Effect of Teaching Comprehension Strategies on the Oral Narrative Skills of Kindergarten Children

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ABSTRACT

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The proposed study investigated the effect of teaching narrative comprehension strategies on the oral narrative abilities of kindergarten children. The sample consisted of 30 children attending two regular kindergarten classes at a French elementary school in the Greater Montreal area. Children from both classrooms were randomly assigned to either a treatment condition or a control condition. Nine books from a children's series written by a single author were used for the intervention. The treatment group received instruction on narrative comprehension strategies using these books. The control group heard the same stories read aloud and participated in general discussions about each story's events, but instruction on comprehension strategies was not provided. The treatment group 'activity sessions' covered, in sequence, four strategies associated with children's narrative skills: analyzing story grammar, recognizing causal relations, identifying characters' internal states, and making predictions about states and events. The final treatment group 'activity session' involved a review of the four strategies and their application to a new story. Pretest and posttest measures of narrative abilities were comprised of a narrative picture sequencing task, responses to narrative comprehension questions, and a narrative retell task. The effect for the story retelling task was significant.

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Chapter 1: Review of the Literature

Statement of the Problem

Children are exposed to oral narratives from a young age. By the time they enter kindergarten, many enjoy listening to stories of real or imagined events, especially if they relate to their personal worlds. Narrative comprehension is an active, constructive, meaning-making process that requires the coordination of various skills, knowledge and strategies. For children to comprehend narratives successfully, they need to form representations of objects, characters, actions and places (Paris & Paris, 2007). They also need to understand how narrative texts are organized temporally and causally; have knowledge of the relationships amongst text elements; and infer characters' mental states and goals (Paris & Paris, 2007).

Oral narrative comprehension skills are also a key resource when children begin the important transition from oral to written communication. It has been suggested that the skills used in oral narrative comprehension are the same ones children will use when they attempt to comprehend the stories they read and these skills appear to be important for later academic success (Hayward & Schneider, 2000). Models of reading development generally acknowledge that listening comprehension contributes to reading comprehension, along with other critical factors, such as word decoding (Kirby, 2007) and fluency (Katzir et al., 2006). Gough and Tunmer (1986) propose a 'simple view of reading' in which reading is the product of decoding and comprehension. They recognize that what is decoded must also be understood; decoding is necessary, but not sufficient for reading. According to this simple view, if print cannot be translated into language then it cannot be understood.

The importance of oral narrative to children's daily communication, the role of oral narrative in the preschool and early elementary curricula, and the link between oral and written narrative comprehension motivate the present study. The purpose of the study was to determine: (a) whether instruction on a particular set of narrative comprehension strategies facilitates the oral narrative skills of kindergarten children, and (b) if effects are greater in a treatment group than in a control group exposed only to book reading sessions. The instruction is based on the literature on narrative, narrative instruction, and instructional frameworks.

Approaches to Narrative and Narrative Instruction

The instruction in the present study draws on several approaches to narrative and narrative instruction proposed in the literature. Although the approaches have some common features, they will be discussed separately in the following section for the sake of clarity.

Story grammar. Mandler and Johnson (1977) describe a story schema as a "set of expectations about the internal structure of stories that make both comprehension and recall more efficient" (p. 377). This schema consists of a general framework that includes a hierarchical ordering of story elements, with basic components related to one another causally or temporally (Rand, 1984). The term *story grammar* captures the important properties of a story schema and gives rules for generating well-formed stories. Stein and Glenn (1979) identified six story grammar components: setting, initiating event, reactions and attempts, consequences, resolution, and ending. The setting refers to the time and place of a story and the introduction of the main characters. The initiating event is an event (physical or internal) that causes a problem for the characters. The problem, in turn,

causes the character to respond or react (reactions and attempts) and leads to the fourth component, the consequence. The consequence refers to the character's success or failure in achieving a goal. The resolution and ending frequently provide an overall summary or moral of the story.

Many narrative intervention studies found in the literature focus on the understanding or production of story grammar components (Gersten, Fuchs, Williams, & Baker, 2001; Westerveld & Gillon, 2008). Murza (2009) reported preliminary results of a systematic review of explicit story grammar instruction on children's oral and written narrative comprehension and production. Analysis of 19 randomized control trials to date has revealed strong, positive effects and results are forthcoming for another 74 studies.

One example of a study of story grammar instruction with young children is found in Bui (2002). She investigated the effects of story grammar instruction on the comprehension of narrative text for 26 students (six with disabilities) in first grade general education classes. Half of the children received the instruction on story grammar and the other half served as a control group. Results revealed that the children who had received instruction showed greater improvement in their abilities to retell stories and answer story grammar questions than the control group.

Hayward and Schneider (2000) conducted an exploratory study on the effectiveness of teaching story grammar components to 13 preschoolers diagnosed with language impairment. All of the children showed improvements in their posttest scores of story information and story content when compared to pretest scores despite significant variability at pretest.

In these intervention studies focusing on story grammar, researchers assessed oral narrative comprehension by addressing story grammar elements in children's story retells and/or their responses to comprehension questions. Other researchers have attempted to address and measure children's narrative comprehension in terms of their understanding of cause and effect relationships, as discussed below.

Causal network model. Incorporating elements from both story grammar and cognitive perspectives is an approach to narrative comprehension that highlights the cause and effect connections between individual statements or events in a text (Lynch, van den Broek, Kremer, Kendeou, White, & Lorch, 2008). Causal network theorists claim that what makes a story coherent are the causal relations between story elements (Hayward, Gillam, & Lien, 2007). These, however, are often not explicitly stated; instead, listeners must make inferences using prior knowledge as well as knowledge of narrative structure. According to Lynch et al. (2008), most research on causal inferencing as it relates to narrative has been conducted with adults and children beyond the age of six. Lynch's study is an exception. In their cross-sectional study, children aged four to six years listened to narratives presented, in a single session, aurally and with audiovisual support. Children's narrative comprehension was measured by evaluating their sensitivity to causal structures. The results revealed that even preschool children were sensitive to the causal structure of the long and complex narratives and that this sensitivity increased with age (Lynch et al., 2008).

Others have investigated children's causal inferencing during dialogic reading. Dialogic reading is based on the premise that "practice in using language, feedback regarding language, and appropriately scaffolded adult-child interactions in the context of

picture book reading all facilitate young children's language development" (Zevenbergen & Whitehurst, 2003, p. 178). Through shared reading, the child is encouraged to become the teller of the story over time. Correlational studies indicate that the way in which preschoolers are read to relates to the language gains that they obtain from the picture book reading experience (Arnold, Lonigan, Whitehurst, & Epstein, 1994; Reese & Cox, 1999). Several researchers have demonstrated that shared picture book reading experience result in gains in preschoolers' vocabulary (Elley, 1989; Sénéchal, Thomas & Monker, 1995), oral language complexity (Valdez-Menchaca & Whitehurst, 1992), and narrative skills (Harkins, Koch, & Michel, 1994).

Makdissi and Boisclair (2006) used case studies to examine the impact of dialogic reading on the causal inferencing of 12 French-speaking preschoolers. They analyzed the children's elaboration of causal relations among story elements during and after a story reading activity. At key points in the causal chain of story events, the examiner stopped reading to ask each child about the causal relations up to that point. After the story was read, the child was asked four more questions about causal relations for comparative purposes. The results demonstrated that children make causal relations more explicit when they are questioned during, rather than after, story reading. The researchers concluded from these results that dialogue during reading fosters better expression of causal connections by preschoolers (Makdissi & Boisclair, 2006).

Narrative thinking. Narrative, in Bruner's (1986) view, is a mode of thought that helps people make sense of their world. He explains that narrative incorporates two "landscapes": the landscape of action and the landscape of consciousness. The landscape of action refers to actions and events that happen in the physical world, while the

landscape of consciousness involves the motivations and intentions of the protagonists in those events (Bruner, 1986).

Neo-Piagetian theorist Case proposed that increasing sophistication in narrative thinking during childhood depends on age-related growth in children's general cognitive capacities, particularly the ability to process information (McKeough, Davis, Forgeron, Marini, & Fung, 2005). In Case's model, working memory increases as a function of maturation and operational efficiency gained through practice and is accompanied by growth in children's ability to simultaneously focus on the landscape of action and the landscape of consciousness. The average four-year-old thus typically focuses on either the external action sequences or the internal mental states of the character, but as the child matures the two aspects can be considered in tandem.

McKeough et al. (2005) developed an instructional program designed to improve the narrative productions of first graders. Case's insights about children's limited processing capacity were considered when developing the instruction. Specifically, cognitive scaffolding was accomplished by providing children with icons of character's mental states, ideas, and thinking. The authors found gains in children's knowledge of story concepts following instruction and attributed them, in part, to the provision of such scaffolds.

Narrative comprehension has also been related to the development of theory of mind: children's understanding of the mind, beliefs, states, and experiences of self and others (Paris & Paris, 2003). By the time children reach the age of four, they are aware of mental states in themselves and others. They can understand the notion that people have both desires and beliefs that may cause observable behaviours (Astington, 1993; Paris &

Paris, 2003; van den Broek, Kendeou, Kremer, Lynch, Butler, White, et al., 2005; van Kraayenoor & Paris, 1996). Given that the transition point in terms of theory of mind development occurs at age four, it has been suggested that children cannot synchronize the landscapes of narrative before this age.

Narrative Comprehension Instruction

Teaching comprehension strategies requires time and effort and needs to be gradual and sensitive to changing contextual conditions from classroom to classroom (Block & Duffy, 2008). Teachers often use an instructional framework to guide the process and to sequence lessons. The present study will involve a blend of two instructional frameworks commonly used to teach comprehension: direct instruction, reciprocal teaching, and transactional strategies.

Direct instruction. Direct instruction consists of a teacher-directed strategy effective for providing information or step-by-step skills. Baumann and Bergeron (1993) investigated the effects of instruction in story mapping on first-grade students' comprehension of central story elements. Story mapping consisted of teaching the children to map out stories in children's literature as a means to develop story schema and promote their recognition and recall of central narrative elements. Results revealed that direct instruction in story mapping improved first graders' identification and sequential organization of central story elements (Baumann & Bergeron, 1993). In an intervention study, Garner and Bochna (2004) examined the effects of instruction in narrative text structure on first graders' listening and reading comprehension. A comparison group received basal activities including listening to and reading stories. It was demonstrated that direct explanation and guided practice for each of the main story

elements improved first graders' listening and reading comprehension. Their results thus supported teaching text structure concepts to beginning readers. Paris and Paris (2007) also conducted an intervention study in order to determine whether direct strategy instruction could enhance narrative comprehension skills of children in first grade. The study provided five weeks of instruction about narrative elements. The results demonstrated that understanding and recall of main narrative elements improved, as did children's skills in making inferences and in understanding the psychological aspects of stories.

