EXAMINING THE EXPERIENCE OF READER-RESPONSE IN AN ON-LINE ENVIRONMENT
A STUDY OF A MIDDLE-SCHOOL CLASSROOM

DISSERTATION

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By

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ABSTRACT

Literacy is intertwined with technology usage that impacts the ways we read, learn, and communicate in today’s society. Computer mediated technologies, such as an on-line threaded discussion, are one example of a technology application that can be utilized to enhance a reader’s response to texts and to encourage participants to collaborate and socially co-construct their understandings.

The purpose of this qualitative study was to explore the ways in which the students and the teacher responded to the texts they read and discussed together in two environments. Fifth-grade students and their teacher were observed in both face-to-face group conversations and in an on-line threaded discussion environment to document their responses to literature.

Analyses of the data revealed that the teacher utilized roles flexibly in response to the needs of the two different groups and in response to the environment in which the students and teacher were responding. These teaching adjustments scaffolded the students’ learning according to the need of the group and the environment in which they were working. Data analysis also illustrated the students’ ownership of the questions and answers in the on-line discussion space.

The research found that in this on-line, computer mediated environment the students led the conversation, posing questions and responding to each other without
teacher intervention. This ThirdSpace, created through the students’ collaboration in the on-line threaded discussion environment, encouraged students to write and respond with each other. This space empowered the students to take ownership of the response process.

These findings illustrate the utilization of multiple contexts such as the face-to-face environment and the on-line environment to enrich the responses of readers to common readings. While the teacher is an important member of the conversations, a fluctuating presence based upon the needs of the group encourages student ownership and leadership of the discussion and the responses to literature. The utilization of technology applications can create a new ThirdSpace outside of the traditional classroom environment that encourages and nurtures student leadership in the reader response process. This study makes a unique and significant contribution to the reader response literature as it examines the integration of technology in enhancing the response of readers and describes the ways in which a teacher can facilitate those responses across contexts.
Dedicated to my Greg, Julia, Grant, and Logan
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TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Abstract</td>
<td>ii</td>
</tr>
<tr>
<td>Dedication</td>
<td>iv</td>
</tr>
<tr>
<td>Acknowledgments</td>
<td>v</td>
</tr>
<tr>
<td>Vita</td>
<td>vii</td>
</tr>
<tr>
<td>List of Tables</td>
<td>xiv</td>
</tr>
<tr>
<td>List of Figures</td>
<td>xvi</td>
</tr>
<tr>
<td>Chapters:</td>
<td></td>
</tr>
<tr>
<td>1. Defining the Study</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>The Changing Nature of Literacy and Technology</td>
<td>1</td>
</tr>
<tr>
<td>The Social Nature of Literacy and Technology</td>
<td>3</td>
</tr>
<tr>
<td>The Changing Nature of Reader Response</td>
<td>7</td>
</tr>
<tr>
<td>The Integration of Literacy and Technology</td>
<td>9</td>
</tr>
<tr>
<td>Statement of the Problem</td>
<td>11</td>
</tr>
<tr>
<td>Purpose of the Study</td>
<td>12</td>
</tr>
<tr>
<td>Research Questions</td>
<td>13</td>
</tr>
<tr>
<td>Definition of Terms</td>
<td>13</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>14</td>
</tr>
<tr>
<td>Summary</td>
<td>15</td>
</tr>
<tr>
<td>2. Review of Literature</td>
<td>17</td>
</tr>
<tr>
<td>Introduction</td>
<td>17</td>
</tr>
<tr>
<td>The Use of Authentic Literature in Elementary Classrooms</td>
<td>19</td>
</tr>
<tr>
<td>The Importance of Book Discussions</td>
<td>23</td>
</tr>
<tr>
<td>The Co-Construction of Knowledge</td>
<td>29</td>
</tr>
<tr>
<td>Re-conceptualizing Space</td>
<td>35</td>
</tr>
<tr>
<td>The Important Role of the Teacher</td>
<td>37</td>
</tr>
<tr>
<td>The Teacher’s Role in the Use of Literature</td>
<td>38</td>
</tr>
</tbody>
</table>
Data analysis for research question #1........................................................... 123
Data analysis for research question #2........................................................... 126
Trustworthiness.......................................................................................................... 128
Credibility ............................................................................................................ 128
Activities included that produce credible findings ....................................... 128
Peer debriefer................................................................................................. 130
Negative case analysis .................................................................................. 130
Referential adequacy .................................................................................... 130
Member checking............................................................................................. 131
Transferability...................................................................................................... 132
Dependability ..................................................................................................... 132
Conformability..................................................................................................... 133
Summary.................................................................................................................... 133

4. Findings of the Study.................................................................................................. 134

Introduction................................................................................................................134
Providing the Context of the Environment .................................................................137
  Overview of the School’s and Teacher’s Philosophy ........................................ 137
  The Physical Environment Surrounding the Students and Teacher ......... 139
A Constructivist Place to Learn and Work .............................................................. 140
  Utilizing group projects to build understanding ...................................... 140
  Having voice in the classroom ................................................................ 143
  Modifying behavior in a constructivist environment ........................ 144
Reading Together..................................................................................................... 146
  Summary of Stargirl .................................................................................. 146
  Summary of Crash .................................................................................. 147
Examining the Teacher’s Presence ......................................................................... 148
The Teacher’s Presence in the Face-to-Face Environment..................................... 149
  An overview .................................................................................................. 149
  Guiding Stargirl ...................................................................................... 153
  Summary of Stargirl .................................................................................. 160
  Steering Crash ......................................................................................... 159
  Summary of Crash .................................................................................. 164
A comparative examination ................................................................................... 164
The Teacher’s Presence in the On-Line Threaded Discussion Environment............ 167
The Teacher’s Presence through Modified IRE Conversations............................ 172
  Talking with Stargirl ............................................................................... 175
  Talking with Crash .................................................................................. 177
Talking on-line in the threaded discussion environment ........................................184
Summary ..................................................................................................................187
Examining the Students’ Presence ........................................................................188
The Responses of Students in the Face-to-Face Environment .............................190
Student generated questions .............................................................................190
Stargirl’s turns at talk ..........................................................................................194
Crash’s turns at talk ...............................................................................................196
Summary ..................................................................................................................203
The Responses of Students in the On-Line Environment ....................................203
Stargirl’s on-line conversations .........................................................................204
Crash’s on-line conversations .............................................................................212
Summary ..................................................................................................................225
The Responses of Students While in the Physical Computer Environment ..........225
Understanding the students’ cultural perceptions .................................................227
Technical issues that arose while posting .............................................................232
Grammatical and spelling issues .........................................................................233
Notification that someone had posted or pointing out something to be read .......234
Social conversations .............................................................................................235
Summary ..................................................................................................................236
Relationships Across Multiple Contexts ...............................................................236
Connections to the style of questions ...................................................................238
On-line connections made to the text ..................................................................243
Face-to-face conversations that related to the on-line conversations .................250
Summary ..................................................................................................................252
Summary ..................................................................................................................252

