TOWARD A DEEPER UNDERSTANDING OF TEXT:
STUDENTS CONTROLLING AND DEVELOPING INQUIRY SKILLS
THROUGH SMALL-GROUP DISCUSSION

by

Julie Krall
B.Ed., University of Victoria, 1994

THESIS SUBMITTED IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF EDUCATION
in
CURRICULUM AND INSTRUCTION

THE UNIVERSITY OF NORTHERN BRITISH COLUMBIA
© July 2005
NOTICE:
The author has granted a non-exclusive license allowing Library and Archives Canada to reproduce, publish, archive, preserve, conserve, communicate to the public by telecommunication or on the Internet, loan, distribute and sell theses worldwide, for commercial or non-commercial purposes, in microform, paper, electronic and/or any other formats.

The author retains copyright ownership and moral rights in this thesis. Neither the thesis nor substantial extracts from it may be printed or otherwise reproduced without the author’s permission.

In compliance with the Canadian Privacy Act some supporting forms may have been removed from this thesis.

While these forms may be included in the document page count, their removal does not represent any loss of content from the thesis.
TABLE OF CONTENTS

Abstract ........................................................................................................................................... ii

Table of Contents ......................................................................................................................... iii

List of Tables ................................................................................................................................. v

List of Figures ............................................................................................................................... vi

Acknowledgements ..................................................................................................................... vii

Chapter One - Introduction .......................................................................................................... 1
  Definition of Terms .......................................................................................................... 6

Chapter Two - Review of the Literature ................................................................................... 9
  The Role of Social Cognition in the Development of Knowledge ........................................... 9
  Cognitive Processes ........................................................................................................ 11
  Major Cognitive Theorists .............................................................................................. 12
    Jerome Bruner .................................................................................................... 12
    Noam Chomsky ................................................................................................. 12
    Jean Piaget .......................................................................................................... 13
    Lev Vygotsky ......................................................................................................... 14
  Practical Applications of Theories .................................................................................. 15
    Schemas ........................................................................................................................... 16
    Perspective Taking ........................................................................................................ 17
    Rules of Communication .............................................................................................. 20
      Time to Practice .............................................................................................. 21
    Social Growth ................................................................................................................. 22
    Scaffolding ...................................................................................................................... 23
      Scaffolding through the use of questions strategies ................................... 24
      Scaffolding through the use of statement strategies ................................... 25
      Scaffolding through the use of revoicing ....................................................... 26
      Scaffolding by modeling .................................................................................. 27
  Making Connections to Literature ............................................................................... 27
  Increasing Student Contributions to Small-Group Discussions ......................................... 30
  Effective Scaffolding leads to Envisionment Building ......................................................... 32
    The Aesthetic and Efferent Stances and Literary Experiences ........................................ 32
    Envisionment Building .......................................................................................... 35
    Stances During Envisionment Building ....................................................................... 35
    Envisionment Building - Principles of Practice ....................................................... 39

Summary .......................................................................................................................... 40

The Study ............................................................................................................................... 43

Research Question ............................................................................................................... 44
<table>
<thead>
<tr>
<th>Chapter Three – Methodology</th>
<th>45</th>
</tr>
</thead>
<tbody>
<tr>
<td>Setting</td>
<td>45</td>
</tr>
<tr>
<td>Sample</td>
<td>45</td>
</tr>
<tr>
<td>Research Design</td>
<td>47</td>
</tr>
<tr>
<td>Design</td>
<td>47</td>
</tr>
<tr>
<td>Limitations</td>
<td>48</td>
</tr>
<tr>
<td>Apparatus</td>
<td>48</td>
</tr>
<tr>
<td>Data Collections Procedures</td>
<td>48</td>
</tr>
<tr>
<td>Measures</td>
<td>51</td>
</tr>
<tr>
<td>Scaffolding techniques for discussions</td>
<td>51</td>
</tr>
<tr>
<td>Data Analysis Procedures</td>
<td>51</td>
</tr>
<tr>
<td>Time-Line</td>
<td>58</td>
</tr>
<tr>
<td>Summary</td>
<td>58</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Four – Results</th>
<th>59</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level-One Results</td>
<td>62</td>
</tr>
<tr>
<td>General Comparison</td>
<td>62</td>
</tr>
<tr>
<td>Control Group Results</td>
<td>64</td>
</tr>
<tr>
<td>Treatment Group Results</td>
<td>64</td>
</tr>
<tr>
<td>Level-Two Results</td>
<td>67</td>
</tr>
<tr>
<td>General Comparison</td>
<td>67</td>
</tr>
<tr>
<td>Control Group Results</td>
<td>69</td>
</tr>
<tr>
<td>Treatment Group Results</td>
<td>69</td>
</tr>
<tr>
<td>Level-Three Results</td>
<td>70</td>
</tr>
<tr>
<td>General Comparison</td>
<td>70</td>
</tr>
<tr>
<td>Control Group Results</td>
<td>71</td>
</tr>
<tr>
<td>Treatment Group Results</td>
<td>71</td>
</tr>
<tr>
<td>Level-Four Results</td>
<td>71</td>
</tr>
<tr>
<td>Conclusion</td>
<td>72</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Chapter Five – Discussion, Conclusions, and Implications</th>
<th>73</th>
</tr>
</thead>
<tbody>
<tr>
<td>Discussion</td>
<td>73</td>
</tr>
<tr>
<td>Conclusions</td>
<td>80</td>
</tr>
<tr>
<td>The Role of Scaffolding in Small-Group Discussions</td>
<td>81</td>
</tr>
<tr>
<td>Implications for Classroom Teachers</td>
<td>82</td>
</tr>
<tr>
<td>Envisionment Building Classrooms</td>
<td>83</td>
</tr>
<tr>
<td>Future Research</td>
<td>84</td>
</tr>
<tr>
<td>Concluding Statement</td>
<td>85</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>References</th>
<th>87</th>
</tr>
</thead>
</table>

| Appendix A | 96 |
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Table 1</td>
<td>Open-Ended Questions</td>
<td>49</td>
</tr>
<tr>
<td>Table 2</td>
<td>Suggestions for the Scaffolded Discussions</td>
<td>52</td>
</tr>
<tr>
<td>Table 3</td>
<td>Envisionment Level Descriptions</td>
<td>55</td>
</tr>
<tr>
<td>Table 4</td>
<td>Total Number of Contributions Made at Each Level</td>
<td>61</td>
</tr>
<tr>
<td>Table 5</td>
<td>Total Number of Level-One Contributions Made By Each Student</td>
<td>63</td>
</tr>
<tr>
<td>Table 6</td>
<td>Total Number of Level-Two Contributions Made By Each Student</td>
<td>68</td>
</tr>
<tr>
<td>Table 7</td>
<td>Total Number of Level-Three Contributions Made By Each Student</td>
<td>71</td>
</tr>
</tbody>
</table>
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Figure 1</td>
<td>Pretest-posttest control group design.</td>
<td>47</td>
</tr>
<tr>
<td>Figure 2</td>
<td>Number of level-one contributions made by the control group.</td>
<td>64</td>
</tr>
<tr>
<td>Figure 3</td>
<td>Number of level-one contributions made by the treatment group.</td>
<td>65</td>
</tr>
<tr>
<td>Figure 4</td>
<td>Number of level-two contributions made by the control group.</td>
<td>69</td>
</tr>
<tr>
<td>Figure 5</td>
<td>Number of level-two contributions made by the treatment group.</td>
<td>70</td>
</tr>
</tbody>
</table>
Abstract

The aim of this study was to demonstrate that students would move toward a deeper understanding of texts when they were given the skills to control and develop their own inquiry through small-group discussion with peers. This study also demonstrated the necessity of initially providing students with the skills and training prior to developing the expectation for them to work independently in small-group discussions about text. The study took place in a rural school of approximately 130 students located in a small town in northwestern British Columbia. An intact Grade 7 class of 26 students was chosen as the sample for this study. Students were grouped using paired sampling, and a pretest-posttest control group design was chosen as it allowed that the effects of internal threats to validity were spread equally between the groups. Students' contributions to the discussions were categorized based on criteria describing envisionment levels, and the Mann-Whitney U Test was used to analyze the leveled protocols. The results of this study suggest that once students begin to understand how to provide effective scaffolding in discussions, they are capable of working independently in groups and improving their comprehension of texts by developing their own interpretations while building and moving further through their envisionments. Analysis of the quantity of results also showed that individual students must make a substantial number of contributions to discussions in order for them to fully explore their horizons of possibilities and move to a deeper understanding of the text.
Acknowledgements

I would like to thank Colin Chasteauneuf, PhD for his support and knowledgeable advice as a supervisor. I appreciated his patience, efficiency and dedication to this study. I would also like to thank Peter McMillan, PhD for his expert advice and support during the statistical portion of this study. Thank you to Lisa Dickson, PhD for her participation as a committee member and for her guidance and feedback during the writing of this document. Thank you also to Andrew Kitchenham, PhD for serving as a knowledgeable and experienced external examiner. His feedback was necessary and appreciated. A special thank you goes to my husband and family for believing in me and for offering their amazing support toward the completion of this degree.
Chapter One - Introduction

Literature has been used in our schools both as a tool to teach children about literary techniques and as a means to explore new ideas and information about the world. For many students, the reading of literature is simply part of the required process in school and they read in such a way as to extract from the text enough useful information to answer teacher-developed questions about the text.

Students may be expected to base their discussion topics on questions, themes, and topics supplied to them by their teachers. I have observed that students have great difficulty answering questions when they are being indirectly pressured to only relate to the teacher's interpretation of the story. I have observed that students who are placed in groups to simply answer knowledge-level questions do not have the skills or knowledge to enable them to scaffold their discussions to include personal connections to, and opinions of the literature.

New curriculum expectations over the last decade have brought about the introduction of new teaching methods in our classrooms. Student participation in literature discussion groups is now a frequent occurrence in our classrooms. However, many teachers view small-group discussion as simply organizing the students to work together without any support to answer predetermined, teacher-devised questions. When used, these text-related questions are often worded in a manner which leads students to believe that there is only one correct answer to the question (Langer 1995, 1998). Based on my observations of this type of small-group work, I have found that students struggle to create answers that the teacher will determine as acceptable. Students also have difficulty knowing how to initiate and conduct discussions with their peers. For instance, a teacher may create a question or task that asks the students to
describe the importance of a particular event in the story. By including their interpretation of events, teachers are indirectly leading students to believe that this particular event is more important than other events.

As a result of the criticism targeted at direct teaching, teachers have often begun to allow students to have full control over their own small and large group discussions. Although this model may eventually be successful for students, most students do not initially have the skills required to successfully conduct their own discussions. McMahon (1996) discussed the problem faced by students who try to conduct their own small-group discussion about literature. In her writing she recognized that students need to take responsibility for leading discussion about literature, but that without teacher support, they are unlikely to be successful. She also examined the tendency that teachers often exhibit for stifling student talk during classroom activities and consequently limiting their attempts to achieve a deeper understanding of the text being discussed.

Although I have observed that middle-school-aged students spend large amounts of time socializing and talking, I have noticed that without effective scaffolding, they have difficulty moving their discussion about literature to a deeper level of understanding. As it is impossible for teachers to attend and scaffold every small-group discussion through the school year, it is important to teach students the necessary skills so they can eventually conduct discussions with no teacher present.

Langer (1995, 1998, 2001) also identified in her studies that students involved in unscaffolded discussions about literature had difficulty moving through their envisionments (see Definitions) to a deeper understanding of the literature. Although students usually have valuable information to contribute to discussions about literature, they are often inexperienced in discussion methods and have difficulty knowing how and
when to make contributions.

Through my observations of the teaching of literature, I believe that in many cases teachers are not providing students with opportunities to make personal connections to literature through discussion with their peers. Rosenblatt's (1994) transactional theory recognized that students did not often have a strong understanding of literature when they were not given the opportunity to make personal connections and create their own meaning through their discussion with peers and adults.

Cazden (1988) explored the problem of the passive role students are often expected to take in the process of understanding literature. She observed that "teachers give directions and children nonverbally carry them out; teachers ask questions and children answer them, frequently with only a word or a phrase" (p. 134). When students are limited to these types of roles they are not being provided with opportunities to increase their own discussion and inquiry skills.

Although middle-school-aged students may spend time socializing and conversing about the text they read, they do not move to a deeper understanding of literature and issues. Teasley's (1995) study about the role of talk in children's peer collaborations identified that merely placing students together in groups will not necessarily ensure that they will benefit from the interaction. She further explained that children will only benefit from peer interaction to the extent that they participate in the collaboration of ideas.

Maloch (2002) argued that overt teacher leadership encourages procedural understanding of how to recite and answer direct questions, and may place students in a passive, less responsible role. This type of literature discussion does not leave time or opportunity for students to respond to or engage in extended and connected interactions.
Applebee (1996) recognized the problem of teacher-focused methods in our schools and classrooms. His writing explored the difficulty faced by students when entering into discussions about literature where the teacher expects students to recite facts and focus on textual features and structure. He expressed support for a more student-centred approach to discussions where students begin to become more effective, personally connected participants.

Wiencek and O'Flahaven (1994) did a meta-analysis from the last three decades that showed that the majority of classroom discussions in schools are teacher-structured and teacher-directed. When teachers are participating, they exhibit various roles such as eliciting, initiating, extending and evaluating the text, but students have been restricted from learning and eventually filling these roles. The main problem with these types of discussions is that they are socially controlled by the teacher, and the teacher takes full interpretive authority.

Therefore, a problem exists. Students’ opportunities to make a high number of contributions to small-group discussions about literature are often limited as a result of the teacher-centred approach used to guide many classroom discussions. They are often asked to answer text-related questions and are not given opportunities to construct new knowledge with their peers by sharing personal experiences, considering others’ perspectives, and offering opinions.

In order to promote the use of small-group discussions in their classrooms, teachers may place students into circumstances for which the students are not prepared. Students who have not yet learned the rules of how to effectively communicate about literature will not necessarily gain from taking part in small-group discussions with their
peers. The goal of this study is to show that by having the teacher provide the effective scaffolding initially, students will eventually learn the skills of scaffolding at the peer level.