Reciprocal teaching. Developed by Palincsar and Brown (1984), reciprocal teaching is a researcher-designed, multiple-strategies instructional package. It is an "interactive instructional framework that focuses on sharing the teaching of assigned texts amongst the teacher and the students" (Thompson, 2008, p. 161). Palincsar and Brown (1984) developed this strategy through two instructional studies on comprehension-fostering and comprehension-monitoring activities of seventh grade poor comprehenders. Based on the concept of scaffolding, the four activities for teaching comprehension were: summarizing, questioning, clarifying and predicting. Using reciprocal teaching, the teacher models each activity and provides extensive scaffolding until the children become more adept. Results revealed that reciprocal teaching, with an adult model guiding the student to interact with the text in more sophisticated ways, led to an improvement in the quality of the summaries and questions and sizable gains on comprehension tests (Palinscar & Brown, 1984).

Myers (2005), a kindergarten teacher and action-researcher, modified Palincsar and Brown's (1984) approach for use with her students. The goal of her study was to

determine if the use of reciprocal-teaching strategies would improve student oral narrative comprehension. Because her students were non-readers, she read aloud and used puppets to model each strategy; Princess Storyteller summarized stories, Quincy Questionner asked questions about explicit story elements, Clara Clarifier asked questions about implicit story elements, and the Wizard had the responsibility of predicting. Interviews and anecdotal records of all her students were collected at the beginning and end of the research project. Based on in-class observations, Myers claimed students became reflective learners who engaged in self-monitoring of their comprehension. She also noted an increase in students' ability to retell stories effectively over the course of the study.

Narrative Comprehension Strategies

In the past, commercial reading materials recommended that as many as 40 different comprehension strategies be taught in a single school year (Dewitz, Jones, & Leahy, 2009). Recently, however, the trend has been to teach fewer comprehension strategies, and to teach them thoroughly. According to Block and Duffy (2008), the strategies that have been researched and validated to be highly successful since 2000 are: predict, monitor, question, image, look-back, reread and fix-it, infer, find main ideas, evaluate, and synthesize.

However, how does this translate for younger children who are not yet reading or are just beginning to read? Paris and Paris' (2007) intervention study on narrative comprehension with young children demonstrated that children as young as age five could learn multiple strategies. Four first grade experimental classrooms received five weeks of direct strategy instruction about narrative elements and relations. Two

comparison classrooms received comparable amounts of instruction with non-narrative activities (language development and poetry). The children in the experimental group were taught comprehension strategies that were specific to narratives with goal-based plots. They consisted of the following: (1) a strategy for identifying and understanding five elements of narrative text structure (setting, characters, initiating event, problem, and resolution); (2) a strategy to bolster inferences about psychological aspects of stories so connections were made between texts and feelings, thoughts, and desires familiar to the children; (3) strategies for making inferences, including prediction, character dialogue, and themes; and (4) retelling strategies intended to help children summarize and sequence events in stories (Paris & Paris, 2007). Assessments administered before and after the instruction showed that the children in the experimental classroom benefited from the narrative strategy intervention. From pretest to posttest, the children improved recall and organization of main story elements, had a better understanding of explicit pictorial information, and improved their inferencing and understanding of the psychological aspects of stories (Paris & Paris, 2007). For most of these variables, the children in the experimental group had lower scores at pretest and caught up to or even surpassed the comparison children at posttest (Paris & Paris, 2007).

The Present Study

Research on oral narrative comprehension in young children is limited. There have been few experimental studies on the effectiveness of teaching narrative comprehension strategies before second grade. Some studies minimize decoding demands, but do not provide instruction about using pictures to comprehend text. In addition, those studies conducted before grade two rarely involved the teaching of

multiple strategies. The most complete study encountered in the literature was Paris and Paris (2007). Using their intervention as a model, this study explores the benefits of explicitly teaching multiple narrative comprehension strategies to kindergarten children. The brevity of the Paris and Paris (2007) intervention is maintained in order to determine whether the gains in narrative skills they observed for first graders can be obtained with kindergarten children.

The study was conducted in French, the predominant language of instruction in Quebec, with French-speaking children. An extensive search for teaching materials in both English and French revealed that although some French-language materials specific to teaching children about narrative have been published locally in the last five years or imported from Europe, there are far more resources available in English. Moreover, only a single intervention study related to narrative comprehension and conducted in French was identified (see Makdissi & Boisclair, 2006). If the results of the present study are positive, the instructional program could supplement the kindergarten curriculum or be of interest to other practitioners (e.g. speech-language pathologists or 'orthopédagogues').

Chapter 2: Method

Research Questions

This research project examined the effects of multiple-strategies instruction on the oral narrative comprehension of kindergarten children. The goal was to determine whether teaching comprehension strategies that focus on story grammar, causal relations, internal states, and prediction was an effective way of facilitating the oral narrative skills of kindergarten children. The primary research question is: does explicit narrative comprehension instruction facilitate the oral narrative abilities of young children relative

to a control group exposed only to book reading sessions followed by general discussion about story events? More specifically, does the comprehension-focused instruction result in improvements in children's responses to comprehension questions, picture sequencing, and retelling of a story, a task that involves expressive language and simultaneously reflects comprehension?

Research Design

A repeated measures design (mixed model) was used to evaluate the effects of the instruction on children. Participants were evaluated prior to and after the instruction using parallel forms of the same measure. The independent variable was groups of participants: treatment and control. The dependent variables were measures of narrative skill, elaborated below.

This study randomly assigned children from both classrooms to the treatment and control groups. Each group was balanced with equal numbers of children from both classrooms. The children in the treatment and control conditions were subsequently randomly assigned to two subgroups to facilitate delivery of instruction.

All children continued to receive their regular classroom program during the intervention period. Each kindergarten class is taught by an experienced teacher. I visited both classrooms once prior to beginning the study and read stories to the children in order for them to become accustomed to my presence.

Research Site and Participants

This research was conducted at a multicultural French elementary school located in Dorval, which is part of the Marguerite Bourgeoys School Board. A total of 575 children from working- and middle-class families were registered at the school in 2010.

The participants were children registered in two of the regular French kindergarten classes. A sample of 30 children (17 girls and 13 boys) ages 5;6 to 6;6 (mean = 72.09 months, SD = 3.73 months) participated in the study. The assessments and intervention activities took place in a quiet, circular hallway area outside both classrooms. This area is familiar to the students, as it is their access to the rest of the school. Parental consent was obtained for all participants.

Description of Data Collection Instrument

Expression, Reception and Recall of Narrative Instrument. The Expression, Reception and Recall of Narrative Instrument (ERRNI) (Bishop, 2004), a measure standardized and normed on English-speaking British children, was adapted for use in the present study of French-speaking children. No other suitable French-language measure was identified but an adaptation of a different English-language narrative measure to French has since been reported (Thordardottir et al., 2010). The ERRNI assesses the ability to relate, comprehend, and remember a story. The stimuli consist of two sets of pictures. Each set, comprised of 15 colourful images, tells a story (The Beach Story and The Fish Story). The parallel forms allow for counterbalancing and retesting while minimizing practice effects. The expression and comprehension tasks, administered individually, require about 15 minutes to complete. In the standard administration of the measure, the child views the pictures with the aid of the examiner, tells a story while viewing the pictures a second time, responds to literal and inferential questions about the story, and recalls his or her story after a delay. In the present study, I adapted the ERRNI for use with French-speaking children. The adaptations are described immediately below with reference to specific tasks. Scoring for each task is also outlined in this section for

the sake of clarity, with additional details provided in the Procedures (see Scoring and Reliability Checks).

Comprehension questions. The use of questions to assess comprehension in young children has been validated through research. According to Paris & Paris (2003), answering comprehension questions provides a uniform and quantifiable procedure for eliciting and scoring children's understanding of story elements. The comprehension questions task provides a means of directly assessing a child's comprehension of explicit story content as well as their inferencing ability for understanding other implicit but important information (Skarakis-Doyle & Dempsey, 2008). As previously noted, the ERRNI includes a set of questions for each of the stories about explicit and implicit story content as well as a set of minimal prompts to be used by the examiner in eliciting responses. The questions include elements that were covered in the treatment 'activity sessions', i.e., story grammar, cause and effect, internal states and inferencing-predicting. The questions, translated to French, were read to each child (see Appendix A). The children's responses were audio recorded and later transcribed by two members of the supervisor's research team. The transcribed responses were scored using guidelines provided with the ERRNI. As per the ERRNI guidelines, scores were 2, 1, 0, or -1, depending on the quality of the response; a negative (-1) score was attributed when responses were very off-topic or outlandish.

Retell. The ERRNI does not use a retell format. Rather, the measure requires that a child generate a story from the pictures. In the present study, I created a retell task by creating scripts for the two stories in French, my first language (see Appendix B). I based the scripts on a list of "story content" items used for scoring the ERRNI. The script was

audio recorded and presented to each of the children at the individual pre- and posttest assessment sessions. The goal was to create a listening task with picture support.

Story retell calls upon children's expressive abilities and can thus be thought of as a production task, but such a task can also be characterized as a measure of story comprehension. Story retell has been described as offering a comprehensive, integrative level of analysis that is typically unavailable through other measures of comprehension testing (Skarakis-Doyle & Dempsey, 2008). Using story retell to assess comprehension allows the child to reveal their understanding of the story. Additionally, research has demonstrated that story retell tasks correlate well with other measures of story comprehension (Skarakis-Doyle & Dempsey, 2008)

For this study, the children were asked to retell the story they had just heard to a puppet (the naïve listener). The puppet, hidden from view during the story listening portion of the task, included repositionable (velcro) features: eyes, nose, ears, mouth, and hair. It was introduced to the child as the examiner's 'friend'. The child was then asked to reposition the features as they wished and to name the puppet. This was done to put the child at ease. Once the features had been repositioned in a manner that satisfied the child, he or she was asked to retell the story to the puppet while following the images in the book. During the child's retell, the examiner manipulated the puppet by moving its head simulating nods. Examiner responses were confined to neutral ones such as "uh-huh" or "oui" ("yes", in French). When the child was done retelling the story, the puppet expressed joy by clapping its hands and the examiner said: "C'était une très belle histoire! Je crois que (name the child had given to the puppet) l'a beaucoup apprécié!" (That was a great story! I think that (name the child had given to puppet) really enjoyed

it!).

