percentage of meaning loss for Ali, Sara and Boshra was respectively 36%, 23% and 16%. Boshra had the lowest average percentage of meaning loss. Both Sara and Boshra showed a strength of 52% and 57% in their patterns of meaning construction. However the average percentage for Ali's strength was 36%. All of the participants had few or no overcorrections. On the other hand, the average percentages for weakness in meaning generation were greater for Ali than those for Sara and Boshra. The participants had the greatest number of meaningful miscues (insertions and substitutions) in the stories for which they had personal experience. For example in the story of *A Snowy Day*, both Sara and Boshra had more meaningful miscues than in the other stories, and in both *A Day by the Lake* and *A Snowy Day*, they had high background knowledge and interest and accordingly were better able to generate relevant meaning from selected passages. However, when they reported high interest in reading a story, and they lacked the appropriate experience related to the events such as 'making a snowman' in *A Snowy Day*, they produced fewer semantically acceptable miscues and relied more on graphophonic cues to understand the story.

These ESL students, though to a much lesser degree for Boshra, used their knowledge of the semantic and syntactic cues with predicting/confirming strategies at the sentence level to understand implicit meanings and draw inferences from transacting with textual information. They used semantic strategies less effectively to generate inferences from the narrative passages. However when these ESL students were required to read between the lines by using their logic and judgment, they were much less successful. Malinowski (1923) referred to this level of comprehension as understanding the meaning of meanings. Understanding the meaning of the meaning of the words and sentences requires both the use of graphophonic cues and predicting/confirming strategies. Although

these factors are necessary, they may not be sufficient to enable readers to understand the writer's intentionality and understand the point of view. Such a level of understanding requires a wide range of cuing systems and strategies that originate from both the text and reader's schemata and extend into the wider use of language in the human community.

All the students made sufficient use of their graphophonic knowledge in reading the expository passages. Ali particularly used more graphophonic cues in reading the expository passages than the narrative ones. However, he used more syntactic and semantic cues in reading the narrative passages. On the other hand, Sara reduced her use of graphophonic cues in reading the expository passages and shifted towards using more of her syntactic and semantic knowledge because she had familiarity and experience with the themes and events in the expository passages. Boshra used more of all three cuing systems in reading the expository passages than in her readings of narrative text.

These ESL students' patterns of meaning construction between the narrative and expository passages were similar though not identical. This similarity suggested that informational texts that present school related content are not necessarily easier to read in the narrative genre than the expository one. Having the appropriate background knowledge appeared to improve these ESL students' comprehension, in particular if they were interested in the passage. In reading both the narrative and expository passages, these ESL students' hardest challenge was to understand the 'meaning of the meaning' of the sentences, or the connotations implied in the passages, as well as understanding new concepts.

These ESL students' perceptions of the reading process were consistent with their use of the language cuing systems and use of strategies. It is concluded that these ESL students need to learn the new concepts presented in the informational texts and as well learn new strategies for unthreading the lines and getting the meaning from the backstage organization of thoughts and ideas presented in the passages. The findings also suggest that narrative passages that contain special subject matter are not necessarily easier to understand the informational texts.

Chapter Summary

Chapter five presented the findings of the study about the ESL students' knowledge of the English language cuing systems and strategies when reading selected narrative and expository passages independently in English. The findings of the participants' miscue profiles were analyzed according to part of Malicky and Leroy's (2006) framework to produce patterns for the students' reading performance. The students' high quality and low quality miscues as well as their reading strategies were discussed as well. This chapter concluded with a presentation of the ESL students' discussions of their miscues according to a retrospective miscue analysis strategy to explore their thinking in relation to their reading of the narrative and expository passages.

CHAPTER FIVE
DISCUSSIONS, IMPLICATIONS AND QUESTIONS FOR FUTURE STUDIES

In this chapter, I present a discussion of the findings with regard to the questions of the study within Goodman's sociopsycholinguistic theory of reading and the whole language approach. The purpose of the study was to explore the oral reading performance of three ESL students enrolled in three different schools in Alberta. Two of the students were girls and one was a boy. All of the students spoke Arabic as their first language and they arrived along with their families in Canada in 2003 as refugees. The girls were Christian and the boy was a Moslem. The research questions guiding this study were:

I. What are the ESL students' beliefs and perceptions of the reading process and of themselves as readers?

    1. What are the ESL students' beliefs and perceptions about good reading?

    2. How do the ESL students perceive themselves as readers?

II. What knowledge and strategies do the ESL students use in reading selected narrative and expository passages independently in English?

    1. What knowledge of the language cueing systems do the ESL students use when reading selected narrative and expository passages independently in English?

    2. What strategies do the ESL students use when reading selected narrative and expository passages independently in English?

The current study did not try to establish any cause and effect relationships in the literacy learning of theses students. Rather, the purpose was to understand their perceptions of the reading process and of themselves as readers, as well as their oral reading performance of selected narrative and expository passages in English.

Discussion of the Findings

K. Goodman (1976) defined reading as an act of constructing meaning from print which requires the activation and application of the readers' knowledge of the language cueing systems and of the world. According to Goodman (1994), "The integration of all of

the language cueing systems (grammatical, graphophonic, semantic and pragmatic) are necessary in order for reading to take place" (p. 233). However, readers, as Frank Smith (1971) stated, selectively use minimal distinctive language cues to read text.

The findings from these ESL students' oral reading of selected narrative and expository passages suggested that these students used their knowledge of the language cueing systems and of the world to construct meaning from print. The high quality miscues that these students produced in reading narrative and expository passages indicate their contribution towards meaning generation from the texts. These high quality miscues, in particular those with little graphic similarity to the expected words, are significant in this process. For example, Ali read 'eyes' for 'sight' in reading one sentence from *The Blind Woman*. Both Sara and Boshra made similar miscues, which had little or no graphic similarity to the printed text but were semantically acceptable. For example, Sara read 'room' for 'place' in one sentence from *Light.* Boshra read 'peel'/'pinch' instead of 'bite' in a sentence from *Hangnails.* All of these examples suggest that these students are bringing meaning to the text and they generate their meaning according to their knowledge of the world and their background knowledge. These miscues suggest that the processing of a text starts in the readers' heads with an assumption or expectation about the meaning of text. They indicate the conceptually driven processes that occur during the reading act (Goodman, 1985; Smith, 1971,1978) and emphasize the readers' contributions towards meaning generation.

A look at other types of miscues such as the students' insertions indicates that these students were creating images in their heads as they were reading. For example, Sara inserted the word 'green' before 'grass' in a sentence because she was conceptualizing grass to be green. In another sentence, she inserted 'snow' before 'ball' and produced a new image of a snowball. The question that arises here is whether it is the students' perceptions and images that bring about the meaning of the text, or the letters in the words and words and sentences that make up meanings. As proponents of conceptually driven, data driven and interactive models of the reading process have a consensus on comprehension being the end goal of reading, an analysis of the high quality miscues that are semantically acceptable in the text and those miscues that are partially acceptable in the text can bring more insight on this question.

Whole word insertions such as 'green' before the noun grass and 'snow' before the word 'ball', and the students' other high quality miscues show that these students conceptualize the story and form images in their heads that create expectations for the students and they see what they expect to find in the print. This indicates that these students do not read what they see in the print but they read what they expect to see on the paper. In other words, their perceptions guide them through the reading process. This is what Smith (1975) referred to as looking through the eye and seeing with the mind. Findings from the retrospective miscue analysis also suggested that the students' perceptions are the basis of their reading processes. For example, Ali read 'shoot' and/or 'shot' instead of 'shout' in a sentence from *The Boy and the Fox*. He said that he visualized a gun and a man firing a gun when he saw the word. Although Ali formed an image in his mind, that image still had to conform to the graphic stimuli in the print that is the word 'shout' with all its graphic features. His miscue 'shot' is graphically similar to the word 'shout' in the text. He read 'shoot' and/or 'shot', he did not say words like 'shy' and/or 'should. This suggests that textual data such as graphic and syntactic features along with readers' perceptions contribute towards meaning generation from text.

In retelling the stories, these ESL students were more successful in recalling literal information from the stories than they were in making inferences. If the story required an advanced level of thinking, associated with CALP to make an inference on the basis of textual data, the students' background knowledge and use of higher order thinking skills such as reasoning, the students were not able draw the inference. They had BICS but not CALP. For example, in the story of *The Lesson,* the students could not understand the concept of strength in numbers with three sticks being harder to break than one stick. Likewise, in the story of *The Blind Woman*, the students could not understand the sarcasm in the question of the woman asking "If I truly could see, wouldn't I see furniture and other belongings in my house?" In answering the critical questions, the students were not able to use their knowledge of the world to make an inference. As a result, they were not able to discern and discuss underlying themes in these stories.

The ESL Students' Perceptions: The Reading Process,
Good Readers and Strategies

The Burke Modified Reading Interview (Watson & Chippendale, 1979) was administered to explore the ESL students' perceptions of the reading process and of themselves as readers. Data about the students' schooling background came from two oral interviews that were individually conducted.

Ali originally defined good reading in terms of having 'a good pronunciation' and 'knows a lot of words'. Sara's definition of good reading concerned the readers' ability in reading 'hard and big' words. Though Ali and Sara's definition of good reading differed in terms of how they described it, their definitions were strikingly similar to each other: both of them put emphasis on certain aspects of a reader's knowledge of English words. However Boshra defined good reading in terms of understanding the text and the ability to read many books.

The participants' reasons as to why they described a certain friend as a good reader were consistent with their descriptions of good reading. For example Ali said that a good reader must 'sound like a native speaker' and be able 'to figure out words fast [read fast]' was consistent with his perception of good reading in terms of having a good pronunciation and knowing a lot of words. Sara said that 'a good reader must never give up and must keep trying to get it' Both Ali and Sara emphasized the reader's ability to decode the words fast and made it sound right. However Boshra said a good reader must understand what she reads. Both Ali and Sara's definitions of good reading and good readers were word-oriented whereas Boshra's definition of good reading and good readers was meaning-oriented.