As part of my requirements for a previous course in language and discourse, I conducted a pilot study using a single group pretest-posttest design. Ethics approval for this study was given, and my project was monitored closely by the instructor. Cohen and Manion (1994) discuss the merits of using this pre-experimental design as a means of exploring new curricular methods and innovations. As this design allows for many threats to its validity, they suggest using the results from the pilot study only as an indication of the need for future studies in this area.

A small number of students from the same class with which I was working were selected to participate in the pilot study. The study consisted of unscaffolded and teacher-scaffolded small-group discussions about literature.

The differences between the results from the unscaffolded and scaffolded discussions in the pilot study indicated a need for further research in this area. The analysis of the data revealed that when I effectively scaffolded instruction, the students made more contributions during the discussions, and the contributions were more complex and showed a deeper level of understanding of the literature being discussed. Higher levels of envisionments were reached by students during the scaffolded discussions. The unscaffolded discussions generated fewer student contributions, and the levels of envisionment reached by the students during the unscaffolded discussion were overall much lower.

The results of the pilot study led me to believe that by providing effective scaffolding, teachers may be able to assist students in moving further through their
envisionments, and toward a deeper level of understanding of literature, themselves, and the world around them. However, due to the one-time nature of this study, further research was deemed necessary to explore if, and to what extent the changes caused by scaffolding are lasting.

Students need to be provided with effective scaffolding while initially learning how to successfully participate in small-group discussions about literature. Students require the opportunity to observe scaffolding strategies being modeled in order to understand how to communicate effectively to better comprehend the literature they are discussing.

The purpose of this study was to provide students with the skills to control and develop their own inquiry through small-group discussion with peers and to determine the conditions under which students will move toward a deep understanding of texts.

**Definitions of Terms**

The following terms are used in much of the research referred to in this study. In the field of education many similar terms are used interchangeably in the definitions of certain methods and activities.

*Collaborative* - To work jointly with others, or together especially in an intellectual endeavor.

*Conversation* - Oral exchange of sentiments, observations, opinions or ideas.

*Deeper understanding* - When a more advanced level of envisionment is achieved by moving beyond the text and seeing new perspectives and understanding new meanings. It is operationally defined in this study as the level of envisionment reached by students.

*Discussion* - Consideration of a question in open and usually informal debate. Criteria for a discussion are: (1) the discussants must present multiple points of view and
then be ready to change their minds after hearing convincing counterarguments; (2) the students must interact with one another as well as with the teacher; (3) a majority of the verbal interactions, especially those resulting from questions that solicit student opinion, must be longer than the typical two- or three-word phrases found in recitation.

**Discourse** – A formal, orderly and usually extended expression of thought on a subject. Discourse is considered a linguistic unit larger than a sentence (Cazden, 1988).

**Effective scaffolding** - The use of modeling and carefully worded question and statement strategies with the intention of providing students with the skills necessary to make an increased number of more complex contributions to discussions.

**Envisionment** - The understanding of the world a person has at any point in time. Envisionments are text-worlds in the mind, and they differ for individuals. They are a function of one’s personal and cultural experiences, and are always either in a state of change or available for and open to change. Readers experience stances as they build envisionments (Langer, 1995).

**Interpretive authority** - Having full control of the interpretation of the themes and issues arising during a discussion about literature.

**Narrative** - the telling of a story.

**Revoicing** – A discussion strategy that sometimes takes the form of a question and serves the purpose of repositioning students with respect to each other and with respect to the content (O’Connor, & Michaels, 1996).

**Student-centred discussions and student-led discussions** - For the purposes of this study these terms both mean that student learning is the focus, rather than the teacher teaching. Students’ ideas often direct the flow of the discussion, and they are speaking to each other, rather than responding to the teacher. The teacher may be scaffolding for more
effective discussion, but allowing the students to decide the direction of the discussion. The students have interpretive authority.

*Teacher-centred discussion and teacher-led discussions* - For the purposes of this study these terms both mean that the teacher has sole responsibility for the interpretations and ideas presented. In this type of discussion, the teacher would only accept students' interpretations that were reflective of the teacher's intended outcomes.
Chapter Two - Review of the Literature

As small-group discussions about literature become more prominent in our classrooms it is inevitable that more research will be done in this area. There are many studies published already that help to inform the way we conduct student-centred, small-group discussions. More research is required however to determine the circumstances under which students will be able to work independently in groups and be successful at improving their comprehension of texts by developing their own interpretations. The literature examined for this study will explain the social and cognitive processes that enable students to independently carry out small-group discussions, why students require the opportunity to make personal connections to literature, the circumstances under which students will increase the number of contributions they make to discussions, and how students go about socially constructing new knowledge in the classroom setting.

The Role of Social Cognition in the Development of Knowledge

Theory and research in the area of social cognition (e.g., Maloch, 2004; Short, Kaufman, Kahn, & Crawford, 1999; Vygotsky, 1978) has led to a general consensus amongst educators that students require interactions with peers and adults in order to socially develop meaning and knowledge. Most teachers understand the significance of students learning by interacting with others; unfortunately, many teachers choose to organize their classroom in a teacher-centred manner where the teacher is viewed as the vessel from which knowledge is delivered. As these teachers begin to incorporate small-group discussions in their classrooms, they may attempt to find ways to continue to direct ideas and concepts being discussed in the small groups. They may also place students in peer-led small-group discussions without having first given them the skills required to be successful. When students are given too much responsibility too soon, their small-group
discussions become unsuccessful.

Students require the skills necessary to conduct their own small-group discussions about literature, and they require the freedom to control the interpretive authority (Langer, 1995). Teachers can assist students in achieving successful small-group discussions by initially taking part and supplying scaffolding through the modeling of revoicing, questioning, making statements and giving personal opinions. Over the course of several small-group effectively scaffolded discussions, students will eventually gain the skills necessary to conduct the discussions without the teacher being present. Students will not only become capable of conducting the scaffolding, but by having full control of the interpretive authority they will make more personal connections which will empower them to move further through their envisionments (Langer, 1995, 2001).

Teachers attempting to use small-group discussion in their classrooms for the first time should be aware of how children learn socially, as well as how to model effective scaffolding while providing students with the authority to direct the ideas and topics being discussed (Vygotsky, 1978). Teachers may then recognize that when students are taught the skills of effective scaffolding and facilitating, they are better able to successfully conduct their own discussions (Almasi, 1996).

Most children attain their formal education in a classroom setting. It is in this setting that children learn the rules of groups, learn to interact and communicate with peers and adults, and learn to develop ideas and understandings. There are many differing views of social cognition, but that some basic features are common to all of them. Although many theorists have contributed to our understanding in social psychology, Noam Chomsky, Jean Piaget, Lev Vygotsky and Jerome Bruner were all integral in establishing the foundation in this area. Much of their research and many of
their theories have been applied since to studies of the social construction of knowledge.

It is the responsibility of teachers to provide scaffolding for students to assist them in their struggle to achieve their highest level of understanding. Vygotskian theory explores the idea that this scaffolding may occur with a more competent peer or adult. In group settings, people's stored memories and perceptions of the world are presented and received, and connections are made by students working cooperatively (Vygotsky, 1978).

To better understand students at the mid-intermediate level, it is critically important to understand how children learn to see different perspectives, and how this connects to how children go about developing meaning with others.

Cognitive Processes

Researchers who employ social cognition as a construct must address the idea that cognitive elements are formed and used, and that they change over time (Fiske & Taylor, 1991). This examination of the internal processes of cognition helps to explain how individuals' cognitive abilities change. Social cognition is considered by some psychologists to be the study of mental processing about the social world (Fiske & Taylor, 1991). Theorists use the term social cognition to imply "a concern for the social nature of perceivers, and for the social construction of our knowledge about the world" (Condor & Antaki, 1997, p. 321). Rather than analyzing the outcomes of processes, psychologists are now moving toward analyzing the social information processing people use prior to making a response in a social situation, and how people attend to, use and store stimuli. This type of research dictates that stimulus must be attended to and the external reality must be encoded internally (Fiske & Taylor, 1991).
Major Cognitive Theorists

Cognitive theorists over time have concentrated their research upon mental processes and structures which include attending, remembering, reasoning, imagining, anticipating, planning, deciding, problem solving and communicating ideas (Zimbardo, 1985). Many researchers have contributed to the study of cognition and human development, although there are four who stand out for making major contributions which have influenced much of the research since (Garton, 1992). Jerome Bruner, Noam Chomsky, Jean Piaget, and Lev Vygotsky explored how social interactions or influences can permit the development of cognition and language, how development occurs, what processes are involved, and what facilitates development (Garton, 1992).

Jerome Bruner. At a time when psychology was dominated by behaviourists, Jerome Bruner (1915-present) proposed a cognitive learning model which focused on how people learn, rather than what they learn. He emphasized the acquisition, organization, understanding, and transfer of knowledge (Zimbardo, 1985). Bruner's theory suggested that prior experience helped individuals to perceive and interpret stimuli in an organized way. His theory argued that individuals interpret external events as they are encountered and incorporate them into a unique classification storage system in the form of imagery, concepts and other representational structures (Sage, 1999).

Noam Chomsky. Noam Chomsky's (1928-present) research in the area of linguistics showed that "expression of ideas through language was not merely reinforced verbal behaviour, but part of a unique cognitive system for comprehension and production of symbols" (Zimbardo, 1985, p. 338).

Chomsky's theory of language acquisition is dependent upon four important factors (Sage, 1999). Historically, he believed that children have an optimal learning age
between three and ten years where they will be most likely to learn a language in its entirety and with fluency. Chomsky also purported that children need only be exposed to a language to learn it. He admitted that extra prompting and reinforcing helps speed up the process, but that these things will really only have a small effect. He also found that even if children are not corrected, they still grasp the language, and speak in the same way as others around them. Chomsky also argued that children go through stages of language acquisition in which they learn certain parts of the language.

Jean Piaget. Jean Piaget (1896-1980) made many contributions to our knowledge of the way children reason, think, and problem solve (Zimbardo, 1985). Of the many factors that Piaget recognized in a child's cognitive development, he deemed interactions with their peers to be most important (Broderick & Blewitt, 2003). One aspect of Piaget's theory specific to this study is the factor of equilibration. Social interactions with peers derive their importance from exhibiting influence on equilibration in the way of cognitive conflict (Forman & Cazden, 1994). Piaget's theory is most helpful in explaining situations where students may enter an argument or conflict as part of their discussion. It is during this disequilibrium that students are forced to clarify their contradictory views on topics. Dealing with these conflicts causes cognitive elaborations which in turn lead to mental growth.

Piaget's theory of cognitive development conceptualizes children as actively constructing and changing their own knowledge. He viewed these changes in knowledge, or cognition as unidirectional and emerging as the biological nature of the human organism unfolds.

Piaget spent his life conducting research on the acquisition of knowledge. His many writings and theories reflected the evolving nature of his ideas and gave a starting
point from which many researchers could explore.

*Lev Vygotsky.* Lev Vygotsky's (1896-1934) research is an integral part of any discussion about children's learning processes. Vygotsky argued that children do not develop in isolation, but that learning takes place when the child is interacting with the social environment (Daniels, 2001, p. i). Vygotsky (1978) believed that functions in the cultural development of a child appear first on a social level, and then on an individual level. Further to this, he also proposed that all the higher functions originate as relationships between individuals. In order for a child to internalize knowledge there had to have first been an interaction between people. His theory of internalization was based on the understanding that the properties of the processes of semiotically-mediated social functions provide the key to understanding internal functioning. Specific to this study is Vygotsky's argument that higher mental functions go through an external stage during their development because they are initially a social function (Wertsch, 1985). *External* is defined as social in Vygotsky's theory, and he emphasized that higher mental functions were once external, before becoming internalized mental functions.

To assist in the assessment of children's intellectual abilities and in the evaluations of instructional practices, Vygotsky (1978) introduced the notion of the "zone of proximal development" which outlined his view of the relationship between internal and external psychological functioning. He defined the zone of proximal development as the distance between children's actual developmental level and their potential developmental level. He determined the actual level of development by using individual problem solving, and the potential developmental level through "problem solving under adult guidance or in collaboration with more capable peers" (Vygotsky, 1978, p. 86). This notion of the 'zone of proximal development' became an integral part
of my research on discussion in the middle grades.

**Practical Application of Theories**

All major cognitive theorists have contributed to our present understanding of how students learn and develop. Bruner (1996) introduced the idea that an internal storage system is used to categorize and store information and that the stored information is what is used to help cope with and learn new information. Chomsky on the other hand proposed that language is learned by genetically programmed procedures in the brain. Although both of these theories contribute to understanding part of how students learn, they do not fully explore the impacts of how social contact affects learning. Piaget identified several factors in a child’s cognitive development, but he saw interactions with peers to be the most critical aspect. He proposed that it is the conflict in which peers engage that leads students to seeing other’s perspectives. His ideas regarding children’s learning conflicted with theories presented by Vygotsky. Though Vygotsky believed that children’s mental growth is a result of social learning, Piaget found that children’s independent actions in the world led them to discover what it has to offer (Broderick & Blewitt, 2003).

Although Piaget’s and Vygotsky’s studies both had the common goal of determining how children learn ideas and express them to the world, they differed regarding how children go about learning. Piaget’s theory suggests that children should not be taught concepts until they are at the appropriate developmental stage to learn them. Vygotsky opposed this idea and suggested that the children’s zones of proximal development determines what they are ready to learn; development will not be universally the same for all children.

It is a blend of aspects from many of the major theorists that provides educators
with a balanced theoretical approach to teaching. Piaget helps us to understand that students need to be developmentally ready to grasp certain concepts; however, Vygotsky's ideas regarding a child's zone of proximal development provide teachers with the potential to tailor learning for students at varying developmental stages. It should be understood however, that both Piaget and Vygotsky agreed that interactions with peers is ultimately one of the most important factors in learning and developing.