Story retells (see Appendix C) were transcribed using the Codes for the Human Analysis of Transcription (CHAT), an internationally-used system for transcribing child language (MacWhinney, 2000). They were then scored from the transcripts (with reference to the audio recording as needed) according to guidelines set out in the ERRNI manual and examples and refinements developed by the supervisor's research team. The retell was scored based on children's inclusion of particular content designated by the test author. There were 24 story content items, with each item scored on scale of 0 to 2.

Picture sequencing. A picture-sequencing task was also administered in addition to the ERRNI comprehension questions and retell. This task took an average of two to three minutes to complete. It was added to allow children another way to demonstrate their comprehension of the story, while eliminating expressive language demands. A series of seven key images from each story was selected. They were then reproduced and plasticized to create picture cards. A number from one to seven was written on the back of each card. This number represented the order in which the card should be in normal sequence. For this task, the seven picture cards were randomly placed in front of the child. The child was then asked to arrange the seven picture cards to reflect the story from beginning to end. Once the child was finished, the cards were collected and placed in a pile respecting the order in which the child had placed them. Once all of the assessment tasks were completed and the child had returned to class, the examiner noted the sequence of numbers next to the child's name on the list. Sequencing scores were calculated on a 3-point scale in the data analysis phase of the study. The child scored 1 point if three or four images were in the correct position (labelled *disorganized*), 2 points

if five images were correctly positioned (labelled *organized*), and 3 points if six or seven images were correctly positioned (labelled *well-organized*).

Procedures

Piloting. About one month prior to beginning the study, the intervention activities were piloted with a group of 4 four-year-olds registered at a home daycare in the Greater Montreal area. The intervention activities were tested and observations of children's responses to the activities noted. The pilot also served to refine the timing of the procedures and to identify words in the books that might be unfamiliar to young children. As a result of the pilot, several words were replaced with more familiar ones. Given the age of the pilot group (4 years), it was expected that after modification, the children in the study (5-6 years) would understand all or most of the words in the books.

Recruitment and Consent. The timing of assessments and intervention sessions were determined during a meeting with the Director of the school. A total of 36 information letters and consent forms were sent home with the children. Thirty-five consent forms were returned. Four parents refused and one child whose parents had consented had to be dropped due to the fact that he was away on vacation during the pretest evaluation phase. Only one form was never returned.

The total sample for the study consisted of 30 children. Of those 30, two parents refused to allow the audio recording of the assessments and therefore their children's responses were hand-written. The teachers were not present during the assessments or 'activity sessions'. Therefore, the children whose parents did not give consent remained in their classroom and continued with activities within that setting.

Pretesting. Pretest assessments were conducted in early April over a 2-day

period. Each child was seen individually by the researcher and the assessment took approximately 20 minutes to complete. No child was absent during the pretest assessments.

For the pretests, participants were randomly assigned to story (Beach Story or Fish Story). Each assessment began with the child viewing an image provided with the ERRNI to help children warm-up to the task. The child was simply asked to tell me, the tester what he or she saw in the picture. Next, I explained to the child that he or she was going to listen to an audio recording of a story and that after listening to the story he or she would do some activities. General guidelines about concentrating and remaining quiet during the listening task were given. While the child listened to the story, I pointed to the corresponding images in the book. The three different tasks were then administered in counterbalanced order; as elaborated in the description of the instrument, the tasks consisted of comprehension questions, a story retell and a picture sequencing activity.

Treatment and control group assignment. The 30 children from both classrooms were randomly assigned to either a treatment group or a control group. This placed 15 children in the treatment condition and another 15 in the control condition. The treatment group included eight girls and seven boys and the control group included nine girls and six boys. In order to facilitate delivery of instruction, the children in each condition were randomly assigned to two subgroups. These groups remained unchanged throughout the study. Each subgroup received the same intervention (or story reading activity for the control condition) and every time a different group was selected to start.

Intervention. Over a period of three weeks during the month of April, 2010 'activity sessions' were held in a separate area outside the classrooms. In collaboration

with the teachers, five days were selected for the interventions. Four 'activity sessions' (two treatment and two control) were conducted between 8:00am and 11:00am. Each treatment or control subgroup (one at a time) was invited to participate in these 'activity sessions' for a period of approximately 30 minutes each. No child decided to stop participating in the 'activity session' before the allotted ending time. Had this occurred, he or she would have been allowed to return to the classroom. My interaction with the children consisted of leading the 'activity sessions'.

Three treatment-group and five control-group 'activity sessions' were repeated in individual sessions or groups of two to allow children who were absent to receive the instruction. By the end of the intervention (April 30th), all the children in both treatment and control groups had participated in the same number of 'activity sessions'.

The books selected for the purpose of this study involved goal-based plots and were of the types found in kindergarten classrooms and school libraries. More specifically, nine books from the series entitled 'Les copains du coin', written by Larry Dane Brimner and published by Scholastic, were used for the intervention (see Appendix D). Each book in the series included the same three characters, highlighted a different theme (kindness, respect of others, etc.), took approximately five minutes to read aloud, and included colourful images. The books were shown to the teachers prior to the study and they confirmed that these books were not familiar to the children. Words I deemed 'unfamiliar' based on the piloting of the books were replaced with more familiar ones in print. Although vocabulary teaching is an important part of aiding children's comprehension, it was not the focus of this study and could have confounded the results.

Each treatment 'activity session' was organized in the same manner: introduction;

direct explanation of a specific narrative comprehension strategy; first story reading activity with picture support; modelling the narrative comprehension strategy; second story reading activity with picture support (different book); guided practice. Each treatment 'activity session' focused on a different element of narrative comprehension: session one: story grammar; session two: causality; session three: internal states; session four: inferencing-predicting, and session five: review of all strategies.

A control-group 'activity session' was created for two reasons. First, having a control group allowed every child in the two classes to participate in a 'special activity'; no child was left out unless their parents declined. Second, the control group allowed a comparison of storybook reading followed by loosely-structured discussion with the direct and interactive teaching of comprehension strategies. The control group 'activity sessions' used the same books as in the treatment sessions, but no explicit narrative strategy instruction was provided. Each control group session was organized in the same manner: introduction, first story reading activity with picture support; group discussion about the story; second story reading activity with picture support; and a group discussion about the second story. Group discussions consisted of children sharing their experiences following a general question about the events of the story (for example: "Has this ever happened to you?").

Treatment group 'activity session' one: story grammar. For this first session, I introduced myself to the children and explained that I was going to teach them about understanding stories. A quick overview of the day's session was provided in order to situate them and make them feel more secure. The first book 'Opération récupération' was shown to the children and the title read. A short discussion followed about how

illustrations (pictures) can give a lot of information about a book before even hearing the story. The children were asked to look at the book cover illustration and describe what they saw in the picture. Following this discussion, 'Opération récupération' was read aloud without interruption. After the story reading, I explained how a story has many parts, just like a house has many rooms. Using the house chart with repositionable images (see Appendix E), the children helped me answer the following questions:

Who was in the story? (Characters)

Where did the story take place? (Setting)

What was the problem? (Initiating event)

What happened? (Reactions, attempts and consequences)

How did the story end? (Resolution and ending)

Once this guided practice was complete, I showed the children how the elements could be arranged like floors and rooms in a house. I explained that another book would be read and that they would get to organize their own house after they listened to the story. 'C'est le règlement!' was read aloud without interruptions. Following the story reading, the children were paired and story-building worksheets (see Appendix F) were distributed along with pencils. I led the activity by guiding the children step-by-step in identifying (circling) the story elements. We then reviewed the answers in a group and the children returned to class.

Treatment group 'activity session' two: causality. For this second session, the children were reminded that I was there to teach them about understanding stories and a quick overview of the day's session was presented. The last session's story grammar elements were reviewed and I explained to the children that the present session was on

the relationship of cause and effect. I explained that sometimes in stories things happen that make other things happen and that this is called *cause and effect.* A series of pictures with a girl dropping a plate of cookies (see Appendix G) and the plate breaking was presented to the children. Other everyday cause and effect examples were given and additional ones were elicited from the children. The first book 'Plaisirs d'été' was shown to the children and the title read. As in the previous session, the children were asked to look at the book cover illustration and describe what they saw in the picture. Following this discussion, 'Plaisirs d'été' was read aloud without interruption. After reading the story, I explained that we were going to play a matching game together. I showed the children a picture representing a cause (green card) from 'Plaisirs d'été' and asked them to identify the corresponding effect (red card). Two choices were given. Once the correct effect was identified, both cause and effect cards were placed together on a board. Once all pairs were identified, we reviewed the various causes and effects. Following this activity, I explained that another book 'Tout le monde à l'eau' would be read and that we would be playing another cause and effect game when the story reading was done. 'Tout le monde à l'eau' was read aloud without interruptions. Following the story reading, the children were asked to stand around the room. Illustrations from 'Tout le monde à l'eau' representing either a cause or an effect were distributed to each child. The game was then explained to the children as follows:

> "We are going to play a matching game just like we played before. I have given each of you either a green or a red card. The green cards have 'cause' pictures and the red cards have 'effect' pictures. The idea of this game is to find the picture that matches with your own. Don't forget there has to be a green and a red card

together – not two greens or two reds. When you think you have found your match, come see me and I will let you know if it is. If so, you are to sit down with your partner. If not, you keep looking. Get ready, set, match!"

The children walked around looking for their match. They enjoyed the game and asked to play it again. Given that time permitted it, I redistributed the cards and we played the game a second time.