Ali said he did not perceive himself as a good reader because he could not sound out difficult words. This was consistent with his definition of a good reader and why he considered his friend Jasem a good reader. He said he would like to get better as a reader and read science fiction, real life stories and sound like a native English speaker.

Sara defined herself as a good reader but her reason for thinking she was a good reader herself was not consistent with why she considered her friends Chris and Casandra good readers. She said she was a good reader because she read every night. She said she

wanted to become an "artist reader" and be able to read everything about art and other things. The reason why she considered her friends as good readers was that they never gave up and kept trying to read anything. If they came to difficult words they would sound them out easily.   She had earlier described reading as 'expressing your feelings' and she emphasized this aspect of reading when she talked about herself. As Rosenblatt (1978) made a distinction between aesthetic and efferent reading and explained that aesthetic readers live through reading, Sara likewise, regarded the reading process as a way of expressing her feelings and sense of artistry.

Boshra did not consider herself as a good reader. Her stated reasons for not being a good reader, however, were not consistent with her reasons for naming her friend Grace a good reader. She said Grace is a good reader because she 'understands [what] she reads; [she] follows along and reads a lot of books.' However, she said she did not consider herself to be a good reader because she 'can't read all the words, can't rhythm any words and can't get used to English.' This suggests that athough she knew the purpose of reading is to understand the materials, other aspects of reading such as rhythm and knowledge of the words were equally important to her.

The ESL students' use of strategies in reading difficult words had some commonalities and differences. All of the students mentioned 'skipping a word' as one strategy to cope with difficult words. All of the participants mentioned using graphophonic strategies such as 'sounding out', 'chunking', and cutting in half' to read difficult words. Ali also mentioned 'asking the teacher, and 'asking a friend' to learn the new words. Boshra mentioned 'thinking about it [the word]' as a way to understand a difficult word, but Ali and Sara did not mention a similar strategy.

The strategies Ali said he would use in helping a struggling reader included only graphophonic strategies such as sounding out and breaking up the word. Sara mentioned 'sounding out' as a strategy to help a struggling reader but she went beyond just graphophonic strategies and mentioned 'reading to her', 'asking to try again and not give up' and '[becoming] 'a reading buddy.' Sara's strategies showed that she put emphasis on the social nature of learning to read and providing support for the learner (Y. Goodman, 1989; Vygotsky, 1978). Boshra also mentioned that she would read with a struggling

reader to help her, would check her reading and would teach her the difficult words, which showed her concern for understanding meaning when reading.

Making Connections: From Perceptions to Performance

Goodman's miscue analysis (Goodman, Watson & Burke 1987) Procedure I was used to provide additional information about the ESL students' perspectives on the reading process as they read narrative and expository passages in English. Their knowledge of the English language cueing systems and use of reading strategies were explored with reference to Malicky and Leroy's scheme (2006) for understanding students' reading patterns. This information provided converging evidence for the students' perceptions of the reading process as observed through the Burke Modified Reading Interview and the oral interviews. It allowed me to determine if their perspectives were consistent with reading performance in English.

The mean percentage for the graphic and sound similarity of the ESL students' miscues to the target words showed that the participants made sufficient use of graphophonic cues in reading the narrative passages. The mean percentage for the ESL students' syntactically acceptable miscues showed that the students, with the exception of Sara, made sufficient use of syntactic cues in reading the narrative texts. However, the mean percentage for the semantically acceptable miscues of all of the participants showed that they did not make sufficient use of the semantic cues when reading the narrative passages.

The patterns of the students' meaning constructions and their understanding of the passages, according to Malicky and Leroy's scheme, provided evidence that both Ali and Sara were print-based readers and Boshra was a knowledge-based reader. However, the ESL students' patterns of meaning construction showed that they were flexible in using their strategies. For example, when the passages tended to become more difficult, Boshra shifted her focus to graphophonic strategies.

When reading materials for which they had some background knowledge, the students made strong use of semantic cues. Whenever they focused on the semantic cues, they made more high quality miscues. According to Goodman (1996), a high quality

miscue is a response that semantically fits the sentence and the context of the story. Patterns of graphic and semantic constructions of high quality suggested that the ESL students followed two principles in their reconstruction of word meanings.

Firstly, the students focused on graphic cues in a word to identify it. Secondly, the readers simultaneously activated their background knowledge and their knowledge of the semantic system of the English language to predict and confirm their guesses. This suggests that the readers used all types of cues simultaneously to reconstruct the message. As Goodman (1994) stated," The integration of all of the language systems (grammatical, graphophonic, semantic and pragmatic) is necessary in order for reading to take place." Rosenblatt (1978) referred to this interaction as reader-text transaction and stated that the readers' schemata are vital to these transactions.

Goodman (1994) defined readers' miscues in terms of schema forming, schema driven and overarching schemata for creating new schemata and modifying old ones. For example, Ali in reading the story of *The Boy and the Fox*, substituted 'shooted' for 'shouted' and during the retrospective miscue analysis procedure said that he was thinking the boy was firing at the fox with a gun. Ali perceived this schema to make sense of the print. Thus in reading texts, readers create event representations and write their own texts as a text representation of the event they created. This not only suggests the transactional nature of the reading process but conforms to Goodman's (1967) statement that meaning is not reconstructed through word recognition or letter identification but occurs as a result of the reader's perception of the events represented in the text.

The ESL students' use of strategies showed that whenever the readers relied heavily on the graphophonic strategies and did not make sufficient use of the semantic cues, they were making non-word miscues or miscues that were not semantically acceptable. As Goodman (1994) stated, "reading involves the interrelationship of all the language systems" (p. 235). The ESL students were most successful when they used their knowledge of the language cueing systems in coordination with their semantic strategies to generate meanings. In general, the students' use of strategies was consistent with their perceptions of the reading process and of themselves as readers. However, Ali and Sara had a tendency towards using graphophonic cues more than semantic ones, while Boshra started her reading predominantly by using semantic cues. However, Sara tried to interact

with the texts aesthetically as she referred to her style as artist reader and created meanings that reflected her life and feelings through the texts. On the other hand, Ali's meaning constructions were greatly influenced by his past literary experiences and perceptions of learning to read in English.

The ESL students were more successful in generating meanings when they had sufficient background knowledge. However, understanding the 'meaning behind the meaning' of the sentences required more background knowledge and strategies and the students were unsuccessful in understanding the inferential and critical questions in the passages even though they knew the meaning of individual words and sentences.

These ESL students learned oral English well but they were delayed by four years in their English literacy learning. These ESL students each encountered the same type of difficulties in reading these passages. Their comprehension was best at the level of explicitly stated information. When they had the appropriate background knowledge, their comprehending and comprehension of the materials significantly improved on the passages. However, their inferential and critical understanding was more influenced by their use of strategies and type of interaction with the text. For example, Sara who interacted with the texts aesthetically was more successful in 'reading between the lines' than Ali, who interacted with the texts at a literal level. For understanding inferential and critical meanings in the texts, the ESL students needed to use their knowledge of the world to make sense of the text. It became evident that narrative passages that contain cognitively challenging school-related content are not necessarily easier to understand than expository passages. This makes it necessary for these students to learn additional strategies and receive explicit instructions regarding the new themes and concepts that emerge in informational texts that L1 learners may not need in their literacy instruction.

The ESL students' interest level also affected their comprehension of the materials, and it appeared to be related to their background knowledge. On the passages where the students had the highest background knowledge and where they used semantic strategies to understand the texts, their level of interest tended to be high. When the ESL students had low background knowledge and their comprehension suffered, they lost interest in the passage and their reported level of interest was low.

The ESL students' use of strategies in reading the narrative and expository passages was consistent with their reported strategies during the interview. However, generally, there were some inconsistencies. For example, the participants mentioned skipping a word if it was too difficult. But during their actual reading, they usually omitted easy words such as function words, nouns and phrases. They never skipped a difficult word. They either used semantic strategies and contextual cues to predict it or they heavily used graphic cues and produced a non-word response. This discrepancy might have been due to their lack of knowledge about the reading process and their perceptions about what they do when they encounter a difficult word. A word might be skipped if this word is in the way of meaning construction and the reader is usually unaware of it because he is omitting the word unconsciously. For example, when Boshra and Sara encountered a difficult word, they said, "What is this? I can't read this."

It appeared that the ESL students' perceptions and their literacy experiences shaped their internalized models of reading so that Ali tended to use more graphophonic cues in his reading practice; Sara focused on graphophonic cues and " artistic" or aesthetic reading, and Boshra tended to use semantic cues when reading the narrative and expository passages. However, these internalized models of interaction with texts were not stable and the readers were flexible in their use of reading strategies.

These ESL students are struggling in school and they need a lot of help. They have been in school in Canada for four years but they are all reading at grade levels one through three, which is not appropriate for their level of schooling. They are not literate in their first language and they believe they are not speaking their native language fluently. This causes them to use their native language reluctantly with peers and they begin to lose their oral native language proficiency over time. Matters get worse when they find themselves unable to make friends with English-speaking peers and build friendly and constructive relationships with their teachers. Thus, it is very important for teachers to develop trusting relationships among their students and improve interactions and socializations among mainstreamers, ESL students and teachers.

General Conclusions

The findings of the study obtained from the analysis of the ESL students' perceptions of the reading process and of themselves as readers, and from the analysis of their miscues, knowledge of the language cuing systems, use of strategies and reflective talk during the retrospective miscue analysis, supported the following general conclusions:

1. The ESL students' perceptions of the reading process and of themselves as readers likely reflected their current or past literary experiences and reflected their internalized perspective of the reading process.

2. The participants' reading levels were low, but the students all had some good reading strategies. Teachers need to recognize the strengths of their students.

3. The participants' use of cueing systems and their strategies were all different. Teachers need to recognize individual diversity in their students' strategies.

4. All three students needed clarification of the reading process. This needs to be a part of classroom instruction.

5. The ESL students made more miscues as the passages became more difficult. However, the number of low quality miscues increased and the number of high quality miscues and semantic strategies decreased, which was to be expected. It is important that they be reading materials at a comfortable level of difficulty.