**Schemas**

Although there are different theories regarding social cognition, there is a common understanding that communication and language have greater meaning than simply the verbalizations that we hear. Gee (2001) explored the idea that meaning in language is tied to people's experiences of situations in the material and social world, and that these experiences, perceptions, feelings, actions, and interactions are stored in the mind or brain. Research has shown that people tend to simplify reality by storing their knowledge at the general, rather than at the specific level (McNeil, 1992; Robb, 2000). When a person stores a memory or experience from a dinner party for example, he or she tends to eliminate specifics such as what the weather was like outside that night and only store the general rules and details that may be relevant to all past and future dinner parties.

This interplay between the current situation and what we bring to it is particularly relevant in the classroom. Rosenblatt (1983) suggested that when interacting with a text, readers bring their "personality traits, memories of past events, present needs and preoccupations, a particular mood of the moment, and a particular physical condition" (p. 30). She viewed this exposure to new ideas as especially significant for adolescent readers who have not yet fully developed their personality or view of the world.
McNeil's (1992) writings explore the idea that students will have different past experiences. When attending schools, they are faced with circumstances where they must try to make personal connections to situations in which their schemas may be quite different from what is presently happening. Further to this, McNeil (1992) suggests that we experience perception as happening directly, similar to simply videotaping our surroundings. The student's lack of experiencing others' ideas necessitates teachers providing students with opportunities to share their specific memories and experiences. This sharing allows for a broader understanding of the myriad ways that situations can be perceived.

*Perspective Taking*

Perspective taking is a topic which has meaning at different levels. Some theorists point to the grammar and words of our language which exist to provide people with alternate ways of viewing experiences (Gee, 2001). Others discuss the development of how people learn to take, or see different perspectives, in situations (Broderick & Blewitt, 2003).

Gee (2001) argued that linguistic symbols exist in order to provide people alternate ways in which to express perspectives. In this sense, language is not just about giving and receiving information; rather, it is about communicating perspectives on experiences and ideas. When considering language, it might be construed that linguistic symbols are loaded with meaning, and their main purpose is to provide people with a perspective on a situation. It is in the classroom and many similar situations that children become aware that other people may have perspectives differing from their own.

Based in Vygotskian theory, many social theorists recognize that "interactive, intersubjective dialogue with more advanced peers and adults" (Gee, 2001, p. 717) is
necessary for children to develop their abilities to see situations from others' perspectives. Piaget believed that children in industrialized cultures are forced to consider the viewpoints of others in order to survive the give-and-take structure of the classroom community (Broderick & Blewitt, 2003). It is upon entering into a classroom community that children are forced by peers to adopt better communication skills and clarify their feelings. Piaget viewed the conflicts that are involved in this process as essential to a developing awareness of others' perspectives (Broderick & Blewitt, 2003). Gee suggests that it is through various types of discussions in the classroom that students are exposed to, and become familiar with, the ability to distance themselves from their own perspective, and internalize others' perspectives. It is then through discussion that they may come to see how differing words and grammar express competing perspectives.

Sullivan (1953) revealed that around the age of four, most children begin to seek relationships beyond those they have with family. Although this is the beginning of building friendships, it is not until about the age of eight that children begin to have many same-sex playmates and begin to understand and see situations from others' perspectives. These relationships teach preadolescents that the perspectives of other people must be considered as carefully as their own (Sullivan, 1953). Both Piaget and Sullivan had views on how children learn to foster friendships through social contact with others (Broderick & Blewitt, 2003).

The mid-intermediate classroom offers students opportunities to develop their friendship abilities by being exposed to a variety of social experiences. Based on Selman's (cited in Broderick & Blewitt, 2003) research about stages of friendship and perspective taking, it is during this reflective stage that students "become more cognizant of the perspectives of others and learn to put themselves in another's place as a way of
evaluating intentions and actions" (Broderick & Blewitt, 2003, p. 219).

Using discussion strategies in mid-intermediate classrooms provides students with exposure to many other perspectives, as well as provides immediate feedback from others for both positive and negative social skills. Students' psychosocial development, combined with their personalities and their home environments will all play a role in how successful a student is in learning how to have friendships and develop their perspective-taking skills.

Research is steadily clarifying how students learn by talking. Halliday (1994) explained that, from the beginning of their lives, children's acts of meaning are constructed jointly with others. He also views discussion in schools as unique and specific; however, it is also an extension of how children learn to collaboratively create meaning from a young age. Many studies show that students cooperating with other students in discussion about literature will lead to improved comprehension of text (e.g. Chinn, O'Donnell, & Jinks, 2000; Langer, 1995, 1997, 1998; Many, 1994; Teasley, 1995).

In a study conducted with high school students, Ruddell and Unrau (1994) reported that during or after small-group discussions many students in their study had re-formed the meanings they had given to the story during their initial interaction with the text. In this same study, it was concluded that many readers added to their initial understanding of the literature and began to establish what was recognized as a community interpretation of the literature. Chinn, O'Donnell, and Jinks (2000) found similar results in their research about discourse in collaborative learning. Based on pre-and post-discussion performance, they were able to deduce that interactive discourse was more effective at promoting improvements in students' ability to construct their own conclusions.
Rules of Communication

In order to construct meaning from social settings such as classrooms, children must be competent in the rules of communicating. Most children already have strong language skills upon entering school. The classroom setting however offers new challenges with a different set of rules governing effective communication.

Littlejohn’s (1992) research in the area of Conversation Analysis has shown that conversations are viewed as achievements of people in social situations who "attempt to accomplish tasks cooperatively through talk" (p. 90). Conversation Analysis makes the assumption that even though they may not appear so, conversations are orderly and stable. One of the main concerns of conversation analysis is the way in which speakers sequence or organize their talk turn by turn. Understanding the rules speakers need to know to have a conversation, and the interactional features of conversation such as turn taking, silences and gaps are also of significance for analysis (Littlejohn, 1992). By participating in group discussions in the classroom, students are being provided with opportunities to learn and practice the rules governing effective conversation. Without first understanding these rules, students placed together to discuss literature will be unable to successfully operate in a group setting.

It is understood that children are able to adjust their speech to suit the expectations of the listener (Gee, 2001). As discussed by Siegal (1991), they speak in less sophisticated ways to other children than to adults and are also skilled in understanding the motives of a speaker. Siegal also states that children assume that a speaker’s message will be cooperatively motivated by brevity, sincerity, relevance, and clarity.

Siegal explored the Cooperative Principle of Communication, and the four rules
or maxims which govern the way we approach effective communication. This foundational theory of conversation first proposed by Grice (see Littlejohn, 1992) explains that maxims dictate that we "speak no more or no less than is required, try to speak the truth and avoid falsehood, be relevant and informative, and avoid obscurity and ambiguity" (Siegal, 1991, p. 24).

Unfortunately, classroom communication does not always follow the rules of effective communication. Teachers will often pose questions to children in which the answers are repeated or obvious. Unlike adults, children may be confused by the departure from the rules governing effective communication. Children are also less likely to "retort spontaneously in an effort to clarify a speaker's intent and to offer repairs for improving communication" (Siegal, 1991, p. 26). Although the purpose is often to enhance their understanding of concepts, children may be misled by the communication, and end up responding with answers that differ from the expectations of the teacher. By providing effective scaffolding and respectfully listening to students' interpretations of literature during group discussions, teachers are modeling effective communication.

_Time to Practice_

Wells' (2003) research shows that by sharing ideas and discussing deeper meaning together, children can turn the variability of classroom communication into an asset. By providing students with opportunities to initially practise their communication skills with the guidance of a teacher, it seems possible that students will become more proficient at utilizing the cooperative principles of communication.

_Cazden (1988) dedicated part of her research to supporting the idea that the need to learn the expectations of academic discussion is one of the reasons that students require discussions in school. Cazden's writing reflects the understanding that there are
different expectations or rules governing students' classroom discussions, verses the
discussions they have on the playground or with their parents. Research undertaken by
King (1994) supports Cazden's theory that academic discourse is specifically school-
related by showing that students require explicit instruction in how to effectively question
and explain during peer group discussions. In a comparison of communication at school
and at home, Tattershall and Creaghead (1991) report that students need to learn an
entirely different set of communication skills when they enter school. Although their study was not specific to peer discussions, they did establish that, with practice, students
were able to adapt to differing discourse expectations between their homes and school.
By introducing and practicing school-related communication skills in small-group
discussions, the teacher gives students the opportunity to practice their skills by being
encouraged to be part of the discussion.

Social Growth

On another level, giving students the setting to experience discussions allows
them to learn more about the rules of how to socially interact with others in a variety of
ways. Gee (1996) proposed that any time we act or speak, we are aiming to accomplish
two things. He felt that we must make clear who we are; as well, we must make clear
what we are doing. He expressed the idea that people will all have different experiences
and ideas, and that it is critical that we learn to interact with and respond to people in
socially acceptable ways.

When entering into a discussion, the participants are in a situation whereby their
grammatical correctness and appropriate use of language are factors, but just as important
is how they situate themselves socially within the group (Gee, 1996). Spiegel (1996)
describes that a level of trust is necessary between teachers and students in order for there
to be a safe, respectful environment where students can learn more about themselves, and learn how to express themselves so that people will want to listen.

*Scaffolding*

In the field of education, it is generally understood that scaffolding is the term used to define the process of the support and guidance given to learners by a more competent individual (Robb, 2000). In using Vygotsky's theory in his work, Wells (1990) shares his definition of scaffolding to be the cultural knowledge and higher mental processes that are acquired by novices through their social interaction with more mature members of the culture. The process allows the novice to take over more of the task as he or she shows the ability to do so.

Maloch (2004) observed a teacher transitioning to literature discussion groups and noticed that the teacher was not only acting as a facilitator, she was also scaffolding by teaching the students how to be facilitators. In an earlier study of teachers' roles in literature discussion groups, Maloch (2002) concluded that teacher scaffolding in the form of modeling and elicitation resulted in students showing a stronger understanding of the strategies being used to analyze the text. In a similar study by Moller (2002) it was recognized that teachers provided scaffolding in literature discussions by modeling themselves as fellow readers, offering advocacy for the students' contributions, clarifying uncertain information, suggesting possibilities when addressing difficult topics, and finding source materials.

Studies conducted by Short, Kaufman, Kaser, Kahn, and Crawford (1999), and the National Reading Research Center (1994/1995) recognized the importance of teacher scaffolding in group discussions about literature. Students' comments were seen as building from the teachers' comments, and students were seen as taking responsibility for
group roles that had been modeled by the teacher. Teacher scaffolding was seen as
critical to eliciting, framing and monitoring the students' discussions. These studies also
revealed that in group discussions, teachers are high-status participants who set the tone
and provide valuable coaching or scaffolding before and after discussions. They did not
however show if the students' use of scaffolding and facilitating skills was lasting when
the teacher was no longer present.

Teachers have many roles and responsibilities when considering the ways they
scaffold discussion to ensure that students are working collaboratively to better
understand literature. There are many aspects involved in scaffolding collaborative
discussions and teachers may have to work slowly toward the inclusion of the various
strategies and methods that constitute effective scaffolding.

In order to effectively scaffold students' discussions about literature, teachers must
understand how to be involved without entirely leading or directing the discussion.
When considering scaffolding, teachers should consider the types of questions they use,
the way they word statements and questions, how they re-voice or re-word students' contributions in order to place students in specific positions in a discussion, the strategies they employ to assist student-centred discussion, and how to give feedback to students so their discussions will evolve and improve toward better understanding. With the careful use of effective scaffolding, teachers model the skills necessary to conduct a successful discussion, while simultaneously providing students with the authority to interpret the themes in the literature (Alverman, Dillon, & O'Brien, 1987).

*Scaffolding through the use of questioning strategies.* Teachers are required to
carefully word questions in ways that encourage students to draw deeper understanding of the literature from their discussion. By understanding how students create meaning and
envision the world, teachers may then proceed to creating questions which enrich students' literary experience by encouraging them to move through their reading stances (Langer, 2001). The particular wording of a question may also encourage students to tap further into their understanding than they would have on their own.

In reference to Vygotskian framework, questions and statements to the students that result in deeper understanding would be the scaffolding required to effectively converse with a student within their zone of proximal development (Wells, 1990). With the effective scaffolding of thoughtfully worded questions, students have the opportunity to converse beyond their actual level of development, and gradually improve their ability to sustain discussion at a higher level.

_Scaffolding through the use of statement strategies._ When collaborating with students in a discussion about literature, teachers should consider careful use of statements to increase the amount and quality of students' contributions to the discussion. Alverman, Dillon and O'Brien (1987) addressed student-centred alternatives to teacher questioning, and gave some possible scenarios to increase students' participation. They suggested that teachers make a declarative or factual statement, and then wait for students to elaborate, or to state or describe the student's state of mind, with the intent of inviting the student to analyze the reason for their expressed feelings. A statement suggesting that more information is needed on a comment invites any student in the discussion to contribute, rather than just the person who made the original comment. Making a controversial statement and then backing away from the crossfire may also provide students with an opportunity to give opinions, and to possibly agree or disagree with other students' perspectives (Alverman, Dillon & O'Brien, 1987). Langer (2001) suggests that using statements to link concerns will assist students in using other ideas from the
discussion, from the text, or other readings to develop their own interpretations of the literature being discussed.

**Scaffolding through the use of revoicing.** Experienced teachers often develop techniques that scaffold discussions by shifting responsibility for opinions and ideas to the students. The idea of using carefully worded questions and statements within the framework of a conversation is not necessarily unique; however, it is a powerful tool and can only be used predictably if fully understood by teachers. Although it is a complex technique, given time and practice it is possible that students may learn to use this technique with their peers.

O'Connor and Michaels (1996) noted that learning through discussion “requires that students take positions, or stances, with respect to the claims and observations made by others; it requires that students engage in purposive action within a social setting” (p. 64). Based on information in this study, O'Connor and Michaels determined that teachers have the responsibility of scaffolding discussion by the revoicing, or re-uttering of a student's contribution. This strategy by teachers sometimes takes the form of a question and serves the purpose of repositioning students with respect to each other and with respect to the content. Revoicing can take many forms with differing intents, but often the teacher has the intention of shifting the responsibility for the next move back to the initial speaker.