5. Discussion and Recommendations ......................................................................255

Introduction .............................................................................................................255
Discussion of the Findings .....................................................................................259
The Important Presence of the Teacher Across Contexts ....................................259
The face-to-face environment .............................................................................259
The on-line environment ......................................................................................261
Providing scaffolding across contexts .................................................................262
Modifying the Initiate, Respond, Evaluate (IRE) pattern ......................................265
Student Involvement Across Contexts ..................................................................266
Using multiple spaces .........................................................................................266
Changing ownership ......................................................................................268
Encouraging collaboration .........................................................................271
Technology’s Contribution to the Reader Response Process ......................272
  Multiple perspectives regarding working on-line ......................................273
  Creating new spaces .................................................................................276
Implications for Teaching and Learning ......................................................277
  Implications regarding the teacher ............................................................278
  Implications regarding the classroom environment ....................................281
  Implications regarding students ...............................................................282
Limitations of the Study ..............................................................................283
Recommendations for Future Research .......................................................285
Summary .......................................................................................................288

Appendices

Appendix A  Computer Screen Shots of the On-line Threaded Discussion Board ..289
Appendix B  Principal Request for Permission Letter ........................................291
Appendix C  Schematic Map of the Classroom ...............................................293
Appendix D  Parent and Student Letters of Consent ........................................295
Appendix E  Student Reading Schedule ..........................................................303
Appendix F  Thematic Types of Questions Asked to Students in Interviews .......305

List of References ........................................................................................307
### LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Rotation schedule of students during the language arts time period</td>
</tr>
<tr>
<td>3.2</td>
<td>Coding categories for types of questions posed</td>
</tr>
<tr>
<td>4.1</td>
<td>Opening questions that the teacher asked the students in the face-to-face discussions</td>
</tr>
<tr>
<td>4.2</td>
<td>Types of questions asked by the teacher in the <em>Stargirl</em> face-to-face discussions</td>
</tr>
<tr>
<td>4.3</td>
<td>Comments made in the <em>Stargirl</em> group that illustrate the teacher’s personal responses to the text</td>
</tr>
<tr>
<td>4.4</td>
<td>Types of questions asked by the teacher in the <em>Crash</em> face-to-face discussions</td>
</tr>
<tr>
<td>4.5</td>
<td>Comments made in the <em>Crash</em> group that illustrate the teacher’s personal responses to the text</td>
</tr>
<tr>
<td>4.6</td>
<td>Amount of questions asked in each group</td>
</tr>
<tr>
<td>4.7</td>
<td>Number of questions posed in the on-line threaded discussion environment</td>
</tr>
<tr>
<td>4.8</td>
<td>Teacher and student number of responses posted on each board</td>
</tr>
<tr>
<td>4.9</td>
<td>Evaluative statements made to the <em>Stargirl</em> group members in the face-to-face context</td>
</tr>
<tr>
<td>4.10</td>
<td>Evaluative statements made to the <em>Crash</em> group members in the face-to-face context</td>
</tr>
<tr>
<td>4.11</td>
<td>Number and percentage of responses made by the teacher in the on-line threaded discussion environment</td>
</tr>
</tbody>
</table>
4.12 Questions from students with the teacher’s responses on the *Crash* threaded discussion board..............................................................................................................................................187
4.13 Questions that the students asked in the face-to-face setting that were not text oriented..............................................................................................................................................191
4.14 Turns at talk for each member of the *Stargirl* group........................................................194
4.15 Turns at talk for each member of the *Crash* group .........................................................197
4.16 Number of times each member posted on the *Stargirl* discussion board...204
4.17 Number of responses posted to each question for the *Stargirl* discussion board .................................................................................................................................................207
4.18 Threaded discussion on *Stargirl* board.............................................................................209
4.19 Multi-layered threaded discussion on *Stargirl* board......................................................211
4.20 Number of times each member posted on the *Crash* discussion board ....213
4.21 Number of responses posted to each question on the second *Crash* discussion board .................................................................................................................................................221
4.22 Multi-layered threaded discussion on *Crash* discussion board...............................224
4.23 Verbal connection made through the *Stargirl* discussion board ......................230
4.24 Indirect questions posted on the threaded discussion boards...............................240
4.25 Examples of questions that directly relate to the *Stargirl* text posted on the discussion board.................................................................................................................................................243
4.26 Examples of responses made that were directly related to the *Stargirl* text...........................................................................................................................................................................245
# LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Example of one Inspiration project detailing plot, setting, and characters</td>
<td>106</td>
</tr>
<tr>
<td>3.2</td>
<td>A screen from the <em>Stargirl</em> on-line threaded discussion</td>
<td>107</td>
</tr>
<tr>
<td>4.1</td>
<td>A finished poster developed collaboratively by one of the <em>Crash</em> small groups</td>
<td>142</td>
</tr>
<tr>
<td>4.2</td>
<td>A finished poster developed collaboratively by one of the <em>Stargirl</em> small groups</td>
<td>142</td>
</tr>
<tr>
<td>4.3</td>
<td>Comparison of questions asked in the <em>Stargirl</em> and <em>Crash</em> group discussions</td>
<td>166</td>
</tr>
</tbody>
</table>
CHAPTER 1

DEFINING THE STUDY

Introduction

The Changing Nature of Literacy and Technology

Change is a predominant theme of our time (Gee, Hull, & Lankshear, 1996). The nature of literacy today is rapidly changing (Kinzer & Leander, 2003; Knobel, 1999; Lankshear & Knobel, 2003a; Leu, 2000b). Hagood (2003) has written that “new media and online literacies belong to and affect people of all ages” (p. 387). Few would contest that changes in society and technological applications are prevalent and affecting each and every person of today’s society. As Luke (2000) writes, “literacy requirements have changed and will continue to change as new technologies come on the marketplace and quickly blend into our everyday private and work lives” (p. 71).