6. Within limits, there was no apparent relationship between the number of miscues per hundred words and the students' comprehension levels. A student might have made more miscues and yet was able to show good comprehension of the text. On the contrary, a student might have produced fewer miscues but only minimally comprehended the passage.

7. The ESL students who had sufficient background knowledge about the passage were more successful than those with little or no background knowledge. This suggests the importance of appropriate reading materials, in terms of interest, background knowledge and level.

8. When the students possessed background knowledge about a passage, it seemed to be related to higher interest in reading the passage. When their comprehension suffered, the students lost interest in reading the materials.

9. It is very important to support the ESL students in their first language literacy. The students who are literate in their first language have a strong understanding of what it means to be literate. Moreover, they are more familiar with literary conventions and have a more highly developed repertoire of background knowledge and strategies to bring to reading in the second language. This will boost their reading and learning activities in the second language as some knowledge and skills in the first language can transfer to the students' repertories of knowledge in the second language. The students without any literacy skills in their first language will need additional scaffolding and support from the teacher.

Implications for Reading Pedagogy

The findings of the study supported the following pedagogical principles of literacy learning:

1. Any reading program for ESL students must closely consider the students' past learning experiences in their home countries. ESL students have varied internalized models of the reading process. All instructional activities must address their perspective of reading by eliminating their misconceptions about the reading process and improving their self-image as readers.

2. ESL students need to be directed to focus more on meaning generation while reading and focus less on superficial features such as sounding out precisely the expected words. Precise reading performance is not a sign of good reading. The students need to attend to meaning and graphic cues simultaneously as they read.

3. ESL students need to acquire new strategies and knowledge of new concepts and vocabulary when reading narrative and expository passages that present school related content. For example, a new strategy could focus on helping the students to use their knowledge of the world in order to critically interact with the texts. A new concept such as knowledge about a thesis and how to form a thesis and confirm or reject it could improve their language proficiency in reading scientific texts. They will need explicit instruction about these strategies and concepts.

Pedagogical Recommendations for ESL Curricula

I am not planning to propose a curriculum for ESL students on the basis of the findings of my study. However, I intend to touch upon some elements that I found to be crucial in the ESL students' reading development.

ESL students come to Canadian schools with different schooling and literacy backgrounds. They have their own perceptions of literacy and learning preferences, which form their internalized perspective of literacy learning and reading development. Their perspective of the reading process is often dominated by their misconceptions about reading and their self-image as readers. All of these factors affect their use of the language cuing systems and strategies while they read school related texts. Too often, ESL students who arrive in Canada and begin their elementary schooling do not read and write in their own home language and they feel ashamed of themselves for not being able to read in their native language. Furthermore, they will likely lack an understanding of what it means to be literate, and they will struggle with concepts about how written language works.

The first priority for these students would be to form friendship with other children in and outside of the classroom (Wiltse, 2005; Cummins, 1996) and to interact with them. Building a trusting relationship with the teachers is also very important for their schooling. The school curriculum for ESL students must take into account their schooling background and plan for learning activities that can produce change in their perceptions of reading and their attitude towards themselves as readers. Thus the first priority in the instruction of reading for these students should be to deconstruct their own misconceptions about literacy learning and then reconstruct their knowledge around a transactional view of reading and build up their image as capable readers. This will only be made possible if serious change is made in the way pedagogy is delivered in ESL classrooms.

The ESL classroom should be set up as a small community in which the members are learning how to experience membership and assert themselves. There must be room for different voices and different interpretations that can allow ESL students to evolve and broaden their perspectives. Control in learning should be replaced with care in learning.

160

Meaning constructions that reflect personal experiences and a different way of literacy learning must be appreciated and encouraged. Students must learn to support themselves and form peer support groups, or as Sara called it 'buddy reading', to scaffold their learning development.

The ESL students need more exposure to and experience in the second language they are learning. As these students do not use English at home, their exposure to the English language is quite limited. This makes it necessary for them to receive some direct instruction in learning English that they do not normally need in their first language.

As miscue and retrospective miscue analysis has established evidence that readers are generating their own meanings when reading, ESL students must be encouraged to interact with the text with an open mind. They should be encouraged to construct, accept and tolerate different realizations of texts. They must believe that for most of the questions around us, multiple answers exist, and all of them might be simultaneously right when judged from the vantage point of the individual.

As Goodman (1990) stated, the teacher must be an experienced "kid watcher" and mediator to be able to see where the students stand developmentally and see the zone of proximal development as it develops naturally in the classroom. The teacher must not interfere in the learning experience of the students and as Goodman (1990) described it, "The teacher is present as the learning transaction takes place but in the role of mediator-supporting the learning transactions but neither causing them to happen in any direct sense nor controlling the learning" (p. 270).

Students are partners in learning, not competitors. They rely on each other's support and they help one another as they transact with texts. As the participants in this study noted, the first resource they use when they encounter a difficulty in reading is to ask a friend. The second resource they use is the text itself. The ESL students said they reread the whole passage again to understand the meaning of a sentence. The analysis of the ESL students' miscues suggested that as they were reading through the texts, they used their knowledge of the cuing systems along with other contextual cues to explore the passage and learn from it. The findings from the ESL students' miscues and their discussions of their miscues during the retrospective miscue analysis also suggested that - as Halliday (1978) stated - these students need to experience three types of learning:

161

learning the language, learning about the language and learning through language new concepts and themes. Thus the power of revaluing and reflective thought should be part of an ESL program if ESL educators want their students to become more in charge and control of their own learning.

Recommendations for Future Studies

Further investigation could be undertaken to explore whether the use of retrospective miscue analysis would result in a change in the students' perceptions of the reading process and improve their reading comprehension over time. The study could be conducted with different reading materials such as school texts or materials the participants have selected in topics of the students' choice.

On the basis of the general conclusions of this study, the following questions remain to be answered with regard to ESL students' reading performance in reading school-related texts:

1. What are the ESL students' social interactions in the classroom, and how do they support or impede the students' language learning?

2. Given that relationships are central to language and literacy learning (Cummins, 1996; Wiltse, 2005), how can educators support ESL students' relationships with peers and teachers?

3. How can the ESL students' discussions of their miscues according to a retrospective miscue analysis strategy enhance their perception of the reading process?

4. How would the students' use of cues and strategies differ in reading subject matter at school versus reading about topics of their interest?

5. How would the ESL students' oral reading performance differ in reading narrative and expository passages if they were literate in their first language? How do the learning challenges vary?

6. How can a change in the ESL students' perceptions of the reading process and of themselves as readers affect their reading performance?

7. What features of the informational texts in school subjects make comprehending more difficult for the ESL students?

8. What types of strategies do the ESL students need in order to overcome difficulties in reading special subject matter school texts?

9. Knowledge of what concepts and strategies facilitate ESL students' transactions with informational texts in school?

Final Thoughts

I used miscue analysis and retrospective miscue analysis to explore the reading performance of three ESL students in the elementary and junior high school. The use of miscue analysis and retrospective miscue analysis benefited both me as a researcher and the participants in the study. It expanded our view of how reading works and what actually happens during the reading process.

I used passages from Steiglitz Informal Reading Inventory as it contained topics of interest for the students and passages were more similar to the informational texts students read at school after grade four. These passages were generally short, interesting to the participants and were followed by comprehension questions that asked about the literal, interpretive and critical meanings in the texts. I used both free and probed recall to explore how the ESL students generated different levels of meaning from the passages and what difficulties they encountered in doing so.

Students' perceptions of the reading process and of themselves as readers were explored using the Burke Modified Reading Interview. Background knowledge about the ESL students schooling background was obtained using semi-structured oral interviews. The use of retrospective miscue analysis showed students' thinking in relation to their reading and revealed how the students' perceptions can affect their reading performance.

The participants said they felt empowered at the end of the study and said they actually learned a lot of good things. From participating in it, we all learned new things about how thoughts, perceptions and reflections can affect our performance in reading.

<div align="center">**References**</div>

Adger, C. T., & Peyton, J.K. (1999). Enhancing the education of immigrant students in secondary school: Structural challenges. In C. J. Faltis & P. Wolfe (Eds.), *So much to say: Adolescents, bilingualism, and ESL in the secondary school* (pp. 205-224). New York: Teachers College Press.

Alberta Education. (1992a). *Achieving the vision report*. Edmonton, AB: AlbertaEducation.

Alberta Education. (1992b). *School grants manual.* Edmonton, AB: Alberta Education.

Alberta Education (1997). *Jurisdiction profile report, selected tables.* Edmonton Catholic Regional Division No. 40. Edmonton, AB: Alberta Education.

Allen, P.D. (1969). *A psycholinguistic analysis of the substitution miscues of selected oral readers in grades two, four, and six, and the relationship of these miscues to the reading process: A descriptive study*. (Unpublished doctoral dissertation). *Dissertations Abstracts International*, 30, 3820A.

Alexander, P.A. (2003). Profiling the developing reader: The interplay of knowledge, interest, and strategic processing. In D.L. Schallert, C.M. Fairbanks, J. Worthy, B. Maloch & J.V. Hoffman (Eds.), *52nd yearbook of the National Reading Conference* (pp. 47-65). Oak Creek, WI: National Reading Conference.

Alexander, P.A., & Fox, E. (2004). *A historical perspective on reading research and practice. In R.B. Ruddell & N.J. Unrau (Eds.), Theoretical models and processes of reading* (5th ed., pp. 33-68). Newark, DE: International Reading Association.

Almasi, J.F., McKeown, M.G., & Beck, I.L. (1996). *The nature of engaged reading in classroom discussions of literature. Journal of Literary Research, 28* (1), 107-146.

Almazroui, K.M. (2007). Learning together through retrospective miscue analysis: Salem's case study. *Reading Improvement, 44* (3). 153-167.

Altwerger, B.I., & Goodman, K. (1981). *Studying text difficulty through miscue analysis*. Tucson, AZ: University of Arizona.

Altwerger,M, & Resta, D. (1985). *Miscue analysis profile*. Albuquerque: University of New Mexico.

Atkinson, D. (2002). Towards a socio-cognitive approach to second language acquisition. *The Modern Language Journal, 2*, 525-545.