When considered against the traditional initiate, respond, evaluate (IRE) sequence in which the teacher initiates the talk, the student responds and the teacher then evaluates the student's response as to its correctness, the framework developed when using revoicing is seen as expanding the participants' roles, and giving them responsibility for the discussion by positioning them with or against others in the
Scaffolding by modeling. By modeling the expected behaviours and strategies used in group discussion, teachers provide a scaffolded opportunity for the students to learn new and different information that they did not already possess. Modeling can take many forms, and is a less intrusive way of providing students with knowledge that they can analyze and synthesize at their own pace.

Teachers may choose to model how to fit into a group discussion about a text by assuming the role of fellow-reader. Appleman and Hynds (1990) discuss the importance of teachers placing themselves in the role of fellow-reader with the students to provide an example for the students. Students will identify with a fellow-reader and see that it is possible for a group participant to use scaffolding technique and effective communication skills.

Making Connections to Literature

When students are given the opportunity to share personal experiences, give opinions, relate to others' texts and hear others' perspectives, they are more likely to comprehend literature presented in the classroom (Langer, 1995). According to Alvermann (2000), however, small-group discussions do not seem to be standard practice for students in the middle and later grades. In fact, teachers often expect students to read literature independently with no discussion at all regarding their ideas, questions or opinions. Although accommodating students' needs to make personal connections with literature is not a complicated task, many studies cite the lack of an organized effort in this direction.

Making meaning by sharing personal experiences during discussions refers to personalizing the curriculum so that students can make their own interpretations of the
knowledge presented to them. As students merge their prior knowledge with new concepts and narrate this experience, they make strong connections for learning. In his research, Wells (1986) saw the process children go through when narrating their experiences to others. He described how, during the sharing, they perhaps for the first time discover the significance of themselves as individuals. Wells expressed that language development is fostered when one has something to say and others want to listen. Language and thinking come together during the struggle to make meaning and communicate it to others. It is in the process of talking and sharing with others that students truly make meaning, and understand the knowledge they are learning in school. Once students have learned the necessary skills to successfully participate in discussions, they will then have full freedom to make meaning through their personal connections with their peers.

A common theme in the literature in this area is the idea that students better comprehend text when they are able to share their experiences and learn about others’ experiences in a discussion format (Cazden, 1988; Rosenblatt, 1983; Wells, 1990). Sharing personal experiences reveals who we are, helps to order our thoughts, and influences our thinking. Sharing personal experiences is the process whereby children are provided the opportunity to bridge the gap between their prior knowledge and the new information presented to them in the class. As children share personal anecdotes in relation to new ideas and concepts, they are constructing their own ideas of knowledge in meaningful ways. Having the opportunity to describe a personal experience such as a river-rafting trip or a recent book they have read may provide students with connections to new stories and other students’ ideas. The telling and sharing of experiences provides an environment that both enhances community learning and accommodates individual
differences.

Almasi (1996) revealed that students who were involved in simply reciting answers to questions began to view the exchanges as primarily for the teacher's sake or for assessment, rather than for the construction of meaning. She concluded that the idea of where the meaning lies is the most significant difference between recitations and discussions. In discussions, students' thoughts, feelings and ideas about a text all contribute and influence the eventual interpretation and understanding.

Rosenblatt (1983) identified the need for students to share their personal feelings and experiences to help them bring meaning to, and better understand, literature. She stated that "during group discussions the students in a spirit of friendly challenge can lead one another to work out the implications of the positions they have taken" (p. 120). Further to this, Alvermann, Dillon, and O'Brien (1987) explain that meanings and experiences shared in group discussions move from being a group of individual meanings, to a new set of meanings developed by the group. These new meanings will reflect an enriched understanding of the literature, and because the students vocalized their ideas, they reinforced the concepts in their long term memory.

Bruner (1996) also sees the sharing of narratives as a way for students to gain understanding by "organizing and contextualizing essentially contestable, incompletely verifiable propositions in a disciplined way" (p. 90). Although the sharing of personal narratives in discussion is common in the primary grades, Wanner (1994) reminds us that adolescents also require the sharing of personal experiences in discussion to help make meaning of the literature they are presented in school.

Sharing personal experiences benefits literacy by: increasing reading comprehension, increasing vocabulary and grammar skills, building sequencing skills,
fostering language appreciation (Palmer, Harshbarger, & Koch, 2001), and teaching story structure (Zubrick, 1987). Studies by Clay (1991), Michaels and Cazden (1986), and Zubrick (1987) show that in order to foster reading and writing development, students require opportunities to share experiences and feelings. Pappas, Kiefer and Levstik (1995; see also Peck, 1989) explain how the more exposure students have to the varying structures of stories, the more they are able to vary their own writings and ideas. Children can receive this exposure by listening to and telling different kinds of personal experiences.

Rosenblatt (1978, 1983) was one of the first researchers to recognize the importance of collaborative interchange to cognitive and academic performance. From her research she deduced that group interchange about evocations from texts can be powerful in stimulating growth in reading ability and critical discernment. Group interchange was also recognized as influencing students to be aware of the author's words and meanings in order to avoid misinterpretations of the text. As part of this theory, Rosenblatt stressed that the sharing of evocations about the same text can lead readers to better understand how their interpretations differ and can also lead to critical concepts being clarified and interpreted.

*Increasing Student Contributions to Small-Group Discussions*

To keep pace with new curriculum and philosophies in the school system, teachers are now incorporating small-group discussion about literature into their classroom operations; however, many students involved in small-group discussions about literature may lack the skills necessary to generate a substantial number of contributions to a discussion.

Regardless of the perspective taken, research surrounding the use of group
discussion to increase reading comprehension has revealed positive results. When students are given the opportunity to share personal experiences, give opinions, relate to other texts and hear others' perspectives, they are more likely to make an increased number of contributions leading to better comprehending literature presented in the classroom. Along with making an increased number of contributions to discussions, students require guidance to learn how to structure their discussions with peers. The idea of effective scaffolding borrows from research grounded in the theories of social cognition (Bruner, 1996; Vygotsky, 1978). It is during effectively scaffolded interactions with their peers that students begin to make more contributions which in turn lead toward a deeper understanding of the literature being discussed.

Although theories of social cognition are an integral part of most teachers' training, many classrooms are constructed so that the majority of information is delivered directly from the teacher to the students. In my experience, the traditional mode of teacher-centred classroom discourse tends to limit the number of contributions made by students, and possibly decreases the chances of them moving further through their envisionments.

Direct teaching is the catalyst for many studies done by educators and researchers to demonstrate that student-centred discussions provide students with more opportunity for cognitive and social growth (Almasi, 1996; O'Connor & Michaels, 1996). Research in the area of social cognition has shown that students require interactions with peers to present and receive schemas, and to socially develop meaning and knowledge. Vogt (1996) identified that the trouble with traditional classroom settings was that interactions are governed by rules set by the teacher. She expressed a need to provide children with something more than simply sitting in their classrooms and answering teachers'
questions. For all students, but especially for those who have difficulty expressing their ideas in writing, effectively scaffolded discussions may provide an opportunity to increase the number of comments made during discussions and improve their chances of expressing themselves at their true intellectual level.

Effective Scaffolding leads to Envisionment Building

Skidmore, Perez-Parent and Arnfield (2003) concluded that teacher-pupil dialogue during guided reading sessions tended to be pedagogical, and that the teacher took on the role of someone who knows and possesses the truth instructing someone who is less knowledgeable or in error. Their analysis indicated that the teacher controlled the discussion and did most of the talking. By so doing, the teacher was limiting the students' interpretive authority and their opportunities to make personal contributions to the discussion. This evidence may be disturbing to teachers who believe that small and large group discussions increase the opportunities provided to the students to participate in collaborative conversations.

The Aesthetic and Efferent Stances and Literary Experiences

In her transactional theory of reader response, Rosenblatt (1994) developed the idea that the text serves as a pattern for the reader and provides a structure for the reader to develop their own personal literary experience. Part of Rosenblatt's theory describes the idea that the reading event falls somewhere in a continuum between a "predominantly aesthetic" stance, or a "predominantly efferent" stance, and that the experience is not necessarily one stance or the other.

The efferent stance is the kind of reading in which attention is paid to extracting facts to be retained after the reading. When reading in this stance the reader is creating meaning by pulling out and analyzing ideas, information or conclusions that must be
remembered and used after the reading. Students reading textbooks, charts or newspapers would be operating predominantly in the efferent stance. The *aesthetic stance* refers to the other half of the continuum. In this type of reading, readers are focusing on what is being lived or experienced through the reading. The aesthetic stance is more personal because readers are providing meaning through their feelings, ideas and past experiences. Students reading novels, poems and stories would be reading predominantly in the aesthetic stance.

An early step in any reading event involves the reader selecting either a predominantly efferent or a predominantly aesthetic stance toward their interaction with the text. A reading event falls somewhere in a continuum depending on whether the reader approached the text from a predominantly efferent stance or a predominantly aesthetic stance (Rosenblatt, 1994). Rosenblatt's use of predominantly aesthetic or predominantly efferent reflects her unwillingness to see the two stances as being dichotomous. She deduced that both aspects of meaning are present in all linguistic events. By selecting a stance, the reader is determining the "proportion or mix of public and private elements of sense that fall within the scope of the reader's selective attention" (Rosenblatt, 1994, p.1066). The efferent stance draws mainly on the public aspects of sense, while the aesthetic stance is relatively more of the private aspect of sense. Approaching an interaction with a text from one particular stance does not exclude the use of aspects from the other stance at times during the reading event. Although there are two clearly distinguishable dominant stances, it is possible that the mix of private and public senses will fluctuate throughout a reading event. Stances are determined by the proportion of each component that is considered by readers entering into an event.

Confusion about the stances often comes from people thinking that the text takes
either an efferent or aesthetic stance. When applying the terms in this way, it is actually an interpretation of the writer's intention of how the text should be read. Readers are free however, to decide their own stances when reading a text. Provided with freedom to make interpretations about text during small-group discussions, students are empowered to determine the stance they will take when reading.

Based on her earlier studies about readers' stances, Many (1994) focused her research on the variation in stances readers express in their responses to the literature. Her study showed that there is support for the use of stances, but that when teachers use back and forth questioning techniques during discussion about the text, students may focus on facts when reading literature which forces them to move closer to the efferent stance than the aesthetic stance on Rosenblatt's continuum of stances.

Based on her own and other studies (e.g., Rosenblatt, 1994), Langer (1995, 1998) proposed that people perceive various genres of literature differently. They have different approaches, either reading for literary understanding or for information. Respectively, the literary envisionment "open[s] horizons of possibilities" (Langer 2001, p. 7), and the reading for information envisionment "maintain[s] a point of reference" (Langer, 2001, p. 7).

Much like Rosenblatt (1978, 1983, 1994), Langer (1995) explores the idea that our minds are open to exploring many horizons of possibilities when we engage in a literary experience. Essentially, we read at two levels at the same time. Our immediate envisionments are influenced by our sense of the developing whole, but we also use our developing envisionments to reconsider the whole. Therefore, when reading from a literary orientation, students will naturally explore many different ideas and scenarios, and be open to a variety of interpretations of the text.
Building envisionments when reading for information differs from exploring horizons of possibilities. When we read with the purpose of gaining and sharing information we tend to focus either on the topic or the point of the argument. Influenced by Rosenblatt’s (1994) efferent stance, Langer's (1995) idea of maintaining a point of reference is used to describe the approach readers take when reading to gain information. When reading with this purpose, readers tend to compare their ideas with the topic, and develop agreements, disagreements, and questions in relation to this point of reference.

**Envisionment Building**

Based on her eight-year study, Langer (1995, 1998) developed the term *envisionment* to describe “the world of understanding a person has at any point in time” (1995, p. 9). Envisionments are essentially “the wealth of ideas that people have in their minds” (Langer, 2001, p. 6) by which they formulate their contributions to discussions. Envisionment refers to the texts we play in our minds when dealing with new or known situations. They are based on our understanding of the world as it relates to our personal and cultural experiences, our feelings, what we know, and how we are situated in the current situation.

A similar process is experienced during the reading of a text. Envisionments may change with time. As the reader progresses through the text some ideas are no longer important, some are added and some are reinterpreted (Langer, 1995). It is even possible that envisionments may continue to change during post-reading discussions, writing or individual reflection.

**Stances During Envisionment Building**

Langer's (1995, 1998) research identified four stances employed by readers during envisionment building. Although there are some similarities to the stances
developed in Rosenblatt's work, they are distinctly different. The stances occur, reoccur, and co-occur as readers attempt to build and round out meaning (Langer, 2001). Langer (1995) describes the stances as “being out and stepping into an envisionment, being in and moving through an envisionment, stepping back and rethinking what one knows, and stepping back and objectifying the experience” (p.16). Moving through the stances is thought to enrich literary experiences.

Readers beginning to read a text go from being outside the envisionment, to stepping into it. During this stance readers begin to develop envisionments and bring meaning to the text by identifying available clues, and tapping into their prior knowledge. Teachers may support the process of students tapping into their understanding by asking them questions designed specifically for this purpose. Langer (2001) argues that it is necessary for teachers to scaffold students’ thinking about prior knowledge by asking them open questions that invite them to express their ideas. By asking students "what were you thinking as you finished reading?", or "what part of the story was most powerful?" (Langer, 2001, p.15), teachers are effectively directing students to tap into what they already know about a topic and make the connection to what they are reading. This stance may recur throughout the reading whenever new or confusing ideas are encountered which may cause the reader to rethink their envisionment. Even a surprise ending may cause an envisionment to be reconsidered.