Although literacy has always been entwined with technology, never before have the advancements of technology and therefore literacy occurred at such a rapid pace (Leu, 2000b). For example, though the technology of the printing press did revolutionize the production of reading material, it took decades for the technology to spread and for centuries it has continued to evolve (Eisenstein, 1983). In comparison, the proliferation
of Internet availability in schools and classrooms has occurred over just a few years. In 1994, only 3% of public school classrooms were connected to the Internet. In 2000 Leu (2000b) reported that close to 100% of classrooms now have Internet access. “The speed of this change is breathtaking; never before have the technologies of literacy changed so rapidly in such fundamental ways” (Leu, 2000b, p. 424). We live in a digital age “where more and more of our time, purposes, and energies are invested in activities involving new communications and information technologies” (Lankshear, Peters & Knobel, 2002, p. 31).

The National Council of Teachers of English and the International Reading Association have both included language in their standards that addresses the importance of literacy and technology instruction. The President’s Committee of Advisors on Science and Technology (1997) wrote “the Panel does not recommend that the deployment of technology within America’s schools be deferred pending the completion of a major program or experimental research” (p. 1). The committee in this powerful statement addresses the cultural impact society and technology are having and to ignore this force would be impossible (Leu & Kinzer, 2000).

The definitions and understandings of terms such as literacy and technology have changed and often take ambiguous meanings. Labbo (1999) writes:

The definition of literacy adopted by educational institutions will mirror mainstream society’s definition of and expectations for what it means to be literate... educational goals and purposes for literacy instruction should reflect a synergistic relationship with society’s expectations for how literacy is utilized and valued in various societal endeavors. (p. 2)
Schools, teachers, and teacher preparation programs will need to invest in the research and study for how to integrate meaningful, situated, technology-rich experiences for students.

The Social Nature of Literacy and Technology

Bloome (2000) articulates these changes illustrating that the literature in many writings has “reframed literacy and schooling as cultural processes intimately involved in complex social and power relationships among various groups and social institutions” (p. 424). Literacy is now often considered to include a social component in which literacy is seen as “part and parcel of, and inextricable from, specific social, cultural, institutional, and political practices. Thus, literacy is, in a sense, ‘multiple’” (Gee, 1999, p. 356). Peters and Lankshear (1996) also write of the social nature of literacy stating that “reading and writing are part and parcel of whole webs of social practice that collectively constitute our social reality” (p. 65). Literacy in this way is conceived within a broader social order that incorporates the complexities of authentic literary practices within our contemporary society. These theories of multiple literacies and a broader social order taking into account screen-based technologies have been referred to as the “new communicative order” (Lankshear, Gee, Knobel, & Searle, 1997; Snyder, 2001a, 2001b, 2002; Street, 2005).

The social component to literacy practices (diSessa, 2000; Tierney, 2000) are inherent regardless of the inanimate tools that are used (Salomon, 1994; Smagorinsky & O’Donnell-Allen, 1998). Pencils, computers, and so forth are all technologies that support literacy practices that incorporate a social element in our interactions with both
text and society. Digital reading and writing have penetrated our daily literate lives and have become inherent tools. As a result, they have impacted what literacy means in today’s society (Labbo, 2000; Reinking, 1998). Bruce (1997a) describes this as our literacy practices that are becoming “immersed in new technologies” (p. 875). C. Smith (2001) states, “we can no longer ignore the sociocultural and technological influences on literacy development” (p. 157).

Literacy research conducted from this sociocultural point of view accepts that the new media are central to the field because in everyday cultural practice people are using the new media to make meaning, to express themselves, and to communicate and work with others. (Nixon, 2003, p. 407)

For example, during the month of July 2006, MySpace (www.myspace.com) become the most visited website in the United States, overtaking even Google and Yahoo. This website is a forum for friends to socially talk and exchange information together through chat rooms, web pages, forums, and other communication technologies. This site serves as an excellent example for the ways in which the social cultural possibilities are exploding through available technologies. Classrooms need to engage in technology-rich practices that encourage the culture of the learning environment to prosper while utilizing the new technologies available and encouraging socially constructed understandings.

Kinzer and Leander (2003) have defined three social developments that have impacted the development of literacy in regard to its relationship with technology. They write that these three broad areas articulate the ways in which social developments have guided the technological changes in our society. First, the increasing availability of
technology has significantly impacted literacy’s relationship with technology and has made a separation of literacy and technology unrealistic. This increasing availability places significant pressure on educational institutions to incorporate the tools instructionally. Teachers are facing students who have personal experience with computers and expectations to utilize those experiences in their instruction. As Kinzer and Leander (2003) write, “the meaning of schooled literacy has already been (and will continue to be) articulated with the availability and meaning of technology” (p. 548).

The second social development that Kinzer and Leander (2003) discuss relates to the fact that multimedia developments of technology have pushed the meanings of what a text is and have necessitated the inclusion of symbol systems with printed texts. The paper-based book is no longer the only location of literacy. The proliferation of hypertexts, the Internet, and the acceptance of additional media forms have socially changed what is referred to as a “text.” The literacy “tool kits” (Gee, 1999) that students build will need to address multiple, varied texts, including traditional texts and hypertexts, that are often interdependent in design.