Brody, D. (1973). *A psycholinguistic comparison of proficient and remedial readers.* (Master's thesis). Retrieved from Proquest Dissertations and Theses database.

Burke, C.L. (1969). A psycholinguistic description of grammatical restructurings in the oral reading of a selected group of middle school children. *Dissertation Abstracts International, 30*, 3851A.

Burke, M.S. (1973). *A psycholinguistic analysis of oral reading by selected first graders taught analytically or synthetically.* (Master's equivalency thesis). Retrieved from Proquest Dissertations and Theses database.

Burke, C. (1987). Reading interview. In Y. M. Goodman, D. J. Watson & C. L. Burke, *Reading miscue inventory: Alternative procedures* (pp. 219-220). New York, NY: Richard C. Owen.

Calgary Board of Education. (2006). *English as a second language (ESL) in 2006.* Retrieved from http:// www.cbe.ab.ca/new/esl.asp.

Canadian Center for Adolescent Research. (2006). *School drop outs*. Retrieved April 14, 2006, from http. //ccar.briercrest.ca/highschool/shtml.

Cattell, J.M.(1947). James McKeen cattell, man of science. *Psychological Research 1*, 13-23.

Chamot, A.U., & O'Malley, J.M. (1994). *The CALLA handbook: Implementing the cognitive academic language learning approach*. Reading, MA: Addison-Wesley.

Chamot, A.U., & O'Malley, J.M. (1986). *A cognitive academic language learning approach: An ESL content-based curriculum.* Wheaton, MD: National Clearinghouse for Bilingual Education.

Chomsky, N. (1957). *Syntactic structures*. The Hague: Mouton and Co

Christie, J. (2001). The effects of grade level and reading ability on children's miscue patterns. *Journal of Educational Research, 74 (6)*, 419-423.

Coll, J., & Osuna, A. (1989). *The use of miscue analysis to investigate the reading strategies used by bilingual and monolingual students*. Paper presented at the annual meeting of the National Association for Bilingual education, Miami, FL.

Coll, J., & Osuna, A. (1990). A comparison of reading miscue analysis between bilingual

and monolingual third graders. *Hispania, 73* (3), 807-815.

Collier, V.P. (1987). Age and rate of acquisition of a second language for academic purposes. *TESOL Quarterly, 21*, 617-641.

Collier, V.P. (1989). How long: A synthesis of research on academic achievement in a second language. *TESOL Quarterly, 23*, 509-531.

Collier, V.P. (1995). *Promotong academic success for ESL students*. Jersey City, NJ: New Jersey TESOL

Collier, V.P., & Thomas, W.P. (1989). How quickly can immigrants become proficient in school English? *Journal of Educational Issues of Language Minority Students, 5*, 26-38.

Connor, U. (1981). The application of reading miscue analysis to diagnosis of English as a second language learners' skills. In C. Twyford (Ed.), *Reading English as a second language:Moving from theory* (pp. 3-20). Bloomington: University of Indiana School of Education.

Costello, S.A. (1992). *Collaborative miscue analysis with middle school students*. (Doctoral Dissertation). Retrieved from Proquest Dissertations and Theses database.

Cummins, J. (1979a). Cognitive/academic language proficiency, linguistic interdependence, the optimum age question, and some other matter. *Working Papers on Bilingualism, 19* (1), 121-129.

Cummins, J. (1981). Age on arrival and immigrabnt second language learning in Canada: A reassessment. *Applied Linguistics 1*, 132-149.

Cummins, J. (1992). Language proficiency, bilingualism, and academic achievement. In P. A. Richard-Amato & M.A. Snow (Eds.), *The multicultural classroom: Readings for content area teachers* (pp. 16-26). White Plains, NY: Longman Publishers USA.

Cummins, J. (1994). The socioacademic achievement model in the context of coercive and collaborative relations of power. In R. A. deVillar, C.J. Faltis & J. P. Cummins (Eds.), *Cultural diversity in schools: from rhetoric to practice* (pp. 3603-392). Albany, Ne Y: SUNY Press.

Cummins, J. (1996). *Negotiating identities: Education for empowerment in a diverse*

society. Ontario, CA: California Association for Bilingual Education.

Cziko, G.A. (1978). *An analysis and comparison of first and second language acquisition.* (Doctoral dissertation). Retrived from Proquest Dissertations and Theses database.

Devine, J. (1984). ESL readers' internalized models of the reading process. In J. Handscombe, R. Oren & B.P. Taylor (Eds.), *on TESOL, 83* (pp. 95-108). Washington, DC: TESOL.

Dewey, J. (1938). *Experience and education*. New York: Simon and Schuster.

Dewey, J. (1943). *The child and the curriculum and the school and society*. Chicago: University of Chicago Press.

Eddy, C. (1999). *The forces who shape us*. Symposia conducted at TESL 1999 conference, Meeting the Millennium, Banff, AB, Canada.

Ellis, J. (2006). *Researching children's experiences hermeneutically and holistically.* Unpublished manuscript, Department of Elementary Education, University of Alberta, Edmonton, Canada.

Flowerdew, J. (1994). *Academic listening*. Cambridge, MA: Cambridge Press.

Gall, J.P., Gall, M.D., & Borg, W.R. (1999). *Applying educational research: A practical guide (4 th ed.)*. New York: Longman.

Garcia, P. (1983). *An investigation of miscue analysis with bilingual children* (Doctoral dissertation). Retrieved from Proquest Dissertations and Theses database.

Gee, J.P. (1990). *Social linguistics and literacy: Ideology in discourses. Critical perspectives on literacy and education*. London: Falmer Press.

Gee, J.P. (1992). *The social mind*. London: Bergin & Garvey.

Gee, J.P. (1995). First language acquisition as a guide for theories of learning and pedagogy. *Linguistics and Education, 6*, 331-354.

Germain, A. (1998). *At-risk elementary students reflect on their reading through collaborative retrospective miscue analysis* (Doctoral Dissertation). Retrived from Proquest Dissertations and Theses database.

Geva, E. (2000). Issues in the assessment of reading disabilities in L2 children. *Dyslexia, 6*, 13-28.

Goodman, K.S. (1965). A linguistic study of cues and miscues in reading. *Elementary English, 42*, 639-643.

Goodman, K.S. (1966). A psycholinguistic view of reading comprehension. In G.B. Schick & M.M. May (Eds.), *New frontiers in college-adult reading.* Milwaukee: National Reading Conference.

Goodman, K.S. (1967). A psycholinguistic guessing game. *Journal of Reading Specialist, 6,* 126-135.

Goodman, K.S. (1969). Analysis of reading miscues: Applied psycholinguistics. *Reading Research Quarterly, Fall,* 10-29.

Goodman, K. (1970). Behind the eye: What happens in reading. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 59-87). Portsmouth, NH: Heinemann.

Goodman, K. (1971). *A study of children's behaviour while reading orally* (Final report No. S-425, Contract No. OE-6-10-136). Washington, DC: U.S. Department of Health.

Goodman, K. (1973). *Miscue analysis: Applications to reading instruction.* Urbana, IL: ERIC Clearinghouse on Reading and Communication Skills and National Council of Teachers of English.

Goodmam, K. (1973). Miscues: Windows on reading. In K. Goodman (Ed.), *Miscue analysis: Applications to reading instruction*. Urbana, IL: National Council of Teachers of English.

Goodman, K.S. (1976). Miscue analysis: Theory and reality in reading. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 124-137). Portsmouth, NH: Heinemann.

Goodman, K. (1975). The reading process. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 124-137). Portsmouth, NH: Heinemann.

Goodman, K.S. (1976a). What we know about reading. In P.D. Allen & D. Watson (Eds.), *Findings of Research in Miscue Analysis: Classroom Implications.* Urbana, IL: ERIC and National Council of Teachers of English.

Goodman, K. (1976). *Miscue analysis: theory and reality in reading*. Paper presented at the Fifth IRA World Congress on Reading, Newark, DE: International Reading Association, pp. 15-26.

Goodman, K. (1982). Revaluing readers and reading. *Topics in Learning and Learning Disabilities, 1* (4), 87-95.

Goodman, K. (1984). Unity and reading. In A. C. Purves & O. Niles (Eds.), *Becoming readers in a complex society. 83rd Yearbook of the National Society for the Study of Education: Part I*. Chicago, IL: University of Chicago Press.

Goodman, K.S. (1985). Unity in reading. In H. Singer & R. Ruddell (Eds.), *Theoretical models and processes of reading*. Newark, DE: International Reading Association.

Goodman, K. S. (1986). *What's whole in whole language*? Portsmouth, NH: Heinemann.

Goodman, K. (1987). Determiners in reading: Miscues on a few little words. *Language and Education, 1 (*1), 33-57.

Goodman, K. (1988). The Reading process, In P.L. Carrell, J. Devine & D.E. Eskey D. E. (Eds.), *Interactive approaches to second language reading* (pp 11-22). Cambridge University Press, Cambridge.

Goodman, K. (1989). Whole language research: Foundations and development. *The Elementary School Journal, 90 (*2), 207-220.

Goodman ,Y. (1970). Using children's miscues for teaching reading strategies. *Reading Teacher, 23,* 455-459.

Goodman, Y.M. (1987). *Miscue analysis and curriculum development. In Reading miscue inventory: alternative procedures*. New York: Richard C. Owen.

Goodman, Y. (1989). Roots of the whole language movement. *The Elementary School Journal, 90* (2), 113-127.

Goodman, K. (1990). Vygotsky in a whole language perspective. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 254-287). Portsmouth, NH: Heinemann.

Goodman, K. (1994). Reading, writing and written texts: A transactional sociolinguistic view. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 3-46). Portsmouth, NH: Heinemann.

Goodman, K. S. (1996). *Ken Goodman on reading*. Portsmouth, NH: Heinemann

Goodman, K.S., & Burke, C. (1968). *Study of children's behaviour while reading orally* (Final Report, Project No. OE-6-10-136). Washington, DC: U.S. Department of Health, Education and Welfare.