The second stance involves being in, and moving through, an envisionment. Based on the initial clues and ideas observed while stepping into the envisionment, our more in-depth involvement with the text leads to a deeper understanding. It is during this stance that readers become familiar with the setting, develop expectations for the characters, and anticipate events (Langer, 2001). Costa (1990) observed that teachers
need to carefully word questions and statements to stimulate desired intellectual functioning in students. Revoicing students' ideas and using questions with uptake are two effective scaffolding techniques that may focus readers to better understandings of the characters, events and setting of a text. O'Connor and Michaels (1996) describe how the re-uttering or revoicing of another participant's comment serves to both empower the student, and possibly align them to continue the discussion with another student in the group. An example of revoicing may be when a teacher says: "So you agree with Sally then, it wasn't what the boy did that caused the accident." Adler, Rougle, Kaiser, and Caughlan (2004) discussed how the use of uptake in questioning allows students' ideas to influence the discussion. When a teacher asks, "What was the character's purpose for doing that?" they are providing an opportunity for students to further develop their understanding of the expectations of the characters in the text. They will continue to elaborate upon and connect their ideas as their envisionments continue to develop and change.

The third stance is different from the others and involves stepping back and rethinking what one knows. In the other stances, prior knowledge and experiences provide information that increases our understanding of the current situation, but during this third stance the opposite occurs. The reader uses the text and new information to inform and add to their bank of knowledge and experiences. As readers develop their envisionments, they can also step back from the text to consider what they understand from the reading and how that influences what they already know about the themes and topics being addressed in the literature (Langer, 2001). Gavelek and Raphael (1996) identified that students require scaffolding from teachers or more capable peers to begin to transition from what they knew as an individual to newly invented ways of thinking.
based on the interactions they had with others. Langer (2001) describes scaffolding at this level as the linking of concerns. As with all the stances, scaffolding at this stance can take many forms. Teachers may help link students’ newly found knowledge of the text with what they already know by asking key questions, making statements, and modeling the process of moving through this level of envisionment. A teacher may do all three types of scaffolding at once by saying "we should listen to Janet. She says that there are really two ideas in the story. Why do you agree, or disagree?" Following a few student responses, the teacher may wish to model their movement through this stance by responding to this prompt as a participant in the discussion. Although this stance does not occur as frequently as the others, it strongly impacts how we think about and compare our own lives and experiences to the text being read.

The fourth and final stance is a time when readers step back and objectify the experience. During this stance, the reader analyzes the whole text, and attempts to relate it to other texts or experiences. It is also during this stance that time is taken to contemplate literary elements, reflect on the personal meaning the text has and why we may agree or disagree with others' views and interpretations of the text. Effective scaffolding is imperative during this stance as stepping back from envisionments can be a difficult process. At this level of stance the teacher may wish to incorporate statements, modeling and revoicing as part of their routine of effective scaffolding; however, Langer (2001) has shown that the use of carefully-worded questions is effective in providing the support necessary to move through this stance. An integral part of the questioning process at this level is to ask the students to explain and provide support for their thinking. Langer (2001) suggests we ask students questions such as: "How does the way this piece is written (language, literary devices, style, etc.) affect your understanding?";
"If a psychologist (reporter, lawyer, historian, etc.) were to look at this character, what might she say?"; or "How do the roles of the characters in this story connect with current news events?" (p. 19). To support students in making connections between their own and others’ views, Langer (2001) suggests asking the students, "What does the author say about the culture in this story? What is your view?" (p. 19). Generally, this is a stance that involves seeing and possibly analyzing text and meaning from a distance.

**Envisionment Building - Principles of Practice**

Although all envisionment-building classrooms do not necessarily look the same, Langer (1995) identified a set of theoretical beliefs about what is recognized as knowing and learning. Teachers must incorporate these beliefs as a central part of their goals, and students must recognize them as part of their understandings about the focus of their learning. These principles apply to situations in which students are engaged in inquiring about literature, exploring horizons of possibilities, and increasing their understanding by moving through envisionments.

Langer (1995) stresses that envisioning literature classrooms are based on the essential beliefs that literature is thought provoking, and that students are competent thinkers. From these two beliefs flow four principles that are part of the envisionment-building literature classroom. Langer's (1995) principles stress that a) students are to be treated as lifelong envisionment builders, b) that their questions will be treated as part of the literary experience, c) that group discussions are a time to develop understandings, and d) that multiple perspectives are used to enrich interpretation. The students in this study will be considered as integral parts of the envisionment building process occurring in this classroom. The research taking place in this classroom is seen as complementary to the establishment of the ultimate goal of having an envisionment building environment.
in this classroom.

**Summary**

Envisionment building is relevant to this study in that it is recognized that students require the opportunity to explore texts from their own perspectives, and that each student will have differing understandings depending on their life experiences. This however, does not mean that students' immediate interpretations will be final. This study views the text's contribution to meaning as a valid part of the building of envisionments. It is understood that readers play an important role in bringing meaning to texts, but equally important is the actual meaning of the text.

This study was set within an envisionment-building classroom where students' and teachers' comments during literature discussions were focused on the text, and were recognized as relevant and important. As recommended by Langer (1995), discussions about literature were seen as a time for developing understanding, learning communication skills, questioning ideas and exploring multiple perspectives.

Although most teachers recognize that middle-school-aged students often enjoy discussing ideas, I have observed that without effective scaffolding in place, students may struggle with understanding literature through the process of envisionment building. As it is impossible for teachers to attend every small-group discussion through the school year, it is important to teach students the necessary skills so they can eventually conduct discussions with no teacher present. Once students are effectively scaffolding and facilitating independently, the teacher may move to only intermittently participating to monitor and extend the students’ communication and scaffolding skills.

Langer identified that when effective scaffolding is absent, students tended to have difficulty moving through their envisionments. Langer’s (1995, 1998) research in
developing understanding through envisionment building is integral to this study. Her focus on using effectively scaffolded discussion to improve student's comprehension of literature will serve as a model for the effectively scaffolded discussions to be conducted. Her findings with regard to the stances and perspectives employed during envisionment building will serve as part of the foundation during the analysis of the discussions in this study.

There is a general belief among educators that social cognition plays a significant role in how students learn. Bruner, Chomsky, Piaget, and Vygotsky greatly contributed to, and influenced our present understanding of social cognition. Many theorists see the classroom as an example of a situation where there is an interplay between what is brought forward by individuals and what is constructed in the current situation. The theory of social cognition supplies the foundation on which this study is based. It helps to explain how students learn to see others' perspectives and how we form our ideas about our place in the world. Studies in the area of discourse theory also assist educators in understanding how students use the rules of communication in their pursuit of constructing meaning from social settings. Vygotsky's work has greatly influenced the way that many educators view pedagogical processes. Based on Vygotsky's research scaffolding has become a much used, but possibly minimally understand term within the educational community.

Small-group discussions about literature have become common practice in our classrooms. Many studies have identified positive reasons for teachers to transition from strictly teacher-directed discussions toward discussions that involve students taking more interpretative control. This student-centred type of discussion involves teachers providing effective scaffolding to assist students in moving toward a deeper level of
understanding of texts. Teachers also need to consider a longer term plan that involves students eventually being able to effectively scaffold their own discussions without a teacher being present.

Teachers today still expect students to read literature independently without providing the opportunity to discuss questions they may have, or share their opinions or feelings. The literature reviewed in this area has shown that students require opportunities to share their personal feelings and experiences to help them bring meaning to literature they read (Alvermann, 2000; Cazden, 1988; Rosenblatt, 1983; Wells, 1990). Students sharing meanings and experiences in successful group discussions move from having individual understandings to a new set of meanings developed by the group (Alvermann, Dillon, & O’Brien, 1987). Giving students the setting and skills to share their personal opinions and feelings about literature allows them to create new meaning for themselves by better understanding how their views differ from others, and by having critical concepts clarified and interpreted.

In order for students to achieve a deeper level of understanding of literature during small-group discussions, they appear to require the opportunity to make many contributions. The literature reviewed shows that students who are simply answering knowledge-level teacher questions will make only a minimal amount of contributions to the discussion (Teasley, 1995). In opposition to this, students who are given effectively-scaffolded opportunities to share personal views and to ask questions themselves are shown to make an increased number of contributions leading to a deeper level of understanding of the literature being discussed (Almasi, 1996). The literature did not however, show if the effects of scaffolding by modeling, revoicing, and the use of questions and statements will continue in the students’ discussions when the teacher is no
Although students at the mid-intermediate grades spend an immense amount of
time socializing and talking, without effective scaffolding their discussions will not
necessarily move to a deeper level of understanding of issues and literature. When
initially involved in discussions about literature, students require effective scaffolding to
assist them in their struggles to know when and how to make contributions (Langer,
1995). When effectively scaffolded by a teacher or students, small-group discussions
about literature will provide students with opportunities to build envisionments.

Rosenblatt (1994) observed that individual readers interact uniquely with texts.
She provided a framework for our understanding of how readers provide the motivation
for a reading of a text to become either predominantly efferent, or predominantly
aesthetic. Langer (1995) further developed the idea that people have envisionments
about the world, and that reading can help to build and change those envisionments over
time. She identified that readers move in all directions between four stances during the
process of envisionment building.

This study was conducted based on the principles and fundamentals of
scaffolding will provide critical background information to the development of the
methods used to analyze the students' contributions to small-group discussions about
literature.

The Study

The purpose of this study was to demonstrate that students will move toward a
deeper understanding of texts when they are given the skills to control and develop their
own inquiry through small-group discussion with peers, and to determine if using
effective scaffolding to develop the student's communication skills leads to a deeper understanding when discussing texts. This study is intended to reflect the necessity of initially providing students with the necessary skills and training prior to developing the expectation for them to work independently in small-group discussions about text. It will also show that once students begin to understand how to provide effective scaffolding in discussions, they will be capable of improving their comprehension of texts independently of a teacher and begin to develop their own interpretations while building and moving further through their envisionments. Information will also be gathered that determines if each student must make a substantial number of contributions to discussions in order for them to fully explore their horizons of possibilities and move to a deeper understanding of the text.

Students do require time to work together in small-group discussions about literature; however, they initially require effective scaffolding from an adult or more capable peer to increase the number and type of contributions they make to the discussion. By initially scaffolding students involved in small-group discussions, teachers provide students with the skills necessary to conduct small-group discussions without a teacher or adult present.

Research Question

Does the teacher's use of effective scaffolding prior to small-group discussions about literature lead to students subsequently developing a deeper understanding of the text?
Chapter Three – Methodology

This study took place in a rural school located in a small town in northwestern British Columbia. An intact Grade 7 class was chosen as the sample for this study. Students were grouped using paired sampling, and a pretest-posttest control group design was chosen as it allowed that the effects of internal threats to validity were spread equally between the groups. Students’ contributions to discussions were categorized based on criteria describing envisionment levels, and the Mann-Whitney U Test was used to analyze the leveled protocols.

Setting

This present study took place in a rural school of approximately 130 students located in a small town in northwestern British Columbia. The population of the school consists of First Nations students from a nearby reserve, students from an agricultural background, students from a subdivision, and students from within the town limits. The majority of students in this population are bused to school each day.

As this study was set in an envisionment-building classroom, students were actively involved in establishing their reading stances by participating in student-centred discussions that provided them with opportunities to explore their own personal connections to the literature being discussed. Although discussions about literature were an active part of this classroom, the students were not intensely exposed to effective scaffolding of discussions prior to the commencement of this study.

Sample

An intact Grade 7 class of 26 students was chosen as the sample for this study. As I am a teacher in this class, I considered this group to represent a convenience sample. Prior to this study I assessed the students reading and writing abilities based on The
British Columbia performance standard for reading and writing (Ministry of Education, 2000). These assessments indicated that the students in this class ranged from not yet meeting, to exceeding expectations in their reading and writing abilities.

Matched sampling was used to equally establish the two groups taking part in the study. I conducted the Gray Silent Reading Test (2000) with the entire class, and ranked the students’ percentile scores from the strongest to the weakest readers. I then used the ranked scores to distribute the students into two equal groups. I paired the students based on their placement in the ranking. I began by pairing the first two students together, and continued to create the pairs for every two students. I then placed the first ranked student into group A, and the second ranked student into group B, the third ranked student into group B, and the fourth ranked student into group A. I continued this pattern until all of the students were assigned to the groups. The groups consisted of 13 students in one group and 13 in the other. I flipped a coin to establish that group A would be the control group, and group B would be the treatment group.

The purpose of using paired samples for this study was to establish two equal groups within the class, and also to allow for a test that would show the differences between the means of the two independent groups.

Students were not considered as subjects in this study until parental permission was obtained. Parents were sent an information package containing a letter describing the study and the ethical procedures, a letter of permission, and an information sheet (Appendix A).

All students were given a number which became their form of identification for the duration of the study. The names of the participants and all associated documentation remained confidential by being kept in a locked file cabinet in the school in which I
teach. All personal information and video tape of the participants in this study were destroyed once the numbered data had been entered into the spreadsheet and the data analysis completed. The video tape was destroyed by first erasing the tape, and then physically destroying the remaining cassette. All group data remains in a locked file cabinet and will be destroyed once all attempts to publish the study in a refereed journal have been exhausted or five years from the time the completed thesis is accepted. The participants in this group data are identified by number only.

Research Design

Design

The pretest-posttest control group design was chosen for this four-week study. This design can be represented as:

<table>
<thead>
<tr>
<th>Experimental</th>
<th>O</th>
<th>X</th>
<th>O</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control</td>
<td>O</td>
<td>O</td>
<td>O</td>
</tr>
</tbody>
</table>

Figure 1. Pretest-posttest control group design

Due to its appropriateness for small-group studies, this true experimental design is often used in educational settings (Cohen & Manion, 1994). This design not only creates equivalent groups, but it also allows the effects of internal threats to validity to be spread equally between the groups.

Although I consider the treatment being examined in this study to be best practice, the denial of the treatment to the control group for the duration of the study was not seen as detrimental to their overall educational standings.