Finally, Kinzer and Leander (2003) state that the development of literacy and technology practices have advanced understandings of literacy and technology as social practices. This social development recognizes the interdependence of literacy and technology under the influence of societal developments. These “complex relations of literacy and technology, as they co-develop as social practice in unpredictable ways with unpredictable effects” (Kinzer & Leander, 2003, p. 549) are now being investigated by researchers.
Leu and Kinzer (2000) explain that new “envisionments take place when teachers, children, and others imagine new possibilities for literacy and learning, transform existing technologies to construct this vision, and then share their work with others” (p. 117). Kist (2005) spent 7 years investigating classrooms that he identified to be situated in the philosophy of the New Literacy Studies. From the New Literacy perspective, language and literacy are “as social practices rather than technical skills” (Street, 2003, p. 79). The New Literacy Studies approach literacy as “part and parcel of, and inextricable from, specific social, cultural, institutional, and political practices. Thus, literacy is, in a sense, ‘multiple’” (Gee, 1999, p. 356). From this perspective, reading and writing are shaped by sociocultural practices. The New Literacy Studies agree that in an increasingly technological society, the “demands for high-level literacy skills are ever increasing” (Gee, 1999, p. 361).

Kist (2005) found that these classrooms appeared “to be less focused on the gadgets and toys and more on the very notion of literacy as a social process. It seemed that the nature of literacy as an inherently social practice was being talked about as much as were the new technologies” (p. 5). Bloome and Kinzer (1998) wrote that “if the future of literacy instruction is to be substantively different, then changes need to be made in both the social relationships that define classroom literacy events and practices and in the accompanying definitions of knowledge” (p. 367).

Leu (2002) states that teachers need to see that “literacy learning becomes increasingly social as multiple literacies emerge from rapidly changing technologies” (p. 466). The silence of traditional classrooms can be replaced with the “noises” of students engaging and supporting each other’s learning. This transition is often challenging for
teachers who must let go of controlling the conversations that happen in the classroom. However, the social nature of classrooms, when prospering, enables students to scaffold their own understandings together as peers (Nystrand, 1997; Vygotsky, 1986).

*The Changing Nature of Reader Response*

Integrating social interactions and growing technology applications could change the nature of reader response. Rosenblatt (1994b) writes that no two readings, even if by the same person, are ever the same. Throughout the reading, neither the text nor the reader remains fixed. Instead, the reader’s stance shifts which influences the text, which then influences the work of the text and creates what Rosenblatt calls “the poem.” Sumara (2002) articulates that for Rosenblatt it is “the relationship between reader and text as a site for the production of knowledge, not merely the interpretation of knowledge” (p. 92). In this way “readers and texts and contexts of reading collaborate in the continued inventing and interpreting of knowledge” (p. 93).

Historically, reader response was understood to occur between the reader and the text as Rosenblatt described. Researchers have since documented that the reading response process is often not an isolated event between one book and one reader but rather occurs with the influence of multiple texts and multiple readers. Hepler and Hickman (1982) write that:

The literary transaction, the one-to-one conversation between author and audience, is frequently surrounded by other voices. . . what children do with books, what they say about them, and what they seem to think of them are all influenced in part by other people. (p. 279)
The nature of these “other voices” is an interesting piece of the reader response puzzle to consider. Though autonomous models of reading that incorporate a single reader and a single text have dominated research, new examinations are being considered in which socially constructed responses are observed and examined. Gavelek and Raphael (1996) write that “social settings are the very means by which students come to acquire and construct new knowledge, new meanings, and new interpretations of text through interactive use of language” (p. 184). These socially constructed responses encourage multiple perspectives that influence and support individual understandings and responses. Leal (1993) states:

When one child expresses his or her personal prior knowledge, the prior knowledge of other participants is activated. These shared thoughts stimulate further ideas from others in the group and the result is a collaborative construction of meaning for all. In essence, shared prior knowledge about a particular topic or text becomes corporate knowledge and part of the discussion group’s textual understanding. (p. 116)

Nurturing these public conversations of reader response requires the time and space for such talk to occur. These spaces have previously been dominated by the belief that one reader is responding to one text. However, moving outside of the autonomous model encourages an envisioning of multiple readers reading and creating multiple texts.

The ubiquitous nature of technology in today’s classrooms provides an opportunity for teachers to nurture and encourage reader response both individually and collaboratively in multiple contexts. Flood and Lapp (1997) write that the concepts of reader response need to expand to embrace the communicative arts, including the
utilization of technology. Examining the “social aspects of learning, as well as students’ responses to literature, implies a need to study what happens when computers are used as a vehicle for response” (McKeon, 1999, p. 700).

The Integration of Literacy and Technology

One of the ways this social construction of knowledge can prosper is through the utilization of the technologies available to teachers in classrooms. Through these tools:

- The concept of literacy has changed to literacy as a social practice, in which being able to read and search for information in different domains of knowledge as well as communicating ideas and knowledge using a variety of electronic media has become very important. (Staarman, 2003, p. 73)

Utilizing technology in socially constructed ways provides for a new approach to learning in which the students can take a more active and constructive role and one in which learning is made through collaboration with others. As Staarman (2003) states,

- If learning is considered as a process of interaction and co-construction, literacy practices can be seen as social practices in which children construct meaning, articulate questions, and share ideas in order to foster their thinking. (p. 74)

The availability of web-based communication tools is encouraging what Moreillon and Tatarchuk (2003) call an “explosion of discourse communities in cyberspace” (p. 1). Carico and Logan (2004) write in a similar way that “the chances for students to experience literacy across time and space are increasing exponentially through
technologies” (p. 302). These discourse communities, like face-to-face communities, incorporate social practices that connect individuals for the purpose of making meaning together. Together, students and teachers can ‘virtually’ talk and collaborate their thoughts and responses to the literature they read. Bloome and Green (1992) report that literacy groups are a way in which members can “talk about and interact with written text and with each other” (p. 53). The utilization of technological tools such as on-line threaded discussions provides another such context for literacy groups to talk and socially co-construct their understandings.