Goodman, K.S., & Burke, C. (1969). *A study of oral reading miscues that result in grammatical retransformations* (Final Report, Project No. 7-E-219, Contract No. OEG-0-8-070219-2806). Wasdhington, DC: U.S. Department of Health, Education and Welfare.

Goodman, K.S., & Burke, C. (1970). When a child reads: A psycholinguistic analysis. *Elementary English, 47* (1), 121-129.

Goodman, K., & Burke, C. (1972). *Reading miscue inventory: A procedure for diagnosis and evaluation*. New York: Richard C. Owen.

Goodman, K & Burke, C. (1973). *Theoretically based studies of patterns of miscues in oral reading performance* (Final Report Project No. 9-0375, Grant No. OEG-09-320375-4269). Washington, DC: U.S. Department of Health, Education and Welfare, Office of Education.

Goodman, Y., & Flurky, A. (1996). Retrospective miscue analysis in middle school. In Y. M. Goodman & A.M. Marek (Eds.). *Retrospective miscue analysis: Revaluing readers and reading* (pp. 87-105). Katonah, NY: Richard C. Owen Publishers, Inc.

Goodman, Y. (1971). *Longitudinal study of children's oral reading behaviour* (Final Report Project No. 9-E-062, Grant No. OEG-5-9-325062-0046). Washington, DC: U.S. Department of Health, Education and Welfare.

Goodman, Y. (1996). Revaluing readers while readers revalue themselves: Retrospective miscue analysis. *The Reading Teacher. 49* (8), 600-615.

Goodman, K.S., & Goodman, A.M. (1979). Learning to read is natural. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 352-375). Portsmouth, NH: Heinemann.

Goodman, K., & Goodman, Y. (1978). *Reading of American children whose language is a Stable Rural Dialect of English or Language other than English* (Research Report). Washington, DC: U.S. Department of Health, Education and Welfare.

Goodman, K., & Goodman, Y. (1979). *A comprehension-centered whole language curriculum* (Occasional paper No. 1). Tucson: University of Arizana.

Goodman, K, & Goodman, Y. (1989). Teachers supporting learners: A transactional view: In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 375-379). Portsmouth, NH:

Heinemann.

Goodman, K.S., & Goodman, A.M. (1990). Vygostsky in a whole-languge perspective. In k. Goodman, A. Flurky & J. Xu (Eds.), *On the revolution of reading: The selected writings of Kenneth S. Goodman* (pp. 254-287). Portsmouth, NH: Heinemann.

Goodman, Y.M., & Marek, A. M. (1989). *Retrospective miscue analysis: Two papers* (Paper No. 19). Tucson, AZ: College of Education.

Goodman, Y.M., & Marek, A.M. (1996). *Retrospective miscue analysis: Revaluing readers and reading*. Katonah, NY: Richard C. Owens.

Goodman, K.S., & Paulson, E.J. (1999). *The analysis of teacher-student oral interaction during retrospective miscue analysis sessions: Developing language about reading* (Upublished research report). National Council of Teachers of English.

Goodman, K., & Rakestraw, A.W. Jr. (2000). Structural aspects of constructing meaning from text. In M.L. Kamil ,P.B. Mosenthal, P.D. Pearson & R. Barr (Eds.), *Handbook of Reading Research: Vol 3* (pp. 311-335). Mahwah, NJ: Lawrence Erlbaum Associate.

Goodman, K., Watson, D., & Burke, C. (1987). *Reading miscue inventory: Alternative procedures*. New York: Owen.

Goodman, K., Smith, E.B., Meredith, R., & Goodman, Y. (1987). *Language and thinking in school*. New York: Richard C. Owen.

Gove, M.K. (1983). Clarifying teachers' beliefs about reading. *The Reading Teacher, 37*, 261-268.

Gunderson, L. (2000). Voices of the teenage diasporas. *Journal of Adolescent and Adult Literacy, 43, 692-706.*

Gunderson, L. (2007). *English only instruction and immigrant students in secondary schools: A critical examination*. Mahwah, New Jersey: Lawrence Erlbaum associates.

Guthrie, J.T, & Wigfield, A. (2000). Engagement and motivation in reading. In M.L. Kamil, P.B. Mosenthal, P.D. Pearson & R. Barr (Eds.), *Handbook of reading research* (Vol. 3, pp. 403-422). Mahwah, NJ: Erlbaum.

Halliday, M.A.K. (1969). Relevant models of language. *Educational Review, 22*, 1-128.

Haliday, M. (1973). *Explorations in the functions of language*. London: Edward Arnold.

Halliday, M.A.K. (1975). *Learning how to mean: Explorations in the development of language*. London: Edward Arnold.

Halliday, M.A.K. (1978*). Language as social semiotic: The social interpretation of language and meaning.* London: Edward Arnold.

Halliday, M.A.K. (1980). Three aspects of children's language development: Learning language, Learning through language, and learning about language. In Y. M. Goodman, M. Haussler & D.S. Strickland (Eds.), *Oral and written language development research: Impact on the schools.* Urbana, IL: National Council of Teachers of English.

Hammer, K.B. (2003). *The effect of oral reading fluency on analysis skills* (Unpublished research paper). Division of Education: School of Business, Education, and Leadership Dominican University of California.

Harris, A.J., & Sipay, E.R. (1985). *How to increase reading ability: A guide to developmental and remedial methods*. New York: Longman.

Harris, A.J., & Sipay, E.R. (1990). *How to increase reading ability: A guide to developmental and remedial methods (9th ed.).* New York: Longman.

Hildreth, G.H. (1958). *Teaching reading: A guide to basic principles and modern practices*. New York:Holt.

Hodes, P. (1981). Reading: A universal process. In S. Hudelson (Ed.), *Learning to read in different languages*. Washington D.C.: Center for Applied linguistics.

Hood, J., & Kendall, J. (1974). *A qualitative analysis of oral reading miscues of reflective and impulsive second graders*. Paper presented at the 59th Annual Meeting of the American Educational Research Association. Chicago, U.S.A.

Johnson, K., & Morrow, K. (1981). *Communication in the classroom*. Essex: Longman.

Kagan, J., Rosman, B., Day, D., Albert, J., & Phillips, W. (1964). Information processing in the child: Significance of analytic and reflective attitudes. *Psychological Monographs, 78* (1).

Kolers, P.A. (1967). Reading is only incidentally visual. In K.S. Goodman & J.T. Fleming (Eds.) *Psycholinguistic and learning of reading* (pp. 8-16). Newark, DE: International Reading Association.

Kouritzin, S.G., & Mathew, P.G. (2002). Policies affecting ESL instruction in Manitoba. *Canadian Journal of Educational Administration and Policy Issue*, 22.

Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge: Cambridge University Press.

LeCompte, M.D., & Preissle, J. (with Tesch, R.). (1993). Ethnography and qualitative design in educational research *(2nd ed.)*. In S.B. Merriam (Ed.), *Qualitative research and case study applications in education, revised and expanded from case study research in education*. San Francisco: Jossey- Bass Publishers.

Lesaux, N.K, & Siegel, L.S. (2003). The development of reading in children who speak English as a second language (ESL). *Developmental Psychology, 39* (6), 1005-1019.

Malicky, G. & Leroy, C. (2006). *A conceptual scheme for diagnosing reading and writing behaviors* (Unpublished manuscript). Department of Elementary Education, University of Alberta, Edmonton, Canada.

Malik, A. A. (1990). A psycholinguistic analysis of the reading behavior of EFL proficient readers using culturally familiar and culturally unfamiliar expository texts. *American Educational Research Journal*, 27, 205-223.

Malinowski, B. (1923). The problem of meaning in primitive language. In C.K. Ogden & I.A. Richards (Eds.), *The meaning of meaning*: Rout ledge & Kegan Paul.

Marek, A.M., & Goodman, Y.M. (1981). Revaluing readers and reading. In Y.M. Goodman & A.M. Marek (Eds.), *Retrospective miscue analysis: revaluing reading and readers*. New York: Richard C. Owen Publishers, INC.

Martens, P. (1998). Using retrospective miscue analysis to inquire: Learning from Michael. *The Reading Teacher, 52* (2), 176-180.

Martens, P. (1997). What miscue analysis reveals about word recognition and repeated reading:A view through the "miscue window." *Language Arts, 74* (8), 600-609.

McCormick, T.W. (1988). *Theories of reading in dialogue: An interdisciplinary study*. New York: University Press of America.

Menosky, D.M. (1971). A psycholinguistic description of oral reading miscues generated during the reading of varying portions of text selected readers from grades two, four, six and eight. *Dissertation Abstracts International, 32*, 6108A.

Miller, G. (1956, March).The magic number seven plus or minus two: some limits on our capacity in information processing. *Psychological Review, 63*, 81-92.

Merriam, S.B. (1988). *The case study research in education*. San Fransisco: Jossey-Bass.

Merriam, S.B. (1998). *Qualitative research and case study application in education.* San Francisco: Jossey-Bass Publishers.

Mishler, E.G. (1986). The analysis of interview-narratives. In T.R. Sarbin (Ed.), Narrative psychology, *The storied nature of human conduct*. New York: Prawger.

Moore, R.A., & Brantingham, K.L. (2003). A case study in reader response and retrospective miscue analysis. *The Reading Teacher, 56* (5), 466.

Nelson, R.L., Damico, J.S., & Smith, S.K. (2008). Applying eye movement miscue analysis to the reading patterns of children with language impairment. *Clinical Linguistics and Phonetics, 22* (4-5), 293-303.

Nisbett, R.E., & Wilson, T.D. (1979). Telling more than we can know: Verbal reports on mental processes. *Psychological Review, 84*, 231-259.

Ochs, E., Schegloff, E.A., & Thompson, S.A. (Eds.). (1996). *Interaction and grammar*. Cambridge: Cambridge University Press.

Perfeti, C.A. (1985). *Reading ability*. New York: Oxford University Press.

Piaget, J. (1971). *The child's construction of quantities*. London: Routledge & Kegan Paul.

Piaget, J. (1977). *The development of thought: Equilibrium of cognitive structures*. New York: Viking.