Treatment group 'activity session' three: internal states. This third session began with a reminder that I was back again to teach them about understanding stories and a quick overview of the day's session was presented. A review of the cause and effect session was presented. I then told the children the following: "Remember how we talked about the importance of knowing who is in a story? Well, it is also important to know what the characters are feeling and thinking when we are trying to understand a story." I explained that hearts and thinking bubbles had been placed in enlarged images from the book and that we were going to discuss what the characters were feeling or thinking in the story. The first book 'Bouquet de fleurs' was shown to the children and the title read. The children were asked to look at the book cover illustration and describe what they saw in the picture. Following this discussion, 'Bouquet de fleurs' was read aloud without interruption. After the story reading, enlarged images were shown to the group and I pointed out the heart or thinking bubble to the children and ask them to tell me what the character was feeling or thinking. Following this whole-group activity, 'La p'tite nouvelle' was read aloud and then the children were paired up randomly. A photocopied, image-only version of 'La p'tite nouvelle', including hearts and thought bubbles, as well as stickers depicting feelings (happy, sad, mad and afraid) were

distributed to the children. The children were asked to paste the 'feelings' stickers in the hearts or draw what the character might be thinking in the thought bubbles. The children enjoyed the stickers, but drawing the thoughts presented a serious challenge. Because of the level of difficulty and the time constraints, I asked the children to verbally express character thoughts instead of drawing them. Once all the children completed the sticker phase of the activity, we reviewed the answers as a group and discussed character thoughts.

Treatment group 'activity session' four: inferencing-predicting. The children were reminded that I was there to teach them about understanding stories and a quick overview of the day's session was presented. We then reviewed the previous session's concepts of character thoughts and feelings. I then told the children that this session was about prediction. I explained that predicting meant guessing what would happen next in the story. I showed them "thinking crowns" (headbands with a thought cloud taken from a commercially available unit on storytelling) and explained that they would help us concentrate and make good predictions. Unfortunately, the velcro attaching system of most crowns became unglued and this interrupted the session momentarily. I collected the crowns from the children and put them away. Once the children settled down, the first book 'La patrouille de quartier' was shown to the children and the title read. The children were asked to look at the book cover illustration and describe what they saw in the picture. After this discussion, I began reading 'La patrouille de quartier'. Once I reached a certain part of the story, I stopped reading and said aloud: "Now that I have read the beginning of the story, why don't we try to guess what will happen next – we can try to make a prediction! What do you think JP, Alex and Gaby will do next?" The children

made their predictions and following this short discussion, I continued reading the book and used a similar procedure to elicit predictions at two other points in the story.

The children were then placed randomly in pairs and told that we were going to play a predicting game with another book. Three different-coloured posters including removable images were placed around the room. Each poster represented a key point in the story. I began reading 'La promesse' and at a certain point in the story would ask each pair to go to a specific poster and collect the image that best represented what they thought would happen next. The children had two choices. Once the book was finished and the children had collected their three images, the predictions were reviewed.

Treatment group 'activity session' five: review. The children were told that this was our last activity session. I then reviewed the four narrative comprehension strategies using materials from past sessions. Repaired thinking crowns were distributed to the children and placed on their heads. They were told that the thinking crowns would help them concentrate. A different book from the same series called 'Le grand nettoyage' was presented. The children were asked to look at the book cover illustration and describe what they saw in the picture. This book was used to review all of the strategies learned in previous sessions. 'Le grand ménage' was read aloud without interruptions. Following the story reading, I explained to the children that we would be playing a game to review all the strategies that they learned in the last four sessions. The children sat on the floor in a circle. The game consisted of using a four-coloured spinner to indicate which colour card the child had to pick (see Appendix H). Each card represented a different narrative comprehension strategy that the child would then apply within activities or games similar to those in the previous sessions. The purpose of the review game was to determine if the

children could apply the strategies addressed in the previous instructional sessions to a different book. Once all the children had played, I thanked them for their participation and they returned to class.

Posttest. Posttest assessments followed the same procedure as in the pretest. Assessments were conducted in early May following the same order as in the pretest phase. The same list of children was used and the order of tasks respected. However, if the child was assigned the Fish story at pretest, then the Beach story was assigned for the posttest.

Once all the assessments were completed in both classrooms, the teachers allowed me to thank the children who participated in the study and give them each a small gift bag containing a certificate of participation, a colourful pencil, an eraser and stickers. Gift bags (excluding the participation certificate) were also given to the children whose parents had not consented to their participation in the study. An e-mail thanking the school Director and both teachers was sent the next day.

Scoring and Reliability Checks. Graduate students in Education employed as research assistants in the supervisor's research office and familiar with the measure transcribed the story retells and scored both the comprehension questions and story retells. One assistant scored the pretest measures and the other assistant scored the posttest measures. I reviewed the scoring of the comprehension questions and retells for 16 (26%) of the participants drawn equally but randomly from the two times (pre and posttest) and two groups (treatment and control). Discrepancies in scoring were identified and rules for scoring were further refined. Subsequently, each research assistant reviewed her own work, made adjustments as necessary based on the refined scoring rules, and

then reviewed the scoring of the other assistant for 22 participants (nearly 37% each). The few remaining discrepancies in scoring were resolved by consensus between myself and the two assistants.

Chapter 3: Results

Preliminary Analyses

Prior to the main analyses, independent-sample t-tests were conducted to rule out group differences with respect to (a) age and (b) pretest scores on each of the three dependent variables: comprehension questions, sequencing, and story retell. None of the results were significant. The lack of significant group differences in the pretest scores allowed their use as covariates in a multivariate analysis of variance (see Main Analyses). The means for each group on the pretest measures are provided in Table 1

Table 1

Comprehension Questions, Sequencing, and Retell Pretest Scores by Group

Narrative Measure		Groups	
		Treatment	Control
Comprehension Questions	*M (SD)*	9.33 (2.85)	9.56 (3.50)
	Range	4.00 – 13.00	3.00 – 15.00
Sequencing	*M (SD)*	2.60 (0.63)	2.40 (0.91)
	Range	1.00 – 3.00	1.00 – 3.00
Retell	*M (SD)*	20.53 (5.51)	18.67 (6.92)
	Range	11.00 – 30.00	9.00 – 30.00

Independent samples t-tests also showed that there were no significant differences

in pretest scores between the two ERRNI stories (Beach or Fish) for any of the three dependent variables. A final independent samples t-test was conducted to explore the possibility of sex differences in pretest scores on each of the dependent variables. The results were again non-significant and no further analyses by sex were conducted.

Main Analyses

The main analyses were conducted using MANCOVA. The data were first tested for normality of each variable using Shapiro-Wilk statistic and visual inspection of histograms. The tests of normality showed that the comprehension question and retell variables were normally distributed. Picture sequencing scores were negatively skewed. That is, most of the scores tended toward the upper end of the scale while fewer scores occurred toward the lower end, suggesting that the task was fairly easy for the children. Logarithmic, square root, and inverse transformations were conducted but did not normalize the scores and so the untransformed results were used. MANCOVA, however, is fairly robust in cases of skew.

As required for MANCOVA, additional assumptions were tested: association between the covariates and the dependent variables; homeoscedasticity (the multivariate equivalent of homogeneity of variance); and homogeneity of regression hyperplanes (the multivariate equivalent of testing that regression slopes are equal across groups). The multivariate test of significant association between the covariates (pretest scores) and the dependent variables (posttest scores) was significant $F(9, 30) = 4.11$, $p < .001$, thus meeting the first assumption. For the other two assumptions, non-significant results indicate that the assumption is met. Homeoscedasticity was tested using Box's test of equality of covariance. The result was non-significant $F(6, 30) = 1.135$. $p = .339$).

Homogeneity of regression hyperplanes was tested and the results were again non-significant, F(9, 30) = 1.039 (9), p = .424.

The MANCOVA analysis showed a significant effect of group on narrative skills as measured by the three dependent variables, Hotellings T^2 = .44, F (3, 30) = 3.37, p = .036. Regarding effect size, 31% of the variability in the narrative tasks was explained by group (partial eta squared = .31).

The univariate results were further examined to determine which variables were contributing to the multivariate effect and to further explore the relationship of pretest and posttest scores for each variable. For the comprehension questions task, the covariate, *comprehension questions pretest score*, was not significantly related to the *comprehension questions posttest score*, F (1, 30) = 2.80, p = .11. After controlling for the pretest score, there was no significant difference between the treatment and control groups on the question task, F (1, 30) = .57, p = .46.

For the picture sequencing task, the covariate, *sequencing pretest score*, was significantly related to the *sequencing posttest score* F (1, 30) = 7.46, p = .011. After controlling for the pretest score, there was no significant difference between the treatment and control groups on the picture sequencing task F (1, 30) = 1.15, p = .295.

For the story retelling task, the covariate, *retell pretest score*, was significantly related to the *retell posttest score*, F (1, 30) = 6.80, p = .015. After controlling for the pretest score, the treatment group scored significantly higher on the story retelling task than the control group, F(1, 30) = 4.29, p = .049. The results indicate that the story retelling task contributed to the observed multivariate effect (partial eta squared = .15).

The observed and adjusted posttest means from the MANCOVA analysis are

provided in Table 2. The adjusted means take into account the covariates.

Table 2

Comprehension Questions, Sequencing, and Retell Posttest Scores by Group

Narrative Measure		Groups	
		Treatment M (SD)	Control M (SD)
Comprehension Questions	observed	10.33 (2.41)	10.73 (2.05)
	adjusted	10.25	10.81
Sequencing	observed	2.80 (0.56)	2.40 (0.83)
	adjusted	2.73	2.47
Retell	observed	26.53 (5.0)	21.80 (6.18)
	adjusted	25.93	22.41

Note. Standard deviations do not apply to adjusted means

Additional Analyses

The significant retell results were further investigated by splitting the scores on the 24 items involved in the retell scoring into two subscores: (a) *targeted content*, which included elements closely related to the intervention (i.e., content that required inferencing and references to internal states of characters) and (b) *non-targeted content*, which included elements not explicitly targeted (i.e., literal information). Independent sample t-tests were carried out to compare the means for each subscore in the treatment and control group. There were no significant differences between the two groups on either subscore. These results, combined with the univariate analysis, suggest that the treatment group improved with respect to a variety of kinds of story content.

Chapter 4: Discussion

This study investigated the effects of instruction on the oral narrative comprehension of kindergarten children. The goal was to determine whether teaching comprehension strategies that focus on story grammar, causal relations, internal states, and inferencing-predicting was an effective way of facilitating the oral narrative skills of kindergarten children. A sample of 30 children of a mean age of six years participated in the study. Below I raise a number of issues pertaining to the findings, including strengths and limitations of the study.