Teachers play a critical role in the decision to use and the development of the environments that utilizes technology in authentic ways. Teachers also have the power to foster environments in which students can socially engage with each other to support each other and nurture socially collaborated understandings. For over 20 years, Daniels has studied and advocated for the utilization of literature circles that nurtured student talk in responding to literature. Daniels (2006) recently wrote to ask teachers to consider “the next big thing in student-led discussion, written conversation” (p. 14). In this call, Daniels challenges teachers to consider the power of students writing to each other back and forth through notes or letters in which they are engaged in the subject matter. Students would answer their ‘mail’ from other students’ written notes whenever they had time. Technology applications that enhance communications such as the threaded discussion board, electronic mail, and chat rooms could enhance the motivation and opportunities for students to engage each other in these written conversations about their reading. However, the possibility for technology to enhance these written conversations has yet to be fully explored. Whatever the space that is used, be it face-to-face or on-line,
it is the decision of the teacher whether or not to create the space, opportunity, and instruction for such authentic conversations to take place. Further research must be conducted to inform the implications and applicability of this potential learning forum.

Statement of the Problem

The previous section illustrated that literacy is intertwined with technology usage that impacts the ways we read, learn, and communicate. It also detailed a process of reader response in which individual and collective understandings are deepened and enriched through the social collaboration and a co-construction of knowledge. However, continued research is needed to further understand these changes and the impact they have on the teaching and learning process.

Though technology is becoming a ubiquitous presence in today’s classrooms, there is little empirical research to be found documenting the effects of technology in classrooms, particularly upon the reader response process (Chu, 1995; Kamil, Intrator, & Kim, 2000). As Lankshear and Knobel (2003b) write, “There is a paucity of research in the area of technology and literacy” (p. 60). Current reviews of reader response research such as Galda and Beach (2004), Marshall (2000), and Martinez and Roser (2003) do not incorporate any studies that directly relate to technology’s influence in the reader response process. In addition, little research exists exploring and examining the use of threaded discussions in middle school classrooms. Fortunately, rich and growing research continues to advance our understandings regarding the nature of the social construction of talk and semiotic communication to deepen and enrich understanding (Alvermann, 1999; Cazden, 2001; Gambrell, 1996) though attention and study are needed
in how these processes take place in middle school classrooms. These developing influences as well as current research on the social implications of learning as well as the importance of students’ responses to literature, articulate a need to study what happens when technology is used as an instrument in facilitating response in the learning and teaching process.

Purpose of the Study

This study seeks to contribute to the fields of reader response, the utilization of technology in classrooms to enhance student learning, and to the ways in which students and the teacher talk and interact with each other to nurture their response to texts. This study explores the ways in which the students and the teacher respond to the texts they read and discuss together in two environments. The first environment is a small group face-to-face discussion environment. This environment, commonly used in classrooms, involves the students and the teacher meeting together in a face-to-face context to discuss their thoughts and reactions to a common text that they are reading. The second environment takes place through an on-line threaded discussion board where the students and the teacher write and post responses to the text they are reading and to each other in an electronic and asynchronous computer environment.

By examining two different reading groups in one classroom, each using these two different environments, this study looks to articulate the various ways that these response environments are utilized by the students and teachers. The following research questions guide the study.
Research Questions

This research study focused on examining how students in a fifth grade classroom respond to texts both in face-to-face and in on-line relationships. The role of the teacher is explored to examine the ways in which the teacher can facilitate the responses of students. How the students responded to their reading and to each other in the different environments is explored. In specific the research questions state:

1. In what ways does the teacher facilitate student responses:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?

2. How do the students respond to texts and to each other:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
   c. In the physical computer environment?
   d. Across the multiple contexts?

Definition of Terms

*Asynchronous technology:* A time-shifted exchange of data or information. Thus it may occur at different times, rather than at the same time.

*Constructivism* – a learning theory in which knowledge is constructed through an active process and is often supported by individuals working together collaboratively to scaffold their understandings.

*Synchronous technology:* A concurrent exchange of data or information (in the same time frame)
Text: Following the definition of Bloome and Egan-Robertson (1993) a text is created through printed words, in a conversation that is conducted, and other social events. It is “something done by people to experience” (Bloome & Egan-Robertson, 1993, p. 311).

Threaded discussion: A bulletin board (commonly on the Web or Internet) based site in which users write a question or comment that is then “posted” or “published” for others to read and comment upon at their convenience. Different topics or responses (“threads”) can occur simultaneously.

Significance of the Study

With the growing utilization of technology in society and classrooms, the examination of the above questions is significant for those interested in encouraging and developing readers’ responses in both traditional and technology-enhanced environments. Though a lengthy history of research exists in the nature and development of reader response, little has been conducted regarding the influence of technology in the reader response process. As the development of technology continues to grow and the utilization of technology in classrooms expands, educators desire to know the ways that these technologies can be utilized to support and nurture student learning and understanding.

Hickman (1979), Martinez and Roser (1991), McClure (1985) and others have documented the effect that adults have upon the reader response process. These researchers articulate the significance of the adult in these environments. With the continuing growth of technology in classrooms, research is needed that examines the
adult’s role in designing and guiding the reader response process in a technological environment such as an on-line threaded discussion. A growing call can be found in the research for appropriate utilization of technology in classrooms (Leu, Kinzer, Coiro, & Cammack, 2004); however, little research exists that supports our understandings of the important role of the teacher in that integration. This study was designed to contribute to the body of research supporting our understandings of the ways that teachers utilize technology in support of student understanding.

Summary

The following chapters tell the reader the “story” of this study. Through these four chapters, the inception, process, and findings are described to provide an understanding of the history and development of this research. An explanation of the related literature, methodology, context, analysis, and summary with implications for educational practice and future research are provided.

Chapter 2 reviews the literature that provides the structure and background for this study. This review encompasses a broad overview of the importance of authentic high quality literature, followed by a review of the importance of book discussions in classrooms. Following the review articulating the importance for discussion of books, an examination is taken of the ways in which students and teachers co-construct knowledge through the discussions and texts that they share. The important role of the teacher in nurturing the discussions and co-construction of meaning is then examined. A historical overview of the reader response process follows this examination of the role of the teacher in the reader response process. The chapter then concludes with a review of the
importance of authentic technology applications in classrooms with a specific look at how technology can facilitate and support the reader response process.