Pierce, B.N. (1995). Social identity, investment, and language learning. *TESOL Quarterly, 29*, 9-31.

Rayner, K., & Pollatsek, A. (1989). *The psychology of reading*. Hillsdale, NJ: Lawrence Erlbaum Associates.

Rodriguez-Brown, F., Yirchott,V., & Lynne, S. (1983). A comparative analysis of oral reading miscues made by monolingual versus bilingual students. *Bilingual Education Paper series, 7* (5).

Roessingh, H. (2001). The dynamics of ESL drop out: "Plus Ca Change." *Canadian Modern Language Review, 58, 203-222.*

Romatowski, L. (1981). A study of oral reading in polish and English: A psycholinguistic perspective. In S. Hudelson (Ed*.), Learning to read in different languages.*

Washington D.C.: Center for Applied linguistics.

Rosenblatt, L. (1938). *Literature and the reader: research in response to literature, reading and interests, and the teaching of literature*. Urbana, IL: National Council of Teachers of English.

Rosenblatt, L. (1978). *The reader, the text, the poem*. carbondale, IL: Southern Illinious University Press.

Saville-Troike, M. (1991). *Teaching and testing for academic achievement*. Washington DC: National Clearinghouse for Bilingual Education.

Schallert, D.L., Meyer, D.K., & Fowler, L.A. (1995). The nature of engagement when reading in and out of one's discipline. In K.A. Hinchman, D.J. Leu & C.K. kinzer (Eds.), *Perspectives on literacy research and practice (44 th yearbook of the National Reading Conference* (pp. 119-125). Chicago: National Reading Conference.

Schegloff, E. (1996). Turn organization: one intersection of grammar and interaction. In E. Ochs, E. Schegloff, & S. Thomas (Eds), *Interaction and grammar*. Cambridge: Cambridge University Press.

Smith, F. (1971). *Understanding reading*. New York: Holt, Rinehart & Winston.

Smith, F. (1978). *Understanding reading: Apsychological analysis of reading and learning to read (2nd ed.)*. Austin, TX: Holt, Rinehart and Winston.

Smith, F. (1988). *Joining the literacy club*. New York: Heinermann.

Smith, F. (1988). *Understanding reading (4th edition)*. Hillsdale, NJ: Erlbaum.

Smith, D.G. (2002). Hermeneutics scholar. In M.P. Woolfe & C.R. Pryor (Eds.), *The mission of the scholar: research and practice- A tribute to Nelson Haggerson*. New York: Peter Lang.

Smith, F., & Goodman, K. (1971). On the psycholinguistic method of teaching reading. *Elementary School Journal, 71*, 177-181.

Stanovich, K. E. (1980). Toward an interactive-compensatory model of individual differences in the development of reading fluency. *Reading Research Quarterly, 26*, 32-71.

Stotsky, S. (1979). Teaching the vocabulary of academic discourse. *Journal of Basic Writing, 2* (3), 15-39.

Spolsky, B. (1989). *Conditions for second language learning*. Oxford, UK: Oxford University Press.

Stieglitz, E.L. (2002). *The Stieglitz informal reading inventory*. Boston, MA: Allyn and Bacon.

Thorndike, E.L. (1917). Reading as reasoning: A study of mistakes in program reading. *Journal of Educational Psychology, 8*, 323-332.

Turner, J.C. (1995). The influence of classroom contexts on young children's motivation for literacy. *Reading research Quarterly, 30,* 410-441.

Valdez, L., pierce, L., & O'Malley, J.M. (1992). *Performance and portfolio assessment for language minority students.* washington, DC: National Clearinghouse for Bilingual Education.

Valdez, G. (1998). The construct of the near-native speaker in the foreign language profession: Perspective on ideologies about language. *Profession*, 151-160.

Valdes, G. (1998). The world outside and inside schools: Language and immigrant children. *Educational Researcher, 27* (6), 4-18.

Vygotsky, L.S. (1978). *Mind and society: The development of higher mental processes*. Cambridge, MA: Harvard University Press.

Vygotsky, L.S. (1981). The genesis of higher mental functions. In J. V. Wertsch (Ed. & Trans.), *The concept of activity in Soviet Psychology* (pp. 144-188). Armonk, N.Y.: M.E. Sharpe.

Vygotsky, L.S. (1986). *Thought and language* (A. Kozulin, Trans.). Cambridge, MA: MIT Press

Wang, L.S. (1996). *Causal modelling research on language minorities achievement.* New York: Peter Lang Publishing, Inc.

Watson, D., & Chippendale, E.K. (1979). *Describing and improving the reading strategies of elderly readers*. Joint Center for aging Studies, University of Missouri, MO.

Watt, D. & Roessingh, H. (1994). Some you win, most you lose: Traching ESL student drop out in high school (1988-1993). *English Quarterly, 26* (3), *5-7.*

Watt, D., & Roessingh, H. (2001). The dynamics of ESL drop-out: Plus change. *Canadian Modern Language Review*, (58) 2.

Watt, D., & Roessingh, H., & Bosetti, L. (1996a). Educational experiences of ESL students: Unraveling the role of English language proficiency. In K. McLeod (Ed.) *Multicultural education: The state of the art national study* (Report #4). Winnipeg, MB: Canadian Association of second Language Teachers.

Watt, D., Roessingh, H., & Bosetti, L. (1996b). Success and failure: Stories of ESL students' educational and cultural adjustment to high school education. *Urban Education, 31,* 199-221.

Wei, M. (2007). An examination of vocabulary learning of college level learners of English in China. *Asian EFL Journal, 9* (2).

Whorf, B.L. (1964). *Language, thought, and reality; selected writings*. Cambridge, MA: MIT Press.

Wilson, A. (2005). Interrupting the failure cycle: Revaluing two seventh-grade struggling readers. *Voices from the Middle, 14 (2).*

Wiltse, L. V. (2005). *Cultural diversity and discourse practices in grade 9*. Edmonton, AB: Qual Institute Press.

Wright, E., & Kuehn, P.A. (1998 spring, Summer). The effects of academic language instruction on college bound at risk secondary students. *Journal of Educational Opportunity, 17 (1),* 9-22.

Yin, R. (1994). *Case study research: Design and methods (2nd ed.). Beverly Hills, CA: Sage Publishing.*

Worswick, C. (2001). *School performance of the children of immigrants in Canada,* 1994-98 (Report No. 178; ISBN: 0-662-31229-5). Ottawa: Statistics Canada

The Boy and the Fox

Level: Grade 2-Narrative

Introduction: Please read this story aloud and find out what happens to a boy and a fox.

The Boy and the Fox

One day a boy saw a fox sleeping on top of a rock. The boy said out loud, " If I kill the fox, I can always sell her skin. I can use the money to buy and plant bean seeds. Then I will sell the beans and use the money to buy a field across the way."

"I will then plant bean seeds in my own field. People will see my beans and say, 'Oh, what nice beans this boy has.' Then I will say, 'Keep away from my beans.' They won't listen to me, so I will shout to them loudly, 'Keep away from my beans."

The boy shouted so loudly that the fox woke up and ran away. In the end, theboy was left with nothing.

Comprehension Questions

1. Where was the fox sleeping?
2. What did the boy want to do with the fox's skin?
3. What kind of seeds did the boy want to plant?
4. What did the boy want to do with the money from the beans?
5. Were the people the boy was shouting at real? How do you know?
6. What can we learn from the story?

Background Knowledge

1. Have you ever read this story before?

    Yes   No

Level of Interest

1. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Appendix B

The Crow and the Pitcher

Level: Grade 3-Narrative

Introduction: Please read this story to find out how the crow solves her problem.

The Crow and the Pitcher

A crow flew many miles in search of water. She finally found a water pitcher. When the crow put its beak into the mouth of the tall pitcher, she found that it held only a little water. She could not reach far enough down to get at it. The crow tried and tried. Finally, she gave up.

Then a thought came to her. Not far from the pitcher sat a pile of pebbles. She flew to the pile and with her beak took a pebble and dropped the pebble into the pitcher. She flew back and forth , dropping pebble after pebble into the pitcher.

As the crow worked, the water rose nearer and nearer to the top. She kept casting pebbles into the pitcher until she was able to dip her beak into the pitcher. Then she quenched her thirst.

Comprehension questions

1. What was the crow looking for?
2. What did the crow find at the beginning of the story?
3. How much water did the crow find in the pitcher?
4. What did the crow do to solve the problem of getting the water at the bottom of the pitcher?
5. What did the crow do at the end of the story?
6. What is the lesson we can learn from this story?

Background Knowledge

1. Have you ever read this story before? (a) Yes (b) No

Level of Interest

2. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Hide and Seek

Level: Grade 2- Expository

Please read this article to learn about the first people to do hide and seek.

Hide and Seek

Many children like to play 'hide and seek'. Hide and seek did not begin as a game. It started many years ago in a far away land.

Hide and seek was something grown-ups did each year when winter was over. People were tired of the cold and the long nights. They wanted to know if spring was on the way.

Grown-ups would leave their village and go into the woods. They tried to find or 'seek out' birds and flowers. It was important to return with a bird or flower. If one did, this was a sign that spring had really started.

Comprehension questions

1. When did hide and seek start?

2. Many years ago, who did hide and seek?

3. During what time of the year did grown-ups do hide and seek?

4. Name two things people looked for when they did hide and seek?

5. Hide and seek was something grown-ups did each year. Why was it so important for them to do hide and seek?

6. Hide and seek is different today. Why is it so?

Background Knowledge

1. How much did you know about the information on light before reading this article?

(1) nothing   (2) very little   (3) something   (4) a good amount   (5) a lot

Level of Interest

1. How much did you like reading this story?
(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Hangnails

Level: Grade 3-Expository

Please read this article to learn something about hangnails.

Hangnails

What is a hangnail? First of all , a hangnail is not really a nail. It is a tough, little piece of skin that hangs loosely at the side of your fingernail.

You get a hangnail when the skin around your nail gets a little dry. Then a piece of skin might start peeling off. Soon the piece of skin starts rubbing off against your other fingers or against objects that you touch. The rubbing bothers the hangnail and make the skin red and sore.