Limitations

The same students who participated in the pilot study were also part of the present study. This potential threat to internal validity was not seen to be important in this situation as the scaffolding techniques used in the pilot study were not yet fully developed, and the pilot study took place more than one year prior to the present study. In addition, the pilot study was of short duration and therefore the students were not given the opportunity to be overly exposed to, or to practise the scaffolding techniques being used.

Apparatus

A digital video camera and a tape recorder were used to record the small-group discussions. Both groups read the same age-appropriate short stories before their respective discussions. The stories were numbered 1-6 to correspond with the discussions in which each group participated.

Data Collection Procedures

Students read a variety of short stories and met in their assigned groups for discussions. As shown in Table 1, I had prepared open-ended questions related to the story for both groups to use. The groups used the questions during all of their discussions. These questions provided the students with a "departure" point in case they had difficulty initiating their discussions. I also orally included the open-ended questions in the scaffolded discussions of the treatment group.
I conducted a pretest discussion with both groups. For the pretest discussion, each group began by reading the same passage, and received the list of open-ended questions to help guide their unscaffolded discussions. Although I was present in the room, I was not involved in either of the pretest discussions. I videotaped and audio taped both pretest discussions. The discussions took place directly one after the other, and were conducted in the same room adjoining the classroom. The pretest discussions for both groups were transcribed within 24 hours of the discussion, and at the end of the study the protocols were categorized based on the level of envisionment reflected in the comments. A teaching colleague was asked to conduct a blind review of randomly selected portions of the transcribed protocols for the pretest discussions and the posttest discussions. The blind reviewer was familiar with using levels to assess students understanding of literature, but not familiar with these specific students, or specifically with the use of levels of envisionment. She received copies of the transcripts and was asked to select a portion of each discussion to assess for envisionment levels. Upon receipt of the transcripts she independently decided to categorize the comments from all
of the pre-and posttest discussions. I then compared both sets of leveled transcripts to ensure that they were consistent. When compared to my analysis of the comments, the results found by the independent checker were consistent with the overall themes found, but inconsistent with number of comments found per level. The person doing the reliability check consistently categorized the students’ comments higher than my original results. Overall however, the inter-rater reliability check did show that the control group’s comments declined from pre-to posttest, and that the treatment groups’ comments increased and improved from the pre to the posttest discussions.

A contact sheet was completed by the researcher at the end of each session. The contact sheet identified any significant student comments, incidents or irregularities. I used this opportunity to reflect on any possible themes, patterns or behaviours emerging from the discussions.

After the pretest discussion, the group receiving the scaffolding took part in four scaffolded small-group discussions about literature over a three-week period. Prior to each discussion, the students independently read one short story. Each discussion lasted between 20 and 30 minutes. The discussions took place in the room adjoining the classroom. I used the list of open-ended questions, as well as a variety of other questions, statements and revoicing techniques (see Table 2) to scaffold the discussions. Through careful observation during the scaffolded discussions, I evaluated students’ depth of understanding by determining the stance they were in (see Table 3). I then used the scaffolding techniques listed in Table 2 to model effective scaffolding for the students.

Alternating before and after the scaffolded discussions, the control group participated in unscaffolded discussions. Prior to each discussion, the students independently read the same short stories as read by the treatment group. The post-
reading discussions lasted between 10 and 25 minutes for both groups.

The final posttest discussions for both groups followed the same format as the pretest discussions, and took place one after the other. Both groups were provided the list of open-ended questions and were asked to conduct a discussion about a short story they had just read. I was present in the room for both discussions, but did not provide scaffolding. I videotaped and audio taped the final discussions for both groups. Three of the discussions for each group were conducted in the morning, and the other three in the afternoon.

**Measures**

*Scaffolding techniques for discussions*

Effective scaffolding addresses how we assist students to think, and how we provide them guidance on how to discuss their thoughts (Langer, 2001). Table 2 lists the questions and statements I used to assist in effectively scaffolding the small-group discussions.

*Data Analysis Procedures*

Prior to the commencement of the study I received permission from Judith Langer (2004) via email to utilize her theories and research as part of this study. As part of my preparations for the analysis of the discussions I prepared a structured format for data analysis (see Table 3). I used this format as the criteria to categorize students' comments into their envisionment levels. Each turn a student took was deemed to be one contribution. For example, a student requiring several sentences to complete their entire thought would still only count as one contribution. The format has four envisionment levels, and detailed criteria for each level (see Table 3).
Table 2

*Suggestions for the Scaffolded Discussions*

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Questions/Statements</th>
</tr>
</thead>
<tbody>
<tr>
<td>To Enhance Understanding</td>
<td>• What were you thinking as you finished reading?</td>
</tr>
<tr>
<td></td>
<td>• What were you thinking while you were reading?</td>
</tr>
<tr>
<td></td>
<td>• What questions or ideas would you like to bring to the discussion?</td>
</tr>
<tr>
<td></td>
<td>• What part of the story was most powerful? Why?</td>
</tr>
<tr>
<td></td>
<td>• Why do you agree/disagree with how the character handled the situation?</td>
</tr>
<tr>
<td>Clarification</td>
<td>• Tell me more about that idea.</td>
</tr>
<tr>
<td></td>
<td>• I am not sure that I understood. Say that in another way?</td>
</tr>
<tr>
<td></td>
<td>• Okay, so you are suggesting,...</td>
</tr>
<tr>
<td>Inviting Participation</td>
<td>• What questions do you have?</td>
</tr>
<tr>
<td></td>
<td>• Could someone please respond to that comment?</td>
</tr>
<tr>
<td></td>
<td>• Why don't you start us off?</td>
</tr>
<tr>
<td></td>
<td>• Teacher maintains a silence.</td>
</tr>
<tr>
<td>Orchestrating Discussions</td>
<td>• You have had your hand up for a while. What would you like to add?</td>
</tr>
<tr>
<td></td>
<td>• Could you connect that to something that was said earlier?</td>
</tr>
</tbody>
</table>
Focusing Ideas
- Why did the characters do that?
- You're saying that.....
- I wonder if your plan would work in all situations?
- Do think that.......?
- What did you see as a problem?
- And, you're thinking that....
- How were you similar or different from this character?
- What do you predict will happen next?
- Where did this story take place? Is this setting important?

Developing Opinions
- How does this story influence how you feel about this happening in your life?
- Based on what you know about this type of situation, did they handle things well?
- Based on your own personal experiences, how would you have handled this situation?
- How did you feel about this story?
- How did the characters act differently than you might have expected?
- What do you mean by...?
- So, you think that based on your own personal experience....
- From your point of view then...?
Linking Concerns

- How do you feel about the way that he/she would have dealt with that situation?
- What about what name said. Do you agree or disagree with him/her? Why?
- Could someone help answer this question for him/her?
- Does anyone have a response to that?
- So, you agree with....
- How does this book compare to others you have read?
- How do you relate to this character? Are you similar, or different?
- What does this story make you think of?
- How does this story compare to other real life or fictional stories you have experienced in the past?
- How will this story change the way you handle this type of situation in the future?
- How does this story compare to other real-life experiences, or stories you have read?

Upping the Ante

- How might this situation have been dealt with differently?
- How might you have dealt with this situation?
- Based on what you know about blank, did they handle this situation well?
Table 3

*Envisionment Level Descriptions*

<table>
<thead>
<tr>
<th>Level</th>
<th>Descriptor</th>
</tr>
</thead>
</table>
| **Level-One – Being out of** and stepping into an envisionment. | • focuses on the genre, structure and language of the text  
  • developing a sense of the setting, and plot  
  • makes simple, obvious connections to self, difficulty may be due to limited repertoire of previous reading experiences  
  • reactions tend to be vague and unsupported |
| **Level-Two – Being in** and moving through an envisionment. | • familiar with setting  
  • develops expectations for the characters  
  • anticipates events  
  • makes connections to self or other selections  
  • offers reactions or opinions about selections, characters, issues, and theme (unsupported or required prompting to provide support) |
| Level Three – Stepping back and rethinking what one knows. | • considers how the text influences what they already know  
• considers real life effects regarding the theme of the text  
• makes logical, relatively straightforward connections between the selection and own beliefs, experiences, and feelings  
• makes and supports connections to other reading or viewing selections that go beyond the obvious; with direction, can compare themes  
• offers reactions and opinions about selections, characters, issues and themes with some support |

| Level Four – Stepping back and objectifying the experience. | • sees new perspectives and understands new meanings  
• makes logical connections between the selection and own ideas, beliefs, experiences, and feelings; may extend or experiment with the ideas and take risks to offer a divergent response  
• relates themes and other features of the selection to other reading or viewing experiences; provides convincing evidence  
• offers reactions and opinions about selections, characters, issues, and themes supported by reasons and examples |
Each comment was categorized based on its level of envisionment. Individual students' comments were then compared from the pretest discussion, to the posttest discussion.

Following are examples of students' comments I deemed to be at each of the four levels:

Level One: My favourite part of the story was near the ending when he was saying that he wouldn't have done it without his friend being there.

Level Two: If they would have gone through the bush his friend might have bled to death or whatever. It might have taken longer but then his mom would have seen him and also they didn't have a hospital.

Level Three: I like how throughout the story they related a lot of the stuff to horses, like how the foam was a mane.

Level Four: A plausible level-four comment would have been: The wild rapids being described as horses made me think of a group of wild horses that live on an island where I go to summer camp. The horses are beautiful because they are wild, and I think that is also what makes the rapids so beautiful.

I colour-coded the envisionment levels directly onto the table used for transcription, as well as placed level and student totals on a score sheet designed for this study. Many of the questions in Table 2 were created with the intention of eliciting protocols that would accurately reveal students' envisionment levels as explained in Table 3. The total number of comments at each level, and the totals for each student were calculated for both groups.

The Mann-Whitney U Test was used to analyze the leveled protocols. This test determined if there was a significant difference between students' contributions from the beginning to the end of the research. This nonparametric test was appropriate for this
analysis as the data collected were ordered, but can not be considered to be interval/ratio. The protocols were analyzed for change in both quality and quantity from the beginning to the end of the research.

*Time-Line*

I received permission from the school district in January 2005, and approval from the UNBC Ethics Committee on March 9, 2005. Permission slips and an information letter were sent home to parents during the second week of March 2005.

The small-group discussions for this study were conducted over a four-week period beginning on April 4, 2005.

*Summary*

This study took place in a school located in a small town in northwestern British Columbia. Convenience sampling was used, and an intact Grade 7 class was chosen for this study. Students were grouped using paired sampling, and a pretest-posttest control group design was chosen as it allowed that the effects of internal threats to validity were spread equally between the groups. Students’ contributions to discussions were categorized based on criteria describing envisionment levels, and the Mann-Whitney U Test was used to analyze the leveled protocols.
Chapter Four - Results

The research question asked whether the teacher’s use of effective scaffolding prior to small-group discussion about literature lead to the group subsequently developing a deeper understanding of the text. Analysis of the results using the Mann Whitney U-test indicated that effective scaffolding during prior small-group discussions about literature leads to students subsequently developing a deeper understanding of the text during peer-led discussions.

Some students existed as part of the groups, but their contributions were not considered as part of the study. Results for student #5 in the control group were eliminated as the student was absent during the posttest discussion. Students #11, #22, #23, and #24 from the treatment group were absent during either the pre-test or posttest discussions so their results were also eliminated. As this research was designed to show if students better understand text when their discussions are scaffolded, it was necessary to eliminate two students who did not participate in the discussions. Student #25 from the treatment group had been medically diagnosed with a disorder called Selective Mutism and was therefore unable to contribute to any of the discussions. Due to the anxiety caused to this student when singled out, the decision was made to include the student in the research even though it was evident that the student would not be contributing to the discussions. Student #26 from the control group had been previously diagnosed by a school district psychologist with a Severe Behaviour Disorder and does not positively contribute to any type of school discussions. This student was included in the research as it was felt that positive skills may be learned from socially interacting with peers. As predicted, the student did not make any contributions to any of the
discussions, and therefore the results from this student were not considered.

Students’ contributions to both pretest discussions and posttest discussions were video taped, transcribed and each protocol was categorized. The groups were provided with a set of open-ended questions (see Table 1) to help them keep their discussions flowing. The students already knew each other well as they were all from one intact classroom group. Because of the nature of the experimental design it was necessary to have all the students grouped into two groups.

Group totals for each of the pretest and posttest discussions at all levels reveal that students in the scaffolding group made three times as many level-one comments, and more than twice as many level-two comments than did the no-scaffolding group in the posttest discussions (see Table 4).

The treatment group increased from a total of 18 level-one comments in the pretest discussion to 54 level-one comments in the posttest discussion. Level-two comments also increased from 4 in the pretest discussion, to 10 in the posttest discussion.

The number of comments made by the students in the control group decreased from their pretest discussion to their posttest discussion. The number of contributions dropped from 48 to 26 for level one, and from 16 to 12 for level two.
Table 4

*Total Number of Contributions Made at each Level*

<table>
<thead>
<tr>
<th>Discussion</th>
<th>Envisionment Level One</th>
<th>Envisionment Level Two</th>
<th>Envisionment Level Three</th>
<th>Envisionment Level Four</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group Pretest Discussion</td>
<td>48</td>
<td>16</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Control group Posttest Discussion</td>
<td>26</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Treatment group Pretest Discussion</td>
<td>18</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Treatment group Posttest Discussion</td>
<td>54</td>
<td>10</td>
<td>2</td>
<td>0</td>
</tr>
</tbody>
</table>

The analysis strategy used a nonparametric test for two independent samples, the Mann-Whitney U test. This test was chosen as it is the ordinal-data equivalent of an independent-sample *t* test. Each of the envisionment levels one and two for the control and treatment groups were tested separately, and due to the small sample size, an alpha level of .10 was used for all statistical tests. Although the small sample size increases the chance of a Type II error, the goal of this study was to explore if a significant effect may lead to future research. The contributions at levels one and two were statistically significant at, $p < .10$.