Chapter 3 describes the qualitative methodology utilized in this study. It incorporates an overview of the methodology and a description of the context in which the study took place. The data collection process is described along with a description of the data analysis procedures that were utilized to thoroughly examine the data. Finally, the conclusion of the chapter discusses the issues of trustworthiness that were addressed throughout the study.

In chapter 4, a description is given to provide the context of the classroom environment in which the teacher and students work and learn together. The remainder of this chapter is organized around the two guiding research questions and the results of the data analysis for each of those questions.

Finally, chapter 5 is organized in three sections. The first section provides a summary of the research study and the significant findings that were presented in chapter 4. The second section discusses the implications that emerged from the data analysis process. The third and final section illustrates the limitations of the study and suggests possibilities for further research.
CHAPTER 2

REVIEW OF RELATED LITERATURE

Introduction

This chapter reviews the relevant research to provide a context to the study and to inform the construction of the essential components. The goal of this review is to articulate the current, relevant understandings related to the constructs of the study and to make a case that this study contributes to the fields of reader response, the important role of the teacher, and the potential of technology usage in the reader response process.

This review argues that though research exists in how students talk and learn together, there is limited evidence on how this talk can support and scaffold students’ understandings. Research also describes the role of the teacher in supporting and nurturing an environment that supports discussion and reader response. However, little research exists that articulates the ways in which teachers can support reader response in a technological environment. This review of literature also illustrates that though depth and breadth exist in the theoretical writings and research studies of reader response, little exists that specifically addresses how technology applications might assist and enhance the reader response process.
These pieces together illustrate the need for a study that (1) examines the ways that students and teachers can support and facilitate their responses to texts in typical and alternative environments; (2) describes the role of the teacher in nurturing reader response in both face-to-face and technology based settings, and (3) explores the ways in which technology applications can assist and encourage the responses of readers as they react to texts.

In order to set the context for the study, this chapter provides an overview of the literature of the historical and current research that has taken place in relation to the major components to the study as outlined. This chapter will therefore begin with a broad look at the authentic uses of literature in elementary classrooms illustrating why it is important for classrooms of today to utilize meaningful literature. One of the ways that authentic literature can be enhanced is through book discussions. A definition of book discussions begins the review, illustrating how they support and encourage children’s reading. As students talk together in book discussion groups a co-construction of knowledge transpires that allows for the scaffolding of all members’ understandings. This learning can take place both inside and outside the stereotypical classroom environment. Research reviewed in this chapter illustrates the importance of the teacher’s role in the utilization of book discussions and in nurturing dialogue in the classroom. Finally, the importance of reader response and the technological possibilities to support reader response are reviewed to articulate the ways in which all of the previous components can come together in a classroom or on-line environment to support student understanding of the literature they read.
To provide a clear background for this study, this chapter summarizes the relevant research using the following structure:

I. The Use of Authentic Literature in Elementary Classrooms

II. The Importance of Book Discussions

III. The Co-Construction of Knowledge

IV. Re-conceptualizing Space

V. The Importance of the Role of the Teacher

VI. A Historical Examination of Reader Response

VII. The Application of Technology in Reader Response

The Use of Authentic Literature in Elementary Classrooms

Sadly, research documents our nation’s decline in its amount of time and enjoyment of reading (Trelease, 1995). An article published in 2004 from the National Endowment for the Arts states that literary reading in the United States has declined over 10% since 1982, with the largest rate of decline found in the age group of 18 to 24-year-olds. The report states that, “literary reading in America is not only declining rapidly among all groups, but the rate of decline has accelerated, especially among the young” (p. 7). Though many factors may contribute to this decline, one potential factor lies in the possibility that students are learning to read, but are not learning to enjoy reading. As Huck (1977) wrote, “there is little value in just having the ability to read if no one ever uses it” (p. 365).

Children’s books, as defined by Huck, Kiefer, Hepler, and Hickman (2004), are those that “have the child’s eye at the center” (p. 5). High quality children’s literature
values and respects children. As Huck et al. (2004) quote E. B. White, “anyone who writes down to children is simply wasting his time. You have to write up, not down” (p. 5). Children know and deserve the same high quality experiences when engaged with books that any adult would demand. Routman (2003) quotes Katerine Paterson as asking, “What are we feeding our children?” (p. 81). The reading diet of our students should be a careful consideration for teachers today. Atwell (1991) asks teachers to reflect on several important questions including, “How do I teach so that each of my students can fall in love with language?” (p. 53). Part of that answer for teachers can be found in the incorporation of high quality literature in the reading diet of children’s classroom instruction.

The uses of authentic, high quality literature can support students in not only learning to read, but in the growing enjoyment of reading. Students who are able to engage in book selection and the reading of high quality literature, and who select the literature activities they engage in, will become responsible, independent readers (Calkins, 1986; Hansen, 1987; Tompkins & McGee, 1993). As Huck (1977) describes “it should be the goal of every reading program to produce children who not only know how to read but who do read” (p. 365).

Huck et al. (2004) describe multiple educational and affective ways that literature contributes to children’s growth and development. Huck et al. (2004) state that at the center of literature’s use is the understanding that literature “provides delight and enjoyment” (p. 6). Also discussed by Huck et al. (2004) is the power of the “narrative as a way of thinking” (p. 6) for children. Talking and performing are ways that adults as well as children make sense of their world and their thinking. Children’s literature
provides a venue to support this narrative. Huck et al. (2004) also discuss the ways that literature provides students with opportunities to utilize their imaginations, to have vicarious experiences, to gain insight into human behavior, and to experience life’s universal questions.

Educational values of the use of children’s literature are also discussed by Huck et al. (2004). They discuss the power of reading aloud and learning to read through the use of authentic children’s literature stating that “accounts published in professional journals and books are replete with stories of teachers’ successes with using children’s trade books in their reading programs. These reports confirm the research that links literature with success in learning to read” (p. 10). Finally, Huck et al. (2004) argues of the power of literature to help students develop a sense of book language, to support their writing, to develop fluency and understanding, and to support critical thinking. As Allington and Cunningham (1996) write, “children who read real books understand why they are learning to read and what reading really is” (p. 57).