What do you do with a hangnail? Don't bite it off. That will only make it worse. Instead, cut it off with scissors or nail clippers.

You can avoid getting hangnails by taking good care of your hands and nails. After washing your hands, dry them well. Use lotion to keep dry skin smooth.

Comprehension questions

1. What is a hangnail?

2. You get a hangnail when the skin around your nail gets to be what?

3. What shouldn't you do to a hangnail?

4. How should a hangnail be removed?

5. Why can a hangnail hurt?

6. Why should you remove a child ask an adult to remove a hangnail?

Background Knowledge

1. How much did you know about the information on light before reading this article?

(1) nothing   (2) very little   (3) something   (4) a good amount   (5) a lot

Level of Interest

1. How much did you like reading this story?
(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

The Blind Woman

Level: Grade 3-Narrative

Introduction: Please read this story about a woman who could not see.

The Blind Woman

A woman who had become blind called a doctor. She promised that if he could cure her, she would reward him well. If he failed, he would get nothing. The doctor agreed.

He went often to the woman's apartment. He would pretend to treat her eyes. But he would also steal furniture and other objects. Little by little, he took all her belongings. Finally, he used his skill to cure her and asked for his money.

Every time he asked for his payment, the woman made up a reason for not paying him. Eventually he took her to court. The woman said to the judge, " I promised to pay the doctor if he gave back my sight. However, how can I be cured? If I truly could see, wouldn't I see furniture and other belongings in my house?"

Comprehension questions

1. Who did the woman ask for help?

2. What promise did the woman make to the doctor?

3. What did the doctor do while in the woman's apartment?

4. Why did the doctor take the woman to court?

5. Why didn't the woman want to pay the doctor for curing her blindness?

6. What would you do if you were the judge in this case?

Background knowledge

1. Have you ever read this story before? (a)Yes (b) No

Level of Interest

1. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

The Lesson

Level: Grade 2-Narrative

Introduction: Please read this story about a woman who could not see.

The Lesson

There were once some children who were always fighting. Their father tried to get them to stop. They would not listen. They could not get along together. Finally, the father asked his children to do something to teach them a lesson. The father asked, " Bring me a bunch of sticks."

The children did as they were told. One child held out the bunch of sticks. The father said,' try to break the bunch of sticks." The child tried. He could not break the bunch of sticks. Each child took a turn. No one could break the bunch of sticks. The father then handed one stick to each child. "Now try to break your stick," said the man.

Each child easily broke a stick in two. The father then said, " Take a lesson from the sticks, my children. Only together are they not able to be broken.

Comprehension Questions

1. What were the children in the story always doing?

2. What did the father ask his children to bring to him?

3. What did the father ask each child to do with the bunch of sticks?

4. What could each child easily break into two pieces?

5. Why did the father want to teach his children a lesson?

6. What can we learn from this story?

Prior Knowledge

1. Have you ever read this story before? (a) Yes (b) No

Level of Interest

2. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Our Best Friend

Level: Grade 2-Expository

Introduction: Have you ever had a pet? Please read this article to learn about the first pets.

Our Best Friends

Many people have pets. Do you ever wonder how animals came to live with people? Long ago, all animals were wild. People then hunted for food. They hunted many kinds of animals. They grew to like those that were smart, friendly, or useful. Horses were once food. So were rabitts and some birds. Today they are pets.

Wolves often followed hunters. They wanted some of the meat. Some were taken in to live with the hunters. Dogs come from the wolf family. They are the oldest pets. Most pets come from families of wild animals that live in groups. One well-known pet does not fit this picture. When you pet it, it makes a strange sound. This pet is cat.

Comprehension questions

1. Long ago, what did people have to do?

2. Name a pet today that was used for food long ago?

3. Which animal often followed the hunters of long ago?

4. Name a pet that does not come from families of wild animals.

5. Why do you think the hunters of long ago grew to like the wolf?

6. Based on what you have read, why did some animals never become pets?

Background knowledge

1. How much did you know about the information on light before reading this article?

(1) nothing   (2) very little   (3) something   (4) a good amount   (5) a lot

Level of Interest

1. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Ant Lion

Level: Grade 3-Expository

Introduction: Please read this article to learn something about a lion that does not roar.

Ant Lion

If you were an ant, you would not want to meet an ant lion. Ant lions feed on ants. They trap them in holes that they dig in dry, loose soil.

The ant lion is an insect. It digs its hole by walking backwards in a circle. As it walks, it pushes its tail into the soil. This moves the dirt up over its wide back. By jerking its head, the ant lion throws the soil off to the side. The ant lion walks in smaller and smaller circles. At last, it reaches its center of its cone-shaped hole. The ant lion then hides in the soil at the bottom.

An unlucky ant walking on the edge slides down the soft sides of the hole. The waiting ant lion traps the ant in its jaws. The juices from the ant's body then become the ant lion's meal.

Comprehension questions

1. What do ant lions like to eat?

2. What is an ant lion?

3. What is the shape of the hole dug by the ant lion?

4. How does the ant lion trap its meal?

5. What does the ant lion do with the ant's body?

6. What would happen to the ant lion if the soil became dry and hard?

Prior Knowledge

1. How much did you know about the information on light before reading this article?

(1) nothing   (2) very little   (3) something   (4) a good amount   (5) a lot

Level of Interest

1. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Appendix I

Clouds in the Sky

Level: Grade 1-Expository

Introduction: Please read this article to learn something about clouds.

Clouds in the Sky

Look up in the sky. What do you see? There are clouds. Some can look white. Others can look dark and gray.

On a sunny day we may see nice big ones. The sun can shine through and make them look white. On another day we may see many clouds. They are all over the sky. It looks like it will rain. The sun cannot shine through as well. This makes the clouds look dark and gray.

Comprehension Questions

1. What is the color of clouds on a cloudy day?

2. Why do clouds look white on a sunny day?

3. On what kind of a day might we see big clouds?

4. Why do clouds look dark and gray on a cloudy day?

5. Why can't we see the sun on a day when the clouds look dark and gray?

6. Do you like clouds when they are white or gray? Why?

Prior Knowledge

1. How much did you know about the information on light before reading this article?

(1) nothing   (2) very little   (3) something   (4) a good amount   (5) a lot

Level of Interest

1. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Appendix J

A Snowy Day

Level: Grade 1-Narrative

Introduction: Please read this article to find out what two children like to do.

A Snowy Day

Bill and Kim looked out the window. They were very happy. It was snowing. They wanted to go out to play.

Bill and Kim could not wait to build something with the snow. When they went outside, they made two large balls. They put one on the top of the other. Then they made one small ball. They put it on the very top. Then Bill and Kim used some sticks and stones. Now they are done.

Comprehension Questions

1. What were the names of the two children in the story?

2. Why were Bill and Kim very happy?

3. How many balls of snow did Bill and Kim make?

4. Where did they put the small ball?

5. What do you think Bill and Kim built with the white flakes?

6. Could this story have happened? What makes you think so?

Prior Knowledge

1. Have you ever read this story before? (a) Yes (b) No

Level of Interest

2. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

A Day by the Lake

Level: Grade 1-Narrative

Introduction: Please read this article to find out what a girl likes to do?

A Day by the Lake

Pat stood by the lake. A soft wind blew. Across the grass, ducks swam near the shore. There were big ducks and baby ducks.

Two stood on the grass near Pat. Pat opened a paper bag.. She put her hand in it. It came out full of bits of bread. She dropped some bread around her on the ground. She threw some on the water. The ducks swam to it.

They quacked and ate the bread. Pat laughed and threw some more bread.

Comprehension questions

1. Who was standing by the lake?

2. What did Pat see?

3. What did Pat take out of the paper bag?

4. Where did Pat throw some of the bread?

5. Was Pat having a good time? How do you know?

6. Could this story have happened? What makes you think so?

Prior Knowledge

1. Have you ever read this story before?

Level of Interest

2. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Appendix L

Light

Level: Grade 1-Expository

Introduction: Please read this article about light.

Light

Where does light come from? You know it comes from the sun. It comes from the stars too. A fire makes light. A lamp makes light. What is the same about all these things? They are all hot.

Have you ever been in a place with no light at all? Most places have some light. Think of your room at night. Can you see a little bit when your lamp is out? If you can, there is some light getting in.

Without light, we could not see. We see things only when light falls on them.

Comprehension questions

1. We know that light comes from the sun and from a lamp. Name one other place light comes from?

2. What is the same about things that make light?

3. What does this article tell you about a persons' room temperature?

4. What couldn't we do without light?

5. Fill in the missing word. The person who wrote this article wants you to think that light is very-------------.

6. Why would your teacher have you read an article such as this one?

Prior Knowledge

1. Have you ever read this story before?

Level of Interest

2. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Appendix M

The Two Farmers

Grade level 3-Narrative

Introduction: Please read this story to find out what happens to these farmers.

The Two Farmers

Once there were two farmers, David and Joseph, who decided to form a partnership. They agreed to buy a field together.

David said to Joseph, "Now we must share the crops as id fair and right. Suppose you take the roots and I take the tops of the plants?" Joseph agreed to this plan. That year the two farmers planted corn. However, when they harvested the crop, David got all the corn and Joseph got nothing but roots and rubbish.

David noticed the displeased look on Joseph's face and said, "This year I have benefited. Next year it will be your turn. You shall have the top and I will have to put up with the root."

When spring came, David asked Joseph, "would you prefer to plants carrots this year?" "Fine! That's a better ffod than corn," answered Joseph. But when the crop was harvested, David got the carrot roots, while Joseph got the carrot greens. Joseph was so angry that he decided to end the partnership.

Comprehension questions

1. What were the names of the two farmers?

2. What did David and Joseph agree to do together?

3. What did the farmers plant this year/

4. Joseph was upset about how the corn was divided. Why was he upset?

5. What happens at the end of the story?

6. Would you ever become a partner with someone like David? Why?

Background knowledge

1. Have you read this story before? (a) Yes (b) No

Level of interest

1. How much did you like reading this story?
(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Smelly Stickers

Grade level 4-Expository

Introduction: Please read this article to learn how scratch and sniff or smelly stickers work.