For both groups a few students made level-two and level-three comments, but many did not. Some students made level-two or level-three comments in only one of the discussions. Overall, there were fewer level-two and level-three comments than level-one comments. Based on the criteria for envisionment levels, I deemed there to be no level-four comments.
Level-One Results

General Comparison

The non-parametric Mann-Whitney U test for two independent samples was conducted to assess the equivalency of the experimental and control groups on the number of level-one contributions. For the Mann Whitney test, $U_{observed}$ must be less than $U_{critical}$ for a statistically significant result. The analysis indicated there were significant differences in the number of level-one contributions between groups ($U_{obs} = 12$, $.10 U_{crit} = 23$, $.01 U_{crit} = 13$, $df = 11, 8, p < .01$.) Although the alpha level of .10 provides weaker evidence that the scaffolding was successful, the contributions at level one were also statistically significant at, $p < .01$.

A comparison of the number of contributions made by individuals in each group are presented in Table 5. Based on the number of contributions at each level 18% of the students in the control group increased their number of comments between the pre and posttest discussions, 46% stayed the same and 36% decreased. When analyzed further, the number of individual contributions at level two indicated that 63% of the students in the treatment group increased their number of contributions, 25% stayed the same, and 12% decreased.
Table 5

*Total Number of Level – One Contributions Made By Each Student*

<table>
<thead>
<tr>
<th>Student</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>5</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>9</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>14</td>
<td>3</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>4</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td><strong>Treatment Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>15</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>17</td>
</tr>
<tr>
<td>14</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>15</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>19</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>3</td>
</tr>
</tbody>
</table>
Control Group Results

The control group made more contributions during the pretest discussion than they did during the posttest discussion. Figure 2 shows the number of contributions made by each student in the pre- and posttest discussions:

![Figure 2. Number of level-one contributions made by the control group.](image)

The results from the control group’s pre-and posttest discussions indicated that all but student #10 made either the same number of comments or fewer comments in the posttest discussion. Observations recorded in my field notes revealed that this group’s discussions worsened over the course of the study.

During their pretest discussion, three students from this group carried and controlled the majority of the discussion. Students #2, #3 and #4 made 74% of the level-one comments during the pretest discussion but only 39% of the level-one comments during the posttest discussion.

Treatment Group Results

Figure 3 shows that the treatment group made significantly more level-one contributions during the posttest discussion than during the pretest discussion:
Figure 3. Number of level-one contributions made by the treatment group.

Student #13 went from making one level-one comment in the pretest discussion, to 17 level-one comments in the posttest discussion. Students #12 and #16 in the treatment group who had been involved in making level-one comments during the pretest discussion also dramatically increased the number of level-one comments they made during the posttest discussion. Five of the eight students involved in both the pre- and posttest discussions increased the number of level-one contributions they made during the discussions. This increase in level-one comments provided students with an opportunity to explore the plot of the story. An example of comments made by students #12 and #20 in the posttest discussion indicates an attempt to better understand what was going on in the story:

#12 I think the mom and dad split up because the dad had a girlfriend.
#20 There was a part in the story here, (points to it in the story) right there. He was not camping with them, and look it says he was meeting with his girlfriend.

#12 And that is why they split up.

During the pretest discussion when I was not part of the discussion, I observed
that the students in the treatment group were reluctant to discuss the story with other
group members, and many of the students made very few contributions. Based on
observations recorded in my field notes it was evident that some students in the treatment
group did not appear to fully understand the story they had read, but they were not
willing to ask other students to help clarify the plot of the story. Even though the
students already knew each other quite well, they appeared to be very uncomfortable in
the group, and not willing to share personal connections or information. When students
did attempt to comment on the story, they were often interrupted by others, and many
times students were simply speaking over top of each other. Many of the students were
often not listening to other students.

As part of the experiment, the students in the treatment group participated in a
pretest discussion, and then four discussions where I also participated by providing
effective scaffolding with the intention of teaching students how to increase their
understanding of text through their discussions. Over the course of the four scaffolded
discussions the students in the treatment group gradually became more involved in the
discussions, and were willing to share personal connections to the story. During the
second discussion when scaffolding was being provided, I observed that students began
taking turns speaking, and letting others finish before they began speaking.

During the third discussion, I began by modeling a personal connection I had to
the story. Some students then followed with personal connections of their own. During
this discussion I observed that the students appeared to be more comfortable contributing
to the discussion; however, the contributions being made were largely impersonal, story
related comments. These types of comments indicated that the students were still
beginning to step into their envisionments, and they had not yet begun the process of moving through their envisionments. This meant that the majority of contributions would still be considered to be at the first level.

Level-Two Results

General Comparison

The non-parametric Mann-Whitney U test for two independent samples was conducted to assess the equivalency of the experimental and control groups on the number of level-two contributions. The analysis indicated there were significant differences in the number of level-two contributions between groups, \( U_{\text{obs}} = 20.5, U_{\text{crit}} = 23, \text{df} = 11, 8, p < .10 \).

Table 6 shows individual students’ level-two contributions to the pre- and posttest discussions. Similar to level one, many students in the control group made the same or fewer contributions, and many students in the treatment group increased their number of contributions.

Of the contributions made by the control group, none of them increased the number of level-two comments they made, 64% made the same amount and 36% decreased.

The treatment group results showed that 50% of the students increased the number of level-two comments they made, 38% stayed the same and 12% decreased.
Table 6

*Total Number of Level-Two Contributions Made by Each Student*

<table>
<thead>
<tr>
<th>Student</th>
<th>Pretest</th>
<th>Posttest</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Control Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>5</td>
</tr>
<tr>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>9</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>10</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>17</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>18</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Treatment Group</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>13</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>14</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>15</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>16</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>19</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>20</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>21</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Control Group Results

In the control group, five students made level-two comments during the pretest discussion, and four students during the posttest discussion. Figure 4 shows the number of level-two contributions made by each student in the control group:

![Figure 4. Number of level-two contributions made by control group.](image)

Of the level-two comments made, students #2, #3, and #4 made 86% of the comments in the pretest discussion and 88% in the posttest discussion. In combination with my observations of this group, this indicates that these three students were largely responsible for the majority of the active discussion regarding the text.

The four students who made level-two comments during the pretest discussion were the same four students to make level-two comments during the posttest discussion. The majority of the level-two comments were made by the above mentioned three students, and the results show that their combined level-two contributions dropped from 12 in the pretest discussion to seven in the posttest discussion.

Treatment Group Results

In the treatment group, three students made level-two contributions during the pretest discussion, and five students during the posttest discussion. Figure 5 illustrates
the number of level-two contributions made by each student in the treatment group:

![Bar chart showing level-two contributions by student number.](image)

Figure 5. Number of level-two contributions made by treatment group.

In the pretest discussion students in the treatment group made a combined total of four level-two comments, and in the posttest discussion their combined total was ten. Of the level-two comments made: two of the same students made comments in both discussions, one student made comments in the pre- but not the posttest discussion, and three students who had not made comments during the pretest discussion made comments in the posttest discussion.

Level Three Results

General Comparison

Due to the minimal number of contributions at this level no statistical analysis was conducted. Table 7 shows the total number of contributions made by the control and treatment groups at this level:
Table 7

*Total Number of Level-Three Contributions Made by Each Student*

<table>
<thead>
<tr>
<th>Group Name</th>
<th>Pretest Discussion</th>
<th>Posttest Discussion</th>
</tr>
</thead>
<tbody>
<tr>
<td>Control group</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Treatment group</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

*Control Group Results*

Student #2 in the control group made four level-three contributions during the pretest discussion, and one during the posttest discussion. The results at this level are consistent with levels one and two in that fewer comments were made during the posttest than the pretest discussions. The results at this level contribute to the overall theme that the control group’s performance deteriorated between the pretest and the posttest discussions.

*Treatment Group Results*

As mentioned earlier, the minimal amount of results at this level did not allow for a statistical analysis to be conducted. However, consistent with the levels one and two, there was an increased number of contributions at this level between the pretest and posttest discussions. During the pretest discussion the treatment group made no level-three contributions, but during the posttest discussion there were two contributions made at this level.

*Level Four Results*

There were deemed to be no results at this level for either group.
Conclusion

The total number of contributions for the pre- and posttest discussions revealed that the treatment group made three times as many level-one comments, and more than twice as many level-two comments than the control group in the posttest discussions. Over the course of this study, the treatment group’s number and quality of contributions increased significantly, and the control group’s declined.

Of the four envisionment levels used to categorize student protocols, only the results from levels one and two were substantial enough to analyze statistically. The statistical analysis revealed that at an alpha of .10, both levels showed a significant change between the scaffolding and no-scaffolding discussions. As well, with an alpha level of .01, the effect of the scaffolding was statistically significant at the first envisionment level. Although level three only contained a minimal amount of contributions, the results were consistent with levels one and two in that the treatment group scores improved between the pre- and posttest discussions and the control group’s deteriorated. There were no results from either group at the fourth level of envisionment.
Chapter Five- Discussion, Conclusions, and Implications

Discussion

Based on a pilot study performed one year earlier with some students from this class, my interpretation of the data suggested that effectively scaffolded student-centred discussions generated more contributions than did unscaffolded discussions. The results from this study support the findings in the pilot study that by making more contributions to discussions, students eventually began to make more complex contributions to discussions. Also revealed during this study was evidence that suggests that students require effective scaffolding from a teacher in order to make subsequent peer-led discussions meaningful.

Each level of contribution was tested separately by the Mann-Whitney U test. The results from this study indicated that effective scaffolding leads to students improving their understanding of how to contribute to discussions in order to better comprehend literature they have read. This study also indicated a need for teachers to scaffold student’s discussions to help them to learn how to meaningfully interact with and listen to their peers to assist them in better understanding a topic. These results suggest that the scaffolding received by the treatment group throughout the study prepared them to successfully conduct a small-group discussion without the teacher present. The significant results at levels one and two indicate that students in the treatment group improved their abilities to use discussion skills to work independently toward better understanding literature they had read.

Both the control and treatment groups experienced student attrition from the beginning to the end of the study. Results from two students from the control group, and
five students from the treatment group were excluded due to absenteeism, and special circumstances. The mortality rate throughout the study was not deemed to have changed the equivalency of the groups. Based on the specific students’ results which were excluded, the groups were still deemed to be equivalent during the posttest portion of the study.

The overall increase of contributions for the treatment group, and decrease for the control group suggest that the overall number of contributions made to a discussion is closely related to an improvement in the quality of the contributions made. Not only did the treatment group go from making 22 total comments in the pretest discussion to 64 total comments in the posttest discussion, the results show that there were only four comments in the pretest discussion at level two or higher, while there were 12 comments at level two or higher during the posttest discussion.

The control group’s decrease in total contributions from the pre- to the posttest discussions appears to have negatively impacted the quality of the comments being made. This group went from making 68 total comments in the pretest discussion, to 39 total comments in the posttest discussion. The number of level two or higher comments decreased from 20 in the pretest discussion to 13 in the posttest discussion.

The control group’s overall decline in performance from the pre-to the posttest discussion may be attributed to a lack of effective scaffolding from the teacher. Observations kept in my field notes show that right from the first discussion the control group had difficulty staying focused in a group discussion. The declining number of contributions at levels one through three suggest that due to a lack of intervention in the form of effective scaffolding the students were not able to conduct discussions which
supported further movement through their envisionments.

During the pretest discussion, three students attempted to carry out a discussion about the text even though many of the other group members were whispering to each other, and fooling around. It appeared that the three focused students were attempting to carry on their own discussion and ignore the students who were off-task. There were also times when many of the members of the group were making comments all at once, and appeared to not be listening to each other at all.

This situation in which some students in the control group were focused on the discussion and others were completely uninvolved seemed to be a reappearing theme in my field observations. Each of the four discussions after the pretest discussion were conducted in the same way with the same 3-5 people taking the discussion seriously, and the others just whispering, laughing or closing their eyes. Three of the control group’s discussions started out with the students taking turns, but this only lasted for the initial part of the discussion until some of group members lost focus and began whispering.

The control group’s posttest discussion appeared to follow the same path as all of their other discussions. The group started out by taking turns, but soon into the discussion many of the students broke off into private whispered conversations with the person sitting beside them. Periodically, many of the students would all begin to make group contributions at the same time. This would carry on for approximately 30 seconds, and then everyone would stop talking. During these episodes when many people were speaking at once, only some of the comments were story related, while many others were connected to a topic that the students had been discussing with the person sitting beside them. It appeared that many students were simply carrying on their private discussions,
but turning up the volume so they could be heard. I believe that the lack of discussion etiquette and respect in the control group’s discussions were the reasons why the posttest discussion generated fewer comments than the pretest discussion. The three students who made the majority of the text-related comments during most of the discussions appeared to lose interest in trying to convince the group to carry out an effective discussion. Over time, the three mentioned students made fewer and fewer comments, and eventually began to appear frustrated with the way the discussions were being conducted. By the time of the posttest discussion, I observed that these three students were only rarely making comments to the group about the story, and that they appeared to have given up on the idea that others in the group may respond to their comments about the text.

Based on my observations during the study, and in the classroom, I believe that there were several students in the control group who if given effective scaffolding and safe respectful conditions would eventually move entirely through their envisionments to the fourth level of stepping back and objectifying their experience with the text. I believe that the denial of effective scaffolding provided to the control group contributed to the negative trend of the amount and quality of contributions between the pre- and posttest discussions.

Also by this last discussion students who were not interested in taking part had obviously figured out that I was not going to intervene to address their groups’ behaviours. Whereas in the first discussion they had tried to hide their whispering and fooling around, by the final discussion, some students moved quickly and openly into an inactive role in the discussion. During the final discussion I observed that some of the
students were no longer whispering to each other, but had begun to openly carry on a
private conversation while the other part of the group was trying to conduct their
discussion. Over the period of the study it appeared that the students who did want to
participate in the discussions became disillusioned, and began to interact less and take
fewer risks because they understood that many people were not interested in listening to
them.