A review of the historical uses of literature in the reading program illustrates that as early as 1934 Paul McKee wrote of his “belief in the vital role of literature” (as cited in Martinez & McGee, 2000, p. 158) in his text Reading and Literature in the Elementary Classroom. In 1949, David Russell published Children Learn to Read in which he emphasizes the important role that literature can play in personal growth and provides recommended literature and literature-based activities (Martinez & McGee, 2000). However, these examples are exceptions to the rule which held predominately to the philosophy that skills should be first and then literature.
Examinations of classrooms today find that the utilization of high quality authentic literature is being used far more significantly currently than they have in the past (Martinez & McGee, 2000). Baumann, Hoffman, Moon, and Duffy-Hester (1998) conducted a study of teachers in preschool through fifth grade regarding their reading instruction. One of the key findings of this study was that the goal of 94% of the teachers was to support the development of readers who were independent and motivated to select and enjoy literature. In addition, Baumann et al. (1998) found that 67% of teachers utilized tradebooks instructionally with children and that 72% of fourth and fifth grade teachers stated that they moderately or greatly used trade books. In addition, 79% of the fourth and fifth grade teachers stated that they utilized literature response based activities. Martinez and McGee (2000) state that “clearly, children’s literature has become increasingly central to reading instruction in the 1990s, as teachers incorporated tradebooks into their programs” (p. 160).

Much of this change in the instructional use of authentic literature in the classrooms has been led by teachers and through the publication of teacher centered materials that illustrated research based philosophies and activities that supported teachers in changing from the basal reader approach to the integration of authentic literature. Publications from authors such as Atwell (1987, 1991), Routman (1988, 2000, 2003), and Calkins (1986, 2001) supported teachers in the uses of reading and writing workshops as well as shared reading and literature based content instruction. Though controversial, the whole language movement with an emphasis on student ownership, authentic literature, and the integration of thematic units across the reading and writing
curriculum, contributed to teachers’ understanding of the power of quality literature usage in student learning (Goodman, 1986; Newman, 1985).

The classrooms of today require more than ever the use of authentic literature. Students need to “engage with thought-provoking literature in order to nurture the deep thinking that will be equated with literacy in the next millennium” (Martinez & McGee, 2000, p. 167). “Teachers who work with older students will increasingly choose to use complete works of literature rather than excerpts that are currently found in basal readers” (Martinez & McGee, 2000, p. 167).

As Allington and Cunnigham (1996) describe, “basal programs severely limit the development of important student book selection strategies” (p. 87). If we want our students to be lifelong learners and readers who are independent and motivated to choose and read books, classrooms must incorporate the use of authentic, high quality literature.

The Importance of Book Discussions

With the use of authentic literature, teachers need to provide ways for the students to respond to the literature they are reading. As Short (1998) writes, “adding a focus on literature to the curriculum will result in only small changes in readers’ talk about books unless there is also a fundamental change in social relationships within the classroom” (p. 34). One of the ways in which this talk or response can be nurtured is through the utilization of book discussions. These discussions can happen through the use of literature response journals in which the teacher and the students share their thoughts and feelings of a common book. They can also happen through the use of electronic technologies such as e-mail and threaded discussion boards. These electronic
possibilities are explored later in this chapter through the section focused on the application of technology in fostering reader response. Literature groups or book discussion groups are more commonly being used in classrooms today. In this setting small groups, which either are student-led or teacher-led, gather in a common place to discuss the literature they are reading in a face-to-face environment.

Literature discussion groups typically consist of small groups of students, usually four to six, who concurrently read a common book. The teachers and the students then come together to “construct and refine deeper meaning and understanding of the text” (Morrow & Gambrell, 2000, p. 574). Through these book discussions, students are able to interpret literature and engage in critical levels of thinking (Maloch, 2002; McGee, 1992). Huck (1977) articulates that any discussion group should center on the enjoyment and appreciation of the literature. Peterson and Eeds (1990) also clearly articulate the purpose of literature discussions or in their words “grand conversations” when they write:

Children will come to see themselves as readers who bring their own meaning to the text in an authoritative way, who share their interpretations with others, and who listen to what others have to say. They become critics of literature, and they grow both in their expectations of literature and in their aesthetic experience. (p. 19)

These “grand conversations” hold great potential for teachers and students to engage, share and build in their appreciation and understanding of the literature that they are reading.

Gambrell (1996) reviews the research that illustrates how the engagement of text discussions supports student knowledge. The three themes are (1) discussion promotes
deep understanding of text, (2) discussion elevates higher level thinking and the ability to problem solve, and (3) discussion facilitates communication skills. Each of these areas will be explored to illustrate the importance of discussion in supporting the reading of literature.

Numerous research studies have illustrated that the discussion of literature promotes the deep understanding of text (Alvermann, 2000; Cazden, 2001; Gambrell, 1996). Through discussions, students enhance their understanding and appreciation of the text that they have read. As students read they may decode the words and understand the passages, but still have difficulty comprehending. Through group discussions the students are able to articulate their understandings and strengthen their understandings based upon that shared by the other members of the group. In addition, the time to discuss literature encourages students to share their aesthetic responses with each other. These factors all support the students’ reading comprehension and deepen their understanding of the text (Gambrell, 1996).

The incorporation of book discussion groups also allows students to elevate their higher level thinking skills and problem-solving skills. As students are provided the opportunity to talk and explore their own thinking they can develop “more extended and more elaborate mental representations and higher level analytical thinking” (Barnes, 1993, p. 31). Eeds and Wells (1989) concluded from their research that “talk helps to confirm, extend, and modify individual interpretations and creates a better understanding of the text” (p. 26). Through this process students can negotiate in-depth critical thinking and elevate their thinking and problem-solving skills (Almasi, 1996).
The last theme that Gambrell discusses centers on the improvement of communication skills through discussion. Students need to be provided the opportunity to articulate their own thinking as well as interact with other students, and recognize and respect the view of others. In addition, as students learn to communicate effectively with each other, they develop skills and behaviors they can use to work effectively throughout their life (Gambrell, 1996; Gilles, 1998).