Smelly Stickers

How do smelly stickers work? Almost any smell you can think of, from pizza to peanut butter, can be captured and put on a scratch and sniff sticker. But there's more to them than meets the nose!

Take a look at a sticker. All you see is a picture of something. But hundreds of thousands of super small containers are glued to that sticker. Inside each container is a little bit of fragrance. The smell may come from the object pictured or it may have been made in a laboratory with chemicals.

When you scratch the sticker, you break open some of the containers. That releases the smell. But don't scratch too hard. You only need to open a few to catch the scent and your sticker will last a lot longer.

Some smells can't be captured. So far, they can't put the smell of a hamburger on a sticker. But wouldn't you rather smell the real thing… just before you bite into a double cheeseburger?

Comprehension questions

1. Name a smell mentioned in the article that ca be put on a sticker.

2. Name a smell that has not been put on a smelly sticker.

3. There are hundreds of thousands of what glued to a smelly sticker?

4. What happens when you scratch a smelly sticker?
5. Janet has a smelly sticker. Her smelly sticker lost its smell much faster than Bill's. Why?

6. Why do you think smelly stickers are made for people to buy?

Background knowledge

1. How much did you know about the information on light before reading this article?

(1) nothing   (2) very little   (3) something   (4) a good amount   (5) a lot

Interest level

2. How much did you like reading this story?

(1) Horrible   (2) Fair   (3) Good   (4) Very good   (5) terrific

Appendix O

Parent Information Letter

Date (of letter release)

Dear (name of participant's parent),

I am writing to ask your consent for the participation of your child in my research study on the challenges of learning to read in English by ESL adolescents. The research is for my doctoral dissertation in the Department of Elementary Education at the University of Alberta. The purpose of this study is to identify the challenges that the ESL adolescents encounter in reading English texts in the school curriculum and what these students do to overcome those barriers. In addition to completing my dissertation, I will be using the information in conference presentations and publications.

The participation of your child in the study involves seven sessions of oral reading activities and three sessions of informal interviews. Each session will take about 2 hours or less and will be held in the convenience of your home. All the sessions with your child will be completed in a period of 5-6 weeks if we meet for two sessions every week. The reading activities will have immediate benefits for your child and will improve his/her cognitive and metacognitive strategies in reading comprehension. Besides, your child will receive a complete assessment of his/her oral reading performance and knowledge about potential areas of strengths and weaknesses. I will transcribe the tapes and analyze them in conjunction with the information collected during the reading activities.

The participation of your child in the study is voluntary and he/she is able to withdraw at any time. I will discuss this with your child at the beginning of every session and ask him/her if he/she still wants to be in the study or if she/he has any questions that want to ask me regarding the study. If your child chooses to withdraw at any time, he/she can contact me by phone, or email and inform me that he/she does not wish to continue in the study. There will be no penalty or consequences for withdrawing from the study. Upon withdrawal from the study, all data for your child will also be withdrawn. Either you as the parent, or your child can contact me at the phone or the email address listed below at anytime if you wish to withdraw, or if you have any questions. All the information

gathered during the reading activities and interviews with each participant will be shared and discussed with him/her to assure understanding and verification. All the information gathered will be treated confidentially. The findings from the study will be included in my dissertation and may be used in scholarly journals and conference presentations. The name of your child will not be identifiable in any presentation or publication. All original data will be kept in a secure place for a period of 5 years and then destroyed.

The plan for the study has been reviewed for its adherence to ethical guidelines and approved by the Faculty of Education, Extension and Augustana Research Ethics Board (EEAREB) at the University of Alberta. For questions regarding participants' rights and the ethical conduct of research, contact the chair of the EEAARB at 780-4923741. You may also contact me at the phone number listed below if you have any questions. You can also contact my supervisor, Dr. Joyce Bainbridge, at 4923741 or by email at HYPERLINK "mailto: joyce.Bainbridge@ualberta.ca if you have any questions or concerns. You may also contact the Chair of the Department of Elementary Education, Dr. Diane Oberg for further questions at 780-4924237 or email her at HYPERLINK "mailto:diane.oberg@ualberta.ca" diane.oberg@ualberta.ca.

Enclosed please find two copies of the information letter and consent form. Please complete the attached consent form and forward it to me to indicate you are willing to consent to the volunteer participation of your child in the proposed study. Please keep one copy for your own records and forward the second copy to me in the stamped addressed envelope I have provided. I will contact you shortly after I receive the signed form to arrange a mutually convenient time for getting started.

Sincerely,

Gholam Moteallemi

gholam@ualberta.ca

Appendix P

Parental Consent Form

Title: Cues and Miscues: ESL Students' Use of Language Cuing Systems, Strategies, Background Knowledge and Interest in Reading in English

Student researcher: Gholam Yahya Moteallemi, Doctoral student, Department of Elementary Education

Phone: 780-4354732

Supervisor: Dr. Joyce Bainbridge

Phone: 780-4923751

Purpose: The purpose of this study is to investigate the oral reading performance of three ESL students to identify what barriers they encounter in reading school texts in English and what they do to overcome those barriers. The study also attempts to explore how readers' performances vary as a function of their background knowledge, their knowledge of sentence structure, syntax, word meanings and the use of particular strategies. In addition to exploring the role played by the cognitive factors in learning to read in English, the study aims to find out the role played by the social cultural factors and context of learning in the reading development of ESL students by analyzing the students' responses to interview questions regarding the teaching/learning activities in their classroom. The participants will be asked to do 7 reading activities and 3 interviews over a period of 6 weeks. Each activity including the interviews will take about 2 hours or less and will be arranged at the convenience of the participants. The interviews will be taperecorded and the tapes will then be transcribed. The information gathered during the interviews will be analyzed in conjunction with the data gathered during the reading activities.

Consent: I, -- parent of --------------------------- agree to have my child participate in the above named study.

I have read the information letter provided and I understand that participation in this study is voluntary. My child may refuse to answer any questions he chooses, and may

withdraw from the study at any time without consequences. If my child withdraws from the study, all data will also be withdrawn.

I also understand that all the information given will be kept confidentially. The child's name will not be associated with any publications and presentations arising from the study. All information collected will be kept in a secure place at the researcher's home. The information will be retained for 5 years following the completion of the study and will be destroyed then.

All questions that I had about the research have been answered to my satisfaction, but I am free to ask further questions of the researcher at any time. If I have any questions or complaints, I may contact the student researcher, Gholam Moteallemi, or email him at gholam@ualberta.ca. I might also contact Mr. Gholam Moteallemi's supervisor, Dr. Joyce Bainbridge at 780-4923751. or email her at Joyce. HYPERLINK "mailto:Bainbridge@ualberta.ca" Bainbridge@ualberta.ca if I have any further questions or concerns. I may also contact Dr. Diane Oberg, Chair of the Department of Elementary Education, at 780-4924273 or email her at HYPERLINK "mailto:diane.oberg@ualberta.ca" diane.oberg@ualberta.ca.

I understand that the plan for the study has been reviewed for its adherence to ethical guidelines and approved by the Faculties of Education, Extension and Augustana Research Ethics Board (EEAREB) at the University of Albereta. For questions regarding participant rights and ethical conduct of research, I may contact the chair of the EEAREB at 780-4923751.

I may retain one copy of the information letter and consent form for my own records to refer to if I might have further questions about the study, and I will sign and forward the second copy to the researcher to indicate I am willing to consent to the volunteer participation of my child in the proposed study. The researcher might contact me after the signing of this form to arrange a mutually convenient time for getting started.

Parent's signature   Date

Appendix Q

Participant Information Letter

Dear (name of child)

My name is Gholam Moteallemi and I am a student at the University of Alberta. I am inviting you to be part of a research study that will help me to receive my Ph.D. degree. My purpose in doing this study is to find out more about students' reading abilities when they have learned English as a second language. Your participation in the study will help me to understand what students like you need in the classroom.

I am planning to interview you once at the beginning of the study about your own reading habits and reading activities. What do you like to read and what do you not like to read? Then you will have 7 sessions of oral reading activities with me. You will read 2 reading passages that are like a story and 2 passages that are more like reading information. I will ask you questions at the end of each passage. I will ask you why you answered the way you did because I need to know how you thought about the reading. You may tell me how you find the answers during some of these activities.

Following these reading activities, I will interview you twice on 2 different days to ask you questions about your classroom activities. I will ask about what you like or dislike doing in class and what in the classroom can help you learn most. We will also talk about how other students or the teacher or the class environment can help you improve your reading in English.

Your participation in the study is voluntary and you can withdraw ant time you want to without any consequences for you. To do this, you cab tell me in person, or send me an email, or phone me at the contact information below. Your name will not be revealed on any document or paper, nor to any person associated with this study. Whatever you say during the interviews will not be discussed with your teachers or parents. It will remain confidential. I appreciate your participation in the study and thank you for allowing me to learn from you.

Sincerely,

Gholam Moteallemi

Appendix R

Participant Consent Form

I, --------------------------------------- consent to participate in the proposed study. I understand that my participation is on a voluntary basis and that I may withdraw any time I want to. If I withdraw from the study, all data will also be withdrawn. I also understand that my name will be kept as a secret and will not be revealed to anybody or anywhere on a document, publication or in a presentation. I also understand that my opinions will not be discussed or revealed to my parents or teachers. If I have any questions or complaints, I may contact the student researcher, Gholam Moteallemi, at 780-4354732, or email him at HYPERLINK "mailto:gholam@ualberta.ca" gholam@ualberta.ca. I might also contact Mr. Gholam Moteallemi's supervisor, Dr. Joyce Bainbridge at 780-4923751. or email her at Joyce. HYPERLINK "mailto:Bainbridge@ualberta.ca" Bainbridge@ualberta.ca if I have any further questions or concerns.

I have received 2 copies of the information letter and consent form. I may retain one copy for my own records to refer to if I have any questions and I will forward the signed form to the researcher who can contact me after receiving the signed form.

Participant's signature   Date