Overall Results

Multivariate analysis with pretest scores as covariates showed a significant effect of group. That is, when comprehension questions, story retelling, and picture sequencing were considered together, the treatment group showed greater improvement than did the control group. Each of these variables measures narrative skills, but in different ways. Univariate tests were also informative. Univariate results for the story retell showed that the treatment group outperformed the control group, while comprehension results showed no difference. Further examination of the story retell data indicated overall improvement across explicit and implicit story content.

The group effect for retell but lack of effect for the comprehension questions merits some attention. It may have arisen because comprehension questions tap only specific events in the story, while retelling is a less constraining procedure for young children and may better demonstrate what they have understood. Using a story retelling procedure allowed the children to tell the story in their own words and to emphasize what they felt was important. Comprehension scores might also have been affected by the

measure itself. A published measure developed for English-speaking children was adapted for use in the present study. In the norming study with British children, scores on the two stories (Beach and Fish) were the same on the retell task. However, comprehension question scores were somewhat lower for the Beach story, leading to adjustments in the norms (Bishop, 2006). Given that the children in this study were francophone, the English norms are not valid so raw scores were used. Pretest scores did not show any significant differences by story but it is possible that subtle differences between the two stories did somehow affect the comprehension results. For example, the questions in the Beach story seemed to rely more on children's memory and one of the questions asked about the internal states of a secondary character (but only about a primary character in the Fish story). Informal observations of children during assessment suggested that the Beach comprehension questions were more challenging. For example, children seemed to hesitate more frequently and looked more perplexed than when responding to questions about the Fish story.

Also, a longer intervention might have led to higher comprehension question scores. The brevity of the Paris and Paris (2007) intervention was maintained in the present study in order to determine whether the gains in narrative skills they observed for first graders could be obtained with kindergarten children using a similar intervention approach. The results demonstrated that only 2.5 hours of instruction led to gains in narrative skills for kindergarten children. These results are promising. Future research could investigate the effects of a longer intervention period. In addition, further investigation into the effects of teaching of narrative comprehension strategies to young children within the regular classroom setting could be informative to practitioners.

Univariate results did not show a group effect for the picture sequencing task. The majority of children achieved a high level of success on the task at both pretest and posttest, indicating that most were able to recreate the logical and temporal sequence of the story they had heard. The task may have been more sensitive to change had the children been asked to sequence the pictures before hearing the story, or after hearing only part.

Treatment versus Control Group

As noted in the Method, the control group activity sessions were created to allow every child in both classes to participate in a special activity and to allow a comparison of the direct and interactive teaching of comprehension strategies with storybook reading. It was hypothesized that the control group activity session would not affect the children's narrative skills. However, the means suggested that the control group improved slightly from pretest to posttest on comprehension questions and retell, although the treatment group scores for the retell were still significantly higher for the retell. Story reading followed by opportunities for the children to reflect aloud on the stories and relate them to their own experiences might have influenced the oral narrative skills of the control group children as well as the treatment group. My interactions with the children and the books themselves (carefully selected to be age-appropriate and engaging) might also have had some impact. Although the reasons for providing activities for the control group were valid and important, the results might have been different had the control group been exposed only to their usual instruction in the classroom. Small changes in both groups might also be due to maturation of the children or exposure to stories at home or at school, factors minimized but not eliminated by the treatment's short duration.

Characteristics of the Children

An important element that needs to be considered is the linguistic background of the children in the sample. Due to constraints placed by the School Board on collecting demographic information, no demographic data was collected for this study other than age. Informal conversations with the two teachers revealed that some children in their classrooms did not come from monolingual-French homes. Although the school provides a 'classe d'accueil' (welcome class) for kindergarten children, second language (L2) learners can attend regular kindergarten classes if they are somewhat fluent in French. Qualitative judgements of the children's expressive language were made by listening to the audio recordings of the assessment sessions. These observations provided support that four children, all of whom were in the treatment group, were likely L2 learners of French. These presumed L2 learners were not numerous enough to compare to L1 learners using statistical tests, but their mean scores were lower for the comprehension questions and the retell than their L1 peers' scores. The rules for scoring comprehension questions, in particular, might have penalized L2 children, as points were deducted for vague responses or if a correct response was spoiled by the use of imprecise vocabulary – for example, a child in the study lost a point when he referred to the pet store as 'pharmacie' instead of 'animalerie'. Given the possibility that the French language proficiency of the L2 children might have been less developed than that of the L1 children, and that these children were in the treatment group, their scores may have affected the results. If the L2 status of the children were confirmed, these data could be examined further case by case as it would be interesting to note if and how these children's skills improved.

Implications for Practice

The results of this study provide support for the teaching of multiple narrative comprehension strategies to young children. Using books involving goal-based plots and of the types found in kindergarten classrooms worked well in this intervention. The use of a series of books with the same set of characters was intended to engage the children and allow them to focus on other aspects of the stories, and this intention was fulfilled. The intention was to create playful activities involving low cost materials and books to teach narrative strategies to young children, and that intention was met. The children in the treatment group enjoyed the playful aspect of each activity session. The house building board for the story grammar session was a simplified version of a story map. Given that children in this age group enjoy playing with blocks and building structures, playing a game in which they had to build a house with correct answers may have increased their motivation to learn.

The cause and effect activity was based on matching games commonly found in kindergarten classrooms. The fact that the children were familiar with such games allowed them to concentrate on the task, and presumably helped them begin to grasp the concept of causality.

The internal states activity provided visual cues (hearts and thought bubbles) on enlarged images. The whole-group activity was successful in that most children participated in the discussion and offered their thoughts. The guided practice of the session provided an occasion for the less verbal children to demonstrate their comprehension in other ways. The feelings stickers were simple to use and required no verbal skills. Pairing the children worked well for this activity because of the additional

support it provided. In some pairs, one child took the lead, while other pairs discussed their answers. The sticker activity was easily understood and completed rather quickly by the children. However, reflecting on character thoughts was challenging for the children and required more time. I would recommend conducting more than one session on internal states and spending more time on character thoughts.

The inferencing-predicting whole-group activity was based on kindergarten story time. A typical story time involves the teacher reading a picture book to the whole class and the children interrupting with questions or comments about the story. This activity followed that same pattern with the exception that I asked the children to make predictions about the events in the story. The guided practice component of the session involved the same kind of story reading activity. The activity involved children walking over to a board and selecting the image that made most sense in the context of the story. Given that the area in which the activity was conducted was rather small, each board containing the images was in plain view of all children. Because of this, it is not impossible that some children's choices may have been influenced by selections made prior to their turn. A more creative and playful option would be to assign a child as 'station attendant'. These attendants could wear a special 'attendant' hat or ribbon and would be responsible for showing the images to each group coming to their station. This way, the selection of images would remain confidential. This would add a little mystery and a good deal of fun to the game.

The children also enjoyed the review game, but more time would need to be allotted to this activity session – each child only got to play once. The children enjoyed the spinner and it was a simple way of randomly assigning an activity to a child. Given that we were

sitting on the floor in a circle, I kept all the materials behind me on a small table and would take them out as required. Placing the materials around the room at various stations and assigning attendants as mentioned earlier would be a better option. Although guidelines were given about respecting a person's turn, some responded for their fellow students. Another recommendation would be playing this game with a smaller group of children, possibly during workshop time, a period which is typically included within the kindergarten curriculum. The teacher would be able to determine on a more individual basis which comprehension skills had improved following the activities and which needed to be reviewed.

In order to assess whether the comprehension strategies taught during classroom time were successful, a cost-effective, time-saving measure could be to record children's retells: in doing so, a teacher could evaluate a child's narrative comprehension abilities through their expressive language, possibly identifying signs of potential comprehension difficulties and recommending further assessment.

References

Arnold, D. H., Lonigan, C. J., Whitehusrt, G. L., & Epstein, J. N. (1994). Accelerating language development through picture book reading: Replication and extension to a videotape-training format. *Journal of Educational Psychology, 86*(2), 235-243.

Astington, J. W. (1993). *The child's discovery of the mind.* Cambridge, Massachusetts: Harvard University Press.

Baumann, J. F., & Bergeron, B. S. (1993). Story map instruction using children's literature effects on first graders' comprehension of central narrative elements. *Journal of Reading Behavior, 25*(4), 407-437.

Bishop, D. (2004). *Expression, reception and recall of narrative instrument.* London, UK: Harcourt.

Block, C.C. & Duffy, G.G. (2008). Research on teaching comprehension. Where we've been and where we're going. In C.C. Block and S.R. Parris (Eds.), *Comprehension instruction. research-based best practices* (pp. 19-37). New York, New York: The Guilford Press.

Bruner, J. (1996). *The culture of education.* Cambridge, Massachusetts: Harvard University Press.

Bui, Y. N. (2002). Using story-grammar instruction and picture books to increase reading comprehension. *Academic Exchange Quarterly* (Summer), 127-132.

Dewitz, P., Jones, J., & Leahy, S. (2009). Comprehension strategy instruction in core reading programs. *Reading Research Quarterly, 44*(2), 102-126.

Elley, W. B. (1989). Vocabulary acquisition from listening to stories. *Reading Research Quarterly, 24*(2), 174-187.

Garner, J. K., & Bochna, C. R. (2004). Transfer of a listening comprehension strategy to independent reading in first-grade students. *Early Childhood Education Journal, 32*(2), 69-74.

Gersten, R., Fuchs, L. S., Williams, J. P., & Baker, S. (2001). Teaching reading comprehension strategies to students with learning disabilities: A review of research. *Review of Educational Research, 71*(2), 279-320.

Harkins, D. A., Koch, P. E., & Michel, G. F. (1994). Listening to maternal story telling affects narrative skill of 5-year-old children. *The Journal of Genetic Psychology, 155*(2), 247-257.

Hayward, D. V., Gillam, R. B., & Lien, P. (2007). Retelling a script-based story: Do children with and without language impairments focus on script and story elements? *American Journal of Speech-Language Pathology, 16*, 235-245.

Hayward, D., & Schneider, P. (2000). Effectiveness of teaching story grammar knowledge to pre-school children with language impairment. an exploratory study. *Child Language Teaching & Therapy, 16*(3), 255-284.