The significant improvement between the treatment group’s pre and posttest
discussions appeared to be directly linked to the scaffolding they had received during the
previous four discussions. During the posttest discussion the students in the treatment
group independently conducted an organized and effective discussion by using many of
the strategies that I had modeled during the previous four discussions. As I was not
involved in the posttest discussion, and one of the group’s unofficial leaders was absent
on that day, I observed that other students who had previously been only minimally
involved took more active roles in the discussion. Student # 13 in particular who had
only made one comment in the pretest discussion, got more involved and made a total of
17 contributions in the posttest discussion. Although this student had not made many
contributions throughout the entire study, he/she was able to take a leadership role when
other more controlling people were not involved in the discussion. As well as increasing
the amount of comments made, this student also performed scaffolding for the group on
several occasions. For example, at one point when the discussion was slowing down the
student asked, “How might the characters have dealt with the situation differently”?
Although this student did not move beyond the first level of ‘beginning to move through
an envisionment’, the student did show an enormous improvement in the way in which
he/she interacted as part of the discussion group. Essentially, this student went from saying nothing, to working together with the group to better understand the story and its themes.

Through the use of effective scaffolding, three students in the treatment group went from making no level-two comments, to making three comments at this level. The increased number of level-two comments made by the treatment group during the posttest discussion indicates that this group improved their ability to further move through their envisionments in a group discussion.

Student #20 went from making no level-two comments during the pretest discussion to two level-two comments, and two level-three comments during the posttest discussion. This student made only one contribution during the pretest discussion. During the pretest discussion when another student expressed that he found the story confusing, Student #20 responded, “I did too. I just didn’t follow it.”

During the posttest discussion, Student #16 not only made 14 more comments than during the pretest discussion, but three of the comments were at the second level, and two of the comments were at the third level. Rather than just giving in to being confused as in the pretest discussion, Student #16 made comments such as:

Level Two: So, if the seal got hit and had a scar on his forehead, so maybe I was thinking that he (the boy) may be somehow connected to the seal. I mean it’s not just by chance you hit a seal with a knife and then you get a scar on your head from something else.

Level Three: That would make sense if he was reincarnated from the seal.

By making more contributions to the discussion, Student #16 also improved the quality of
the comments being made. In combination with the overall results for the treatment group, individual results for Student #16 suggest that the effective scaffolding during the initial discussions lead to this student moving further through his or her envisionments about the text.

As with the control group, the treatment group had no results to report at the fourth level. Based on observations made throughout the duration of the study, it became evident that the students in the treatment group were primarily engaged in learning the skills to carry out an effective discussion about literature. Based on the increase and improvement of comments made by this group from the beginning to the end of the research, it is predicted that given more time to practise their discussion skills this group would have eventually succeeded in reaching the fourth level of envisionment.

The results of this study indicate that effectively scaffolding student discussions leads to students learning the skills required to move to a deeper understanding of text while independently discussing literature. They also imply that students involved in discussion groups who proceed without effective scaffolding may over time, have less successful, meaningful discussions. The results reveal that students who had received effective scaffolding were better able to conduct successful discussions about literature where they are permitted the security necessary to explore making personal connections.

Unfortunately, due to the short duration of this study, it was not revealed that effective scaffolding will lead students to independently moving completely through all four of the envisionment levels. Due to the increases and improvements of the treatment group’s comments from the pre- to the posttest discussions, the results do however imply that given more time to practise their discussion skills, this group would have eventually
achieved the goal of improving their understanding to the extent that they moved through
their envisionments and were eventually able to step back and objectify their experience
with the literature.

The scaffolding provided the treatment group with the necessary skills to improve
their discussions by increasing the amount of level-one comments they made between the
pre- and the posttest discussions. Rather than bringing the students through all four of the
envisionment levels, the scaffolding appeared to provide an opportunity for students who
were previously uninvolved, or only minimally involved in the discussions to improve by
making many level-one contributions in the posttest discussion.

Conclusions

This study demonstrated that students would move toward a deeper understanding
of texts when they were given the skills to control and develop their own inquiry through
small-group discussion with peers. Part of the purpose was also to demonstrate the
necessity of initially providing students with the necessary skills and training prior to
developing the expectation for them to work independently in small-group discussions
about text.

Judith Langer’s (1995, 1998) research and theories were an integral part of the
theoretical framework of this study. Her interpretations of experiencing reading as
envisionments were used to determine the stances students progressed through during the
literature discussions. The study was set in an envisionment-building classroom where
students’ and teachers’ comments during literature discussions were focused on the text,
and were considered to be relevant and important.

The study took place in a rural school of approximately 130 students located in a
small town in northwestern British Columbia. An intact Grade 7 class of 26 students was chosen as the sample for this study. Students were grouped using paired sampling, and a pretest-posttest control group design was chosen as it allowed that the effects of internal threats to validity were spread equally between the groups.

Students’ contributions to the discussions were categorized based on criteria describing envisionment levels, and the Mann-Whitney U Test was used to analyze the leveled protocols. The results of this study suggest that once students begin to understand how to provide effective scaffolding in discussions, they are capable of working independently in groups and improving their comprehension of texts by developing their own interpretations while building and moving further through their envisionments. Analysis of the quantity of results also showed that individual students must make a substantial number of contributions to discussions in order for them to fully explore their horizons of possibilities and move to a deeper understanding of the text.

*The Role of Scaffolding in Small-Group Discussions*

Based on the results from this study, students who received scaffolding during several small-group discussions improved their abilities to work toward a better understanding of the text being discussed. The students who received the scaffolding showed that the discussion techniques learned while in the presence of the teacher were lasting, and continued to be applied even when the teacher was no longer present. The students involved in the control group’s unscaffolded discussions either maintained their levels of contributions or deteriorated to making fewer, less complex contributions.

Between the pre- and posttest discussions, students in the scaffolded treatment group developed their abilities to independently increase their understanding of literature
through small-group discussion. Throughout the duration of the study, and culminating in the posttest discussion, students in the treatment group were better able to take turns speaking, speak more clearly and precisely, be relevant and informative, and avoided obscurity and ambiguity (Siegal, 1991). The fact that the students in this group progressively showed improvement throughout the study leads to the conclusion that students require effective scaffolding, and time to practice the social skills expected in discussions.

Although other studies (e.g., Short, Kaufman, Kaser, Kahn, & Crawford, 1991) have shown that teacher scaffolding during small-group discussions is important, this study has revealed that effective scaffolding may be lasting, and that students carry on the discussion skills and strategies even when the teacher is no longer present in the group.

**Implications for Classroom Teachers**

As a classroom teacher in the public-school system for the past 11 years I have witnessed many new curriculum expectations and teaching methods in our classrooms. Many teachers use small-group discussion about literature as an opportunity for students to work cooperatively and independently with their peers. The results of this study suggest that teachers should take an active role in effectively scaffolding students’ discussions prior to allowing students to work independently. Teachers should realize that when effectively scaffolding small-group discussions they must allow the students to control the interpretive authority and focus on providing scaffolding that permits the students to continue to develop their ideas together. The treatment group’s positive trend toward better discussion contributions at each of the levels of envisionment during this study indicated that students do require time and practice in teacher-scaffolded
discussions prior to being able to successfully conduct and scaffold a discussion of their own.

The decline in the number and quality of contributions made by the control group over the course of the study reinforces the conclusion that students should not be guided to small-group discussions without the necessary scaffolding support. Teachers at all levels of education should not assume that students already have abilities to conduct independent discussions about literature. Teachers must be aware that students initially require teacher scaffolding while developing their group communication and social skills.

**Envisionment Building Classrooms**

Langer's (1995, 1998, 2001) research with student discussions also revealed that students involved in unscaffolded discussions about literature had difficulty moving through their envisionments to a deeper understanding of the literature. This study supports her research by revealing that students who did not receive scaffolding decreased their efforts to explore, understand and make personal connections to the literature being discussed. Although students in the unscaffolded group initially achieved higher results than did the treatment group, over the duration of the study, they did not appear to move through their envisionments to a deeper understanding of the text. It is imperative for teachers to understand that students who receive effective scaffolding from a teacher or informed adult will gradually move further through their envisionments about literature.

Effective scaffolding is necessary for learners to develop a deeper understanding of their literary experiences. Teachers should use their understanding of the four reading stances when helping students to explore horizons of possibilities (Langer, 2001). While
scaffolding, teachers should be aware that through their discussion, students are attempting to step into their envisionments, be in and move through their envisionments, step back and rethink what they already know, and eventually step back and objectify their experience. Students often require effective scaffolding in the form of questions, statements and modeling to help them deepen their understanding and develop skills for extending their own thinking (Langer, 2001).

As I was aware that I would be conducting this study in my classroom during the spring semester, I was reluctant to involve the students in my class in a full envisionment building environment in my classroom. Although the students in this class did participate in many large and small-group discussions, and were treated as lifelong learners whose opinions are integral to enriching our literary experiences, they did not at any time over the past school year participate in small-group discussions where scaffolding played a major role. Part of my decision to restrain from involving the students in many effectively scaffolded discussions was based on my decision to dedicate time to this endeavor after this study was complete.

**Future Research**

Based on my observations and the results of this study I believe I may alter aspects of how I do research in the future. I was satisfied with the quality of videotape and my ability to categorize the students comments based on their level of ability. I was unfortunately unable to fully realize the benefits of the analysis done by the independent checker, and I felt that the large group size may have somewhat limited the discussions.

The relatively large size of the discussion groups in this study may have interfered with the flow of the discussion. The groups were assigned with 13 students each, but due
to student absences over the course of the study there were often nine to eleven students present. Although many students in both the groups contributed to the discussion, there were a few in both groups who did not make comments. Based on my work with smaller-size groups and my observations during the study, I suspect that when the groups become larger than six students, it becomes possible for students to fade to the background and not be noticed.

The relatively large sizes of the groups during this study may have limited the stances the students were able to move through during their discussions. Smaller groups may allow students the security and intimacy necessary to allow them the confidence to speak freely with other involved participants.

Based on the significant results revealed by the treatment group in this study it is likely that an increased amount of intervention in the form of effective scaffolding would provide students the opportunity to move entirely through their envisionments about literature. The treatment group’s increase in the number of contributions and the improvement in quality of their contributions after only four effectively teacher-scaffolded discussions suggests that a longer term intervention would provide the skills and practice necessary for students to successfully move further through their envisionments while being involved in a peer-led discussion about literature.

Concluding Statement

This study appeared to reveal that students involved in small-group discussions about literature initially require effective scaffolding if they are to subsequently move further through their envisionments during peer-led discussions. The process of conducting, analyzing and drawing conclusions from this research has provided me with
new insight into my roles as teacher, and researcher.

I now have a stronger understanding of how the field of education gathers research to influence teaching practices. I will use my understanding of how research is conducted to more critically examine the background behind new methods and practices being introduced. The results from my study, and the many studies reviewed during my time as a researcher have already triggered a positive change in the way I approach small-group discussions in my classroom, and I will continue to more closely observe and analyze my methods to continue to improve and change as a classroom teacher.
References


King, C. (2001). "I like group reading because we can share ideas": The role of talk within the literature circle. *Reading, 35*, 32-36.


Maloch, B. (2004). One teacher's journey: Transitioning into literature discussion
groups. *Language Arts, 81*, 312-322.


Appendix A

In April 12, 2005

Dear parent/guardian:

To enhance my skills as a teacher, I am presently working on my Masters of Education degree at UNBC. I am currently involved in a study requiring observing and analyzing the discussion skills students use when reflecting on literature they have read. These types of small-group discussions are common in our classroom, and are conducted as an important part of implementing the curriculum. During the month of March, I plan to videotape and audiotape students from our class participating in small group discussions. I will be the only person who has access to the taped discussions.

I have received permission from our School District and from the UNBC ethics board to carry out this study. Confidentiality and student anonymity will be maintained throughout the study, and ethical guidelines will be adhered to at all times. Prior to the commencement of the study I will present the students with information regarding the nature and length of the study. You may at any time view any video or audio tape of your child. I hope to complete this study by June 2005 at which time you will have access to view a copy of my completed thesis.

When the study is completed, the videotapes and audiotapes will be destroyed. If you decide to give your permission for your son/daughter to participate, you should know that you may change your mind and withdraw your permission at anytime during the study.

As part of the study your son/daughter will be asked to participate with other students in a small-group discussion. I would like your permission to use observations of your son/daughter's discussion as part of this study.

If you agree to allow your child to participate in this study, please sign the attached permission form, and return it to the school. I will be returning to you a copy of your signed consent form for your records. If you have questions, please feel free to contact me through the school, or by email at jkrall@sd54.bc.ca. If you have any serious concerns regarding this study you may contact the UNBC Vice-President Research, at 960-5820. Thank you for your consideration of this request.

Sincerely,

Julie Krall
Research Study Permission Form

Please sign your name in the area you find appropriate:

Student's Name: _______________________

Yes, my son/daughter may participate in your research study. _______________________

No, my son/daughter may not participate in your research study. _______________________

Date: _______________________

Further to my letter, I would like to summarize the purpose and methods of the study I will be conducting. The following is the information I feel may be most important to the study participants and their parents/guardians:

- The purpose of this study is to observe and analyze the discussion skills students use when reflecting on literature they have read.
- I will be doing this research as part of a short story unit and novel study conducted as part of our Language Arts program. The students will be asked to discuss stories they have read.
- I will video tape some of the discussions. I will be the only person who has access to the video footage.
- Involvement in this study is voluntary. All students will still be part of small-group discussions in our classroom.
- If you do give permission for your son/daughter to participate, you may change your mind at any time.
- As this study is intended to increase students’ discussion skills and possibly increase their reading comprehension, it is possible that your son/daughter may benefit from being involved.
- Students’ identities will be kept anonymous at all times during the study. Your son/daughter’s name and identity will be kept absolutely confidential and will never appear in my thesis.
- Any personal information associated with the students will be destroyed at the completion of my data analysis. I hope to be completed this by May 2005.
- You may have access to view my thesis when it is completed. I hope to be done by June 2005.
- If you have any questions, please contact me at the school, or by email at jkrall@sd54.bc.ca.
- Any serious concerns may be directed to the UNBC Vice-President Research, at 960-5820.