Katzir, T., Youngsuk, K., Wolf, M., O'Brien, B., Kennedy, B., Lovett, M. & Morris, R. (2006). Reading fluency: the whole is more than the parts. *Annals of Dyslexia, 56*(1), 51-82.

Lynch, J. S., van den Broek, P., Kremer, K. E., Kendeou, P., White, M. J., & Lorch, E. P. (2008). The development of narrative comprehension and its relation to other early reading skills. *Reading Psychology, 29*, 327-365.

MacWhinney, B. (2000). The CHILDES Project: Tools for Analyzing Talk. 3rd Ed.. Mahwah, NJ: Lawrence Erlbaum Associates

Mandler, J.M. & Johnson, N.S. (1977). Remembrance of things parsed: Story structure and recall. *Cognitive Psychology, 9*, 111-151.

Makdissi, H., & Boisclair, A. (2006). Interactive reading. A context for expanding causal relations in preschoolers. *Written Language and Literacy, 9*(2), 177-211.

McKeough, A., Davis, L., Forgeron, N., Marini, A., & Fung, T. (2005). A developmental approach to teaching story composition. *Narrative Inquiry, 15*(2), 241-266.

Morrow, L.M. (1985). Retelling Stories: A strategy for improving children's comprehension, concept of story structure and oral language complexity. *Elementary School Journal, 85*, 647-661.

Murza, K. (2009, May). *Story grammar instruction to improve narrative comprehension and production in children.* Paper presented at the Ninth Annual Colloquium of The Campbell Collaboration, Oslo, Norway.

Myers, P. A. (2005). The princess storyteller, Clara clarifier, Quincy questioner, and the Wizard: Reciprocal teaching adapted for kindergarten students. *The Reading Teacher, 59*(4), 314-324.

Palincsar, A., & Brown, A. L. (1984). Reciprocal teaching of comprehension-fostering and comprehension-monitoring activities. *Cognition and Instruction, 1*(12), 117-175.

Paris, A. H., & Paris, S. G. (2007). Teaching narrative comprehension strategies to first graders. *Cognition and Instruction, 25*(1), 1-44.

Paris, A., H., & Paris, S. G. (2003). Assessing narrative comprehension in young children. *Reading Research Quarterly, 38*(1), 36-76.

Pressley, M., Beard El-Dinary, P., Gaskins, I., Schuder, T., Bergman, J. L., Almasi, J., et al. (1992). Beyond direct explanation: Transactional instruction of reading comprehension strategies. *The Elementary School Journal, 92*(5), 513-555.

Rand, M. K. (1984). Story schema: Theory, research and practice. *Reading Teacher, 37*, 377-382.

Reese, E., & Cox, A. (1999). Quality of adult book reading affects children's emergent literacy. *Developmental Psychology, 35*(1), 20-28.

Sénéchal, M., Thomas, E., & Monker, J. (1995). Individual differences in 4-year-old children's acquisition of vocabulary during storybook reading. *Journal of Educational Psychology, 87*(2), 218-229.

Smith, M.W., Brady, J.P., & Anastasopoulos, L. (2008). *Early Language and Literacy Classroom Observation.* Baltimore, Maryland: Brookes.

Stein, N. L. & Glenn, C.G. (1979). An analysis of story comprehension in elementary school children. In R.O. Freedle (Ed.), *New directions in discourse processing* (pp. 53-119). Hillsdale, NJ: Erlbaum.

Thompson, M. H. (2008). Transforming classroom instruction to improve the comprehension of fictional texts. In C.C. Block and S.R. Parris (Eds.), *Comprehension instruction. Research-based best practices* (pp.159-170). New York, New York: The Guilford Press.

Thordardottir, E., Kehayia, E., Lessard, N., Sutton, A. & Trudeau, N. (2010). Typical performance on tests of language knowledge and language processing of French-speaking 5-year-olds. *Canadian Journal of Speech Language Pathology and Audiology, 34*, 5-16.

Trabasso, T., & van Den Broek, P. (1985). Causal thinking and the representation of narrative events. *Journal of Memory and Language, 24*, 612-630.

Valdes-Menchaca, M. C., & Whitehurst, G. J. (1992). Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Developmental Psychology, 28*(6), 1106-1114.

van den Broek, P., Kendeou, P., Kremer, K., Lynch, J., Butler, J., White, M. J., et al. (2005). Assessment of comprehension abilities in young children. In S. G. Paris, & S. A. Stahl (Eds.), *Children's reading comprehension and assessment* (pp. 107-130). Mahwah, New Jersey: Erlbaum.

van Kraayenoord, C., & Paris, S. (1996). Story construction from a picture book: An assessment activity for young learners. *Early Childhood Research Quarterly, 11*, 41-61.

Westerveld, M. F., & Gillon, G. T. (2008). Oral narrative intervention for children with mixed reading disability. *Child Language Teaching and Therapy, 24*(1), 31-54.

Zevenbergen, A.A. & Whitehurst, G.J. (2003). Dialogic reading: A shared picture book reading intervention for preschoolers. In A. van Kleeck, S.A. Stahl, & E.B. Bauer (Eds.) *On reading books to children* (pp. 177-200). Mahwah, New Jersey: Erlbaum.

Appendix A

Administration Procedure for Beach Story Comprehension Questions

Instructions	Verbal Directions (in quotes) and Expected Reponses by Child (in italics)
	"Maintenant, je vais to poser des questions à propos de l'histoire que tu viens d'entendre. Nous regarderons le livre encore. Voici la première page..,"
PRÉSENTE IMAGE A	"Ou va la fille dans cette histoire?" **Question de réchauffement**
POINTE À IMAGE A	"Qui a téléphoné la fille au début de l'histoire?" ***R: Le garçon de la plage (réponse précise nécessaire)*** **Si pas précis (un garçon, les parents de son ami):** Est-ce que tu peux m'en dire un peu plus?"
NE PAS TOURNER PAGE PRÉSENTE IMAGE C	"La fille rencontre un garçon à un étang à la prochaine page. Qu'est-ce qu'il faisait? ***R: Il pêchait, attrapait des poissons*** **Si pas précis (envoyait la main)** "Peux-tu m'en dire un peu plus?"
SI ENFANT INCAPABLE DE RÉPONDRE, DIS...	"Regardons"
TOURNE LA PAGE ET L'ENFANT VERRA IMAGE D	"Il pêchait!"

TOURNE PAS LA PAGE PRÉSENTE IMAGE F	"Sur la prochaine page, qu'est-ce que l'ami de la fille faisait sur la plage pendant qu'elle nageait?" ***R: Il lisait un livre*** **Si pas précis (couché, rien, se reposait)** "Peux-tu m'en dire un peu plus?
SI ENFANT INCAPABLE RE RÉPONDRE, DIS	"Regardons"
TOURNE PAGE ET ENFANT VERRA IMAGE G	"Il lisait!"
POINTE À IMAGE H	Ou est-ce que la fille pensait que sa montre était lorsqu'elle est sortie de l'eau?" ***R: Dans son sac, au côté de sa serviette*** **Si pas précis (e.g. sur le sable, sur la plage)** "Peux-tu m'en dire un peu plus?"
POINTE À IMAGE I	"L'ami de la fille se sentait comment lorsqu' elle lui a dit que sa montre était partie? ***R: Surpris, étonné, inquiet*** **Si pas précis (e.g. gêné, triste, mal, fâché)** "Peux-tu m'en dire un peu plus?"
NE PAS TOURNER PAGE PRÉSENTE IMAGE I	"Sur la prochaine page, qu'est qu'ils ont fait lorsqu'ils sont partis de la plage? ***R: Parties en vélo (bicyclette), chercher, sont allés voir le garçon, sont allés à x endoit*** **Besoin 2 actions + 1 endroit** **Si pas spécifique ou inclus juste 1 (parties en bicyclette):** "Peux-tu m'en dire un peu plus?"
SI ENFANT INCAPABLE DE RÉPONDRE, DIS...	"Regardons"

TOURNE LA PAGE ET ENFANT VERRA IMAGE K	"Ils ont conduient leurs bicyclettes jusqu'à l'étang!"
POINTE À IMAGE K	"Pourquoi la fille et son ami sont allés voir le garçon à l'"étang?" *R: Pour lui demander de l'aide ou de l'information* **Si aucne mention à propos de demander de l'aide** "Peux-tu m'en dire un peu plus?"
PONTE À IMAGE L	Pourquoi les enfants ne s'occupaient pas du chien au début? *R: Ils ne se rendaient pas compte que le chien pouvait les aider* **Si pas précis, si aucun mention du 'false-belief' (e.g. occupé, parlaient)** "Peux-tu m'en dire un peu plus?"
POINTE À IMAGE O	"Comment le garçon avec le chien se sentait à la fin de l'histoire? *R: Heureux, fier, soulagé PLUS raison (e.g. parce que son chien a aidé) OU fait référence à la fille (il était heureux pour elle)* **Si enfant mentionne seulement l'émotion** "Peux-tu m'en dire un peu plus?"

Appendix B

Scripts

Le poisson (Fish story)

Un garçon nourrit son seul poisson. Sa mère lui remet de l'argent pour aller acheter un autre poisson. Le garçon part à la marche avec son sac et se rend à l'animalerie. Lorsqu'il entre dans l'animalerie, il montre au marchand le poisson qu'il désire. Le garçon achète le poisson. Le marchand place le poisson dans le sac du garçon. Le garçon prend son sac et reprend la route vers la maison. En marchant, le garçon rencontre deux amies. La grande fille et le garçon décident d'aller acheter de la crème glaçée. Entre temps, la petite fille sort le poisson et une poupée, mais les remet dans les mauvais sacs. Les amis mangent leurs crèmes glacées et aussitôt qu'ils ont terminé, le garçon quitte et poursuit la marche vers sa maison. Une fois arrivé à la maison, le garçon s'apperçoit qu'il n'a pas de poisson dans son sac, mais bien une poupée. Il montre la poupée à sa mère, et sa mère téléphone les amies que le garçon avait rencontré. Les amies sont venues chez le garçon remettre le poisson et prendre la poupée. Le garçon prend le poisson et le dépose dans l'aquarium et la petite fille est heureuse de retrouver sa poupée.

La plage (Beach story)

Une petite fille reçoit un appel d'un ami. Suite à cet appel, la petite se rend à sa chambre et prepare son sac à dos. Elle part en bicyclette vers la plage. En route elle passe près d'un étang et salue un garçon à la pêche avec son chien. Elle continue sa route, arrive à la plage et rejoint son ami. Elle dépose ses vêtements et autres objets sur la plage et décide d'aller se baigner. Soudainement, un oiseau arrive près de sa serviette et prend la montre de la petite fille dans son bec. L'ami de la fille ne se rend compte de rien car il lit un livre. L'oiseau s'envole avec la montre pendant que les enfants jouent au ballon. La fille se rend compte qu'elle a perdu sa montre. La fille et son ami cherchent la montre partout, mais ne la trouvent pas. Ils décident de partir en bicyclette à la recherche de la montre et retourne à l'étang. La fille demande au garçon qui pêche s'il aurait trouvé une montre. Le chien apperçoit un oiseau avec une montre dans son bec. Le chien aboie et saute sur la fille pour avoir son attention. Les enfants suivent le chien et la fille retrouve la montre sur un banc. Le garçon est très fier du chien et le flatte. Les enfants remercient le garçon et son chien et retournent à la maison en bicyclette.

Appendix C

Sample of Pretest and Posttest Retells from Child in Treatment Group

Pretest - score 18

Il téléphone. Elle met ses choses dans son sac pour partir. Il s'en va en bicyclette. Il s'en va à l'étang. Elle met ses choses. Son ami lit. Ils jouent a ballon. Sa montre n'est plus là, ils la cherchent la montre partout partout. Ils s'en vont à l'étang pour dire au garçon qu'ils avaient vu tantôt s'il avait trouvé la montre. Le chien est venu et le chien courrit et a retrouvé la montre.

Posttest - score 31

Le garçon nourrit son poisson. Sa mère lui donne de l'argent pour acheter un autre poisson. Il s'en va puis il y arrive. Puis là il nomme le poisson qu'il veut et après la madame le met dans son sac. Après il repart. Il rencontre d'autres filles et ils déposent leurs sacs et puis vont prendre une crème glaçée. Là la petite fille met la poupée dans le sac du garçon et elle met le poisson dans le sac de la fille. Après ils mangent leurs crèmes glaçées sur le banc. Après ils repartent. Après le garçon ouvre son sac et puis il voit qu'il y a une poupée puis il s'inquiète. La mère téléphone aux amies qu'il avait vu tantôt. Elles viennent et ils échangent les choses. Il met les deux poissons ensemble. Ils sont heureux.

Appendix D

List of books used for the intervention, published by Scholastic and written by Larry Dane Brimner

Opération récupération

C'est le règlement

Tout le monde à l'eau!

Les plaisirs d'été

Le bouquet de fleurs

La promesse

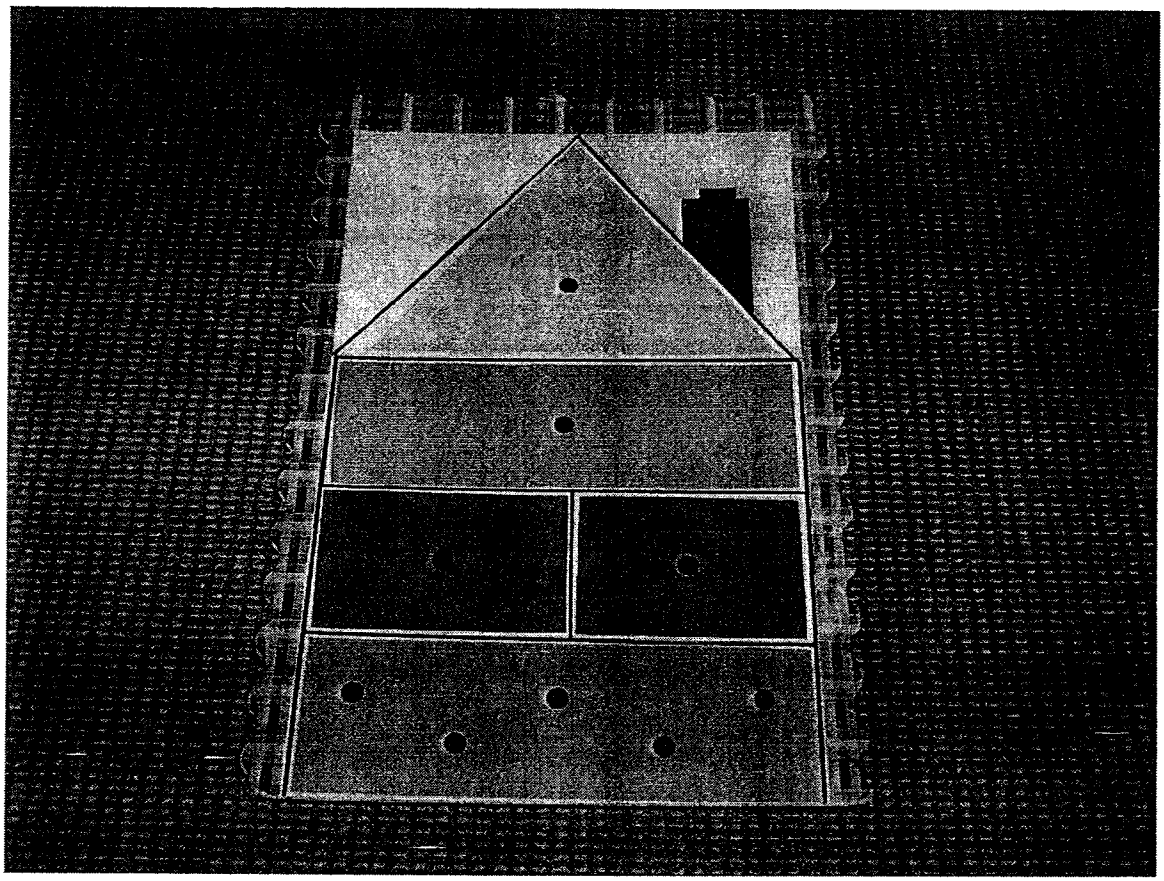
La patrouille de quartier

La p'tite nouvelle

Le grand nettoyage

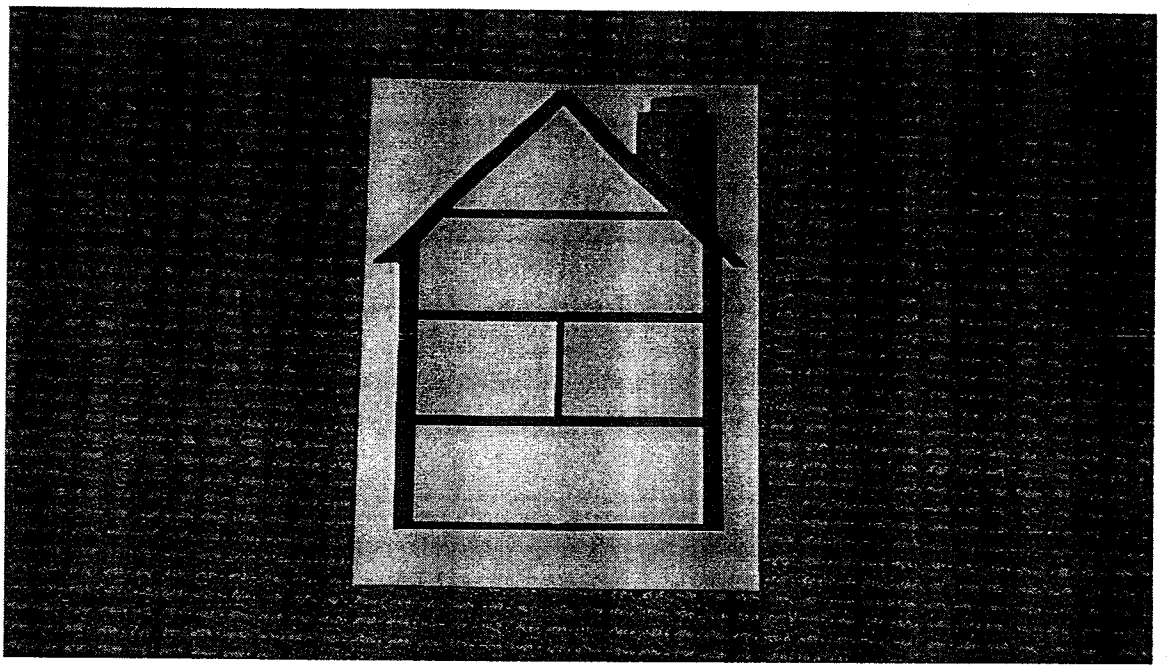
Appendix E

Story Grammar Treatment 'Activity Session' House Chart



Appendix F

Story Grammar Treatment 'Activity Session' Worksheet

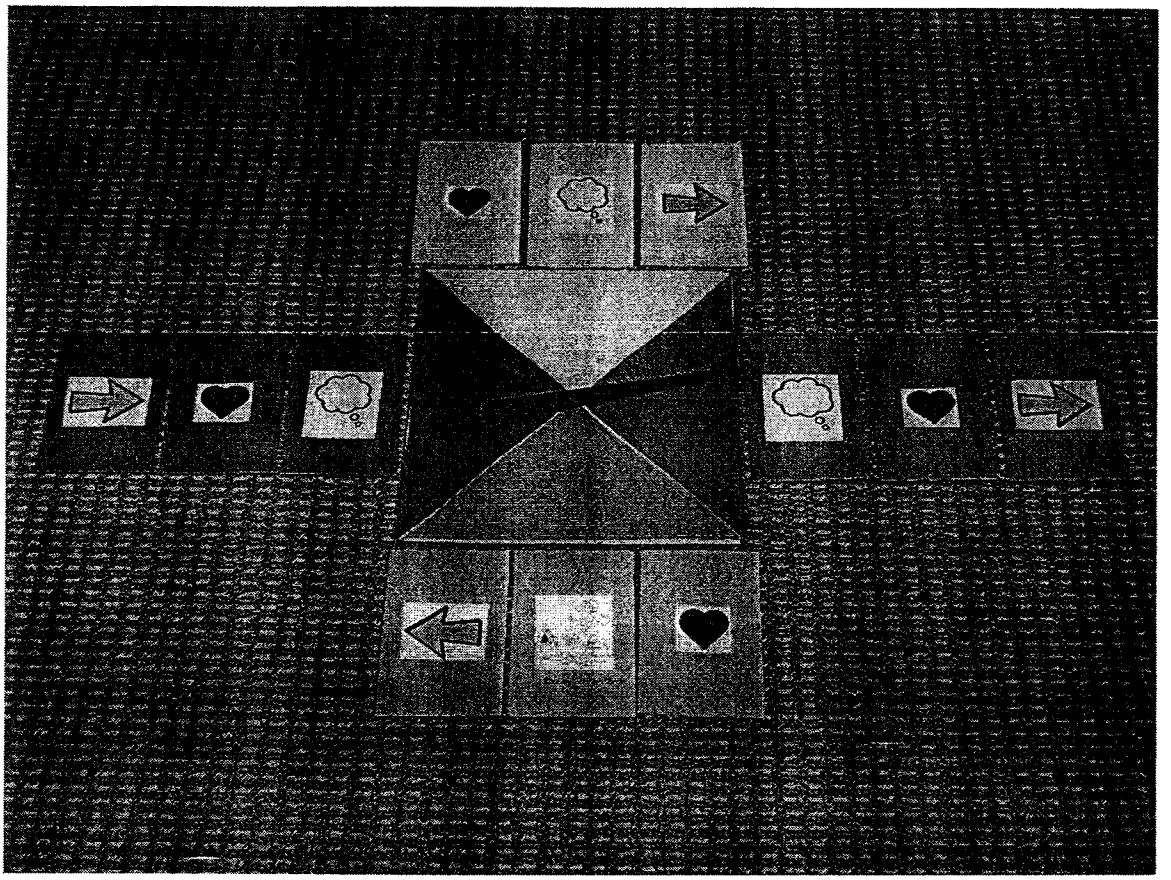


Appendix G

Girl dropping plate of cookies

Appendix H

Review Game Spinner and Activity Cards



Appendix I

Ethics Certificate

UNIVERSITE Concordia UNIVERSITY

Department of Education
LB-579
Sir George Williams Campus

To: **Christine Delvin, M.A. Child Study**

From: **Richard Schmid, Chair**

Date: **February 4, 2010**

Re.: **Effect of Teaching Comprehension Strategies on the Oral Narrative Skills of Kindergarten Children**

This letter is to inform you that your proposal had successfully passed the scrutiny of the Department's Ethics Committee and has been accepted.

We take this opportunity to wish you every success with this project.

1455 De Maisonneuve Blvd. West, Montreal, Quebec, Canada H3G 1M8 www.concordia.ca

Appendix J

Letter to Parents

PROJET DE RECHERCHE
LA COMPRÉHENSION ORALE DE RÉCITS : UNE INTERVENTION EN MATERNELLE

Cher parent ou tuteur,

Je vous écris pour vous informer d'un projet de recherche et pour vous demander si vous accepteriez que votre enfant y participe. Le projet se déroulera à l'école Gentilly ce printemps. Je vous explique les détails du projet dans la partie qui suit, mais si vous avez d'autres questions, il me fera plaisir d'y répondre.

Je me nomme Christine Devlin et je suis étudiante en Maîtrise dans le département de l'éducation à l'université Concordia et je travaille auprès des jeunes enfants depuis 15 ans.

Le but de ce projet est de déterminer les effets des programmes d'activités éducatives sur l'expression et la compréhension des récits des enfants en maternelle. Ce projet se divise en trois parties:

1. J'évalue le niveau de l'expression et la compréhension de récit de tous les enfants de deux classes de maternelle. Pour se faire, une adaptation française d'un outil qui s'appelle Expression, Recall and Reception of Narrative Instrument (ERRNI) sera utilisé. Je demanderai aussi à votre enfant d'effectuer quelques tâches afin de mesurer sa compréhension des histoires. Ces tâches seront effectuées individuellement et la durée sera de 20 minutes. Les réponses de votre enfant seront enregistrées sur un magnétophone. Cet enregistrement est important car il me donnera la possibilité de ré-écouter les réponses de votre enfant et de les noter correctement.

2. Les enfants des deux classes seront affectés au hasard à un de deux groupes :

    - Groupe A : Les enfants de ce groupe participeront à des sessions pendant lesquelles ils écouteront des histoires et participeront à des activités axées sur la compréhension des histoires
    - Groupe B : Les enfants de ce groupe participeront à des sessions pendant lesquelles ils écouteront des histoires et pourront discuter de leurs impressions et partager leurs questions

Les sessions, d'une durée approximative de 30 minutes, auront lieu dans un local différent sans la présence de l'enseignante et se dérouleront sur une période de trois semaines (c'est à dire deux sessions par semaine pour les premières deux semaines et une autre session pendant la troisième semaine).

3. Je ré-évalue tous les enfants des deux classes de maternelle à la fin du projet en utilisant le même instrument (ERRNI) et la même démarche. Ceci permettra une comparaison claire entre les deux groupes afin de déterminer si les leçons ont un effet et de voir quel type d'instruction donne des meilleurs résultats.

   En tant que parent ou tuteur, vous n'avez rien à faire pour cette étude. Seulement votre enfant y participera.

Foire aux questions...

Qu'est-ce qui arrive si je ne veux pas que mon enfant participe à ce projet?
Votre enfant restera dans la classe avec son enseignante et d'autres enfants. Étant donné que seulement un petit groupe d'enfants (5) à la fois viendra avec moi pour participer aux sessions, votre enfant ne se sentira pas mis à l'écart car il y aura toujours des enfants qui resteront dans la classe avec l'enseignante.

Qu'est-ce qui arrive si je donne mon consentement et que je décide par la suite de retirer mon enfant du projet?
Même si vous avez consenti à la participation de votre enfant au projet et que celui-ci ou vous-même décidez, pour quelque raison qui soit, que votre enfant ne participera plus, il pourra être retiré à n'importe quel moment pendant la durée du projet.

Qu'est-ce qui arrive si je donne mon consentement, mais mon enfant choisit de ne pas participer?
Avant de débuter *chaque* session d'évaluation et d'enseignement, je demanderai à votre enfant s'il veut participer aux activités. Si votre enfant refuse de participer à une session en particulier, ou mentionne qu'il ne veut participer à *aucune* session, il restera en classe (avec son enseignante et les autres élèves qui ne participent pas à cette session) et ne fera pas partie de ces activités. De plus, si votre enfant décide qu'il ne veut plus participer aux activités pendant le déroulement d'une session, je le ramènerai immédiatement à sa classe.

Est-ce que les données recueillies pendant ce projet resteront confidentielles?
Oui. Soyez assuré que l'identité de votre enfant ne sera aucunement dévoilée. Son identité restera confidentielle. Toute donnée sera identifiée avec des codes qui n'identifieront pas les participants par leur nom. Seulement moi-même ainsi que ma superviseure de thèse connaîtront l'identité des participants. Tout document imprimé sera conservé sous clé dans le bureau de ma superviseure de thèse à l'université Concordia. Tout fichier électronique sera conservé sur un ordinateur sécurisé à l'université Concordia. Lorsque le projet de recherche sera complété, les documents seront détruits (déchiquetage de papier et élimination de fichiers informatiques) de façon à maintenir la confidentialité des participants.

Qu'est-ce que je dois faire pour avoir plus d'information sur ce projet?
Je peux répondre à toutes vos questions. Vous pouvez me téléphoner au 514-631-6936. Mon courriel est DEVLI_91@education.concordia.ca. Vous pouvez également communiquer avec ma superviseure de thèse, Dre. Diane Pesco, au 514-848-2424 poste 7338 ou par courriel au dpesco@education.concordia.ca.

Le comité d'éthique de recherche du département d'éducation de l'université Concordia a révisé ce projet et a accordé son approbation. La Commission Scolaire Marguerite Bourgeois a accordé sa permission.

Est-ce que mon enfant peut participer même si je ne vous ai pas donné la permission?
Non. Votre permission est absolument nécessaire.

Quels seraient les avantages ou inconvénients qui pourraient découler de la participation de mon enfant?
Les participants de cette étude pourraient augmenter leur capacité de compréhension de récits, ainsi que leur connaissances générales. Il est possible que votre enfant ressente un léger stress lors des sessions d'évaluation. Soyez assuré que toutes les mesures seront prises afin de mettre les enfants à l'aise – présentation amusante des évaluations et activités éducatives, adaptation des procédures d'évaluation afin que les enfants connaissent du succès.

Bien à vous,

Christine Devlin

Appendix K

Consent Form

Formulaire de consentement

Veuillez retourner au professeur de votre enfant au plus tard le
JEUDI 1er AVRIL 2010

J'ai lu la lettre explicative et je comprends que l'étude intitulée *La compréhension orale de récits: une intervention en maternelle* a pour but de déterminer les effets d'un programme d'activités éducatives sur l'expression et la compréhension de récits par des enfants de maternelle. Je comprends que les données recueillies pendant ce projet demeureront confidentielles.

J'ai eu l'occasion de poser toutes mes questions concernant ce projet de recherche et on y a répondu à ma satisfaction. Je certifie avoir eu le temps voulu pour réfléchir et prendre ma décision. Je sais que la participation de mon enfant est tout-à-fait volontaire et que je suis libre de le retirer en tout temps. De plus, je sais que même si j'ai donné mon consentement et que mon enfant décide qu'il ne veut plus participer, il sera immédiatement retiré des activités.

PARTICIPATION À L'ÉTUDE :

❑ **J'ACCEPTE que mon enfant participe à cette étude**

❑ **JE REFUSE que mon enfant participe à cette étude**

ENREGISTREMENT SUR BANDE AUDIO :

❑ **J'ACCEPTE que les évaluations soient enregistrées sur bandes audio**

❑ **JE REFUSE que les évaluations soient enregistrées sur bandes audio**

Nom de
l'enfant_____

Nom du parent
(ou tuteur)_____

Signature du parent
(ou tuteur)_____

Date_____

Je certifie avoir expliqué au signataire les termes du présent formulaire de consentement et de lui avoir clairement indiqué qu'il demeure libre à tout moment de mettre un terme à sa participation au présent projet et que je lui remettrai une copie signée du présent formulaire.

*Nom du chercheur*_____

*Signature du chercheur*_____

*Date*_____