These three themes illustrate the powerful learning opportunities that discussion time in literature groups brings to students’ learning. Research has documented the power that “talk” brings to the learning process (Cairney, 1996, Maloch, 2002; McGee, 1996). Vygotsky’s (1986) work centers on the ways in which we interact and talk with others. Through the process of talk, we internalize new understandings, and this process scaffolds our understandings. This process of talk is not independent or individual in nature. As Bakhtin (1981) writes, “language is not a neutral medium that passes freely and easily into the private property of the speaker’s intentions; it is populated – over populated – with the intentions of others” (p. 294). Language is a tool that we use to construct our own mental thoughts through the process of interacting with others in meaningful, social activities (P. Smith, 2001). Through our thoughts (that are intermingled with the thoughts of others) and the discussion of others’ thoughts, new, more complex understandings are built. Language is never a monologue, it is a dialogue (Bakhtin, 1981).

This use of language as a scaffold can be a pedagogical tool (Mercer, 1995) that supports the understanding of the participants. Students who engage in dialogue and are allowed to independently engage in the construction of their understandings will build “a
critical, constructive rationality” (Mercer, 1995, p. 6). Mercer defines this type of discussion or talk in which students constructively and critically engage in the sharing of ideas as exploratory talk. Students through talk are able to “negotiate, evaluate, and transform the knowledge they acquire” (Fuhler, Farris, & Nelson, 2006, p. 646) through which they construct meaning. While the students individually construct meaning, that meaning will be enriched by the sharing and collaborating through social interaction with others. As Alvermann (2000) eloquently states, “discussion is a bargain at any price” (p. 148).

Though Commeyras and DeGroff (1998) report that 95% of English teachers value the use of peer discussions for the enhancement of literature discussions, less than 33% of teachers incorporate time for peer discussion into their instruction. Ivey and Broaddus (2001) also report that though teachers want students to read critically, they rarely provide the time for students to hold critical conversations regarding the books they are reading. Multiple reasons exist for the avoidance of student discussions in classrooms. The most prevalent of these reasons resides in the teacher’s consistent search for more time in covering the extensive curriculum that is given to them and a fear of losing control over students and the conversations that they have (Freedman, 1993). However, Maloch (2004) reports that more and more classroom teachers are creating spaces for students to engage in meaningful talk through the use of discussion groups.

When teachers do incorporate classroom talk or discussion into the curriculum, much of those classroom conversations are dominated by the teacher. In these conversations, teachers are either holding predominate turns at talk or expecting a recitation of information or assessment of students’ knowledge and comprehension.
Teacher dominated talk tends to slip into an initiate-respond-evaluate (IRE) pattern (Cazden, 2001; Mehan, 1979; Newkirk & McLure, 1992). These conversations begin with the teacher providing the topic of conversation, the students then attempt to find the right answer, and the teacher provides an evaluative comment about the response. In this teacher dominated discussion, students are provided limited chances to engage in their own construction of meaning. Instead, they search only for the answer that is desired by the teacher. This type of dialogue discourages authentic talk about the text. In this environment the interpretive authority is held by the teacher who opens the conversation, asks the questions, controls who answers, and evaluates the answers that are given. In this environment “students’ voices are silenced and their identities within the community are marginalized” (Almasi, 1995, p. 318).

In an environment in which the teacher acts as the interpretive authority of the literature, students engage in procedural engagement (Nystrand & Gamoran, 1991). In this type of engagement, the group members follow the rules and procedures that govern the rules of classroom behavior trying to only find the “correct” answer or the “right” response rather than trying to collaboratively contribute to the discussion.

For this reason talk must incorporate supportive communication. Helpful talk or communication encourages the flow of ideas, sharing, and engaging dialogue (Henson, 1993). All members of the discussion must be willing to listen and communicate. As Wilkinson and Silliman (2000) write, “to a great extent, the language used by teachers and students in classrooms determines what is learning and how learning takes place” (p. 337). When a community is formed that shares the interpretive authority among students and the teacher, all members can explore the possible meanings of the text. In this
environment all members of the group become co-constructors of knowledge as will be further discussed in the following section.

McGee (1996) refers to the talk that takes place in this supportive communication as “response centered talk” (p. 195) that can encourage students to construct and discover new information together. Through response-centered talk readers are able to share with fellow students and teachers their thoughts and feelings regarding their reading. They can negotiate through the conversation or “talk” their personal insights and consider the alternative perspectives of fellow group members. This type of “response centered talk” encourages the students to have ownership over the conversation. Response-centered talk allows the three themes of Gambrell (1996) to prosper. Students hold a discussion that can promote deep understanding of text, they talk together to elevate higher level thinking and to problem solve, and this talk facilitates their communication skills.

A discussion of this caliber orchestrates more than students and teachers talking together. At this elevated level, readers are thinking together to “collaboratively co-construct meaning, not just working together cooperatively to complete a task” (Short & Pierce, 1998, p. viii). Finding time for this advanced talk or discussion is critical for students to articulate and clarify their own understandings and to support the advancement of other members’ understandings.

The Co-Construction of Knowledge

As illustrated in the previous section, literature discussion groups can provide for the participants to engage in social interactions to support their understandings and together facilitate a co-construction of knowledge. Fish (1980b) described the power of
“interpretive communities” in which students and teachers talk together to share alternative views of their reading. These alternative ideas influence the members of the group and impact their individual thoughts. This section articulates how an interpretive community, formed in the shape of a literature discussion group, can support both individual and collective understandings as the participants talk and learn together.

Conversations regarding reading are usually defined in terms of cognitive skills contained within the mind of the reader. Autonomous models of reading that incorporate a single reader and a single text have dominated research (RAND Reading Study Group, 2002). This isolated model of reading is found in many classrooms and in most assessments of reading. The RAND Reading Study Group defines reading comprehension as “the process of simultaneously extracting and constructing meaning through interaction and involvement with written language. It consists of three elements: the reader, the text, and the activity or purpose for reading” (RAND Reading Study Group, 2002, p. xiii). This definition of reading comprehension nurtures the preconceived image of a single reader with a single text.

However research from the New Literacy Studies (Gee, 1999, 2000; Knobel & Lankshear, 2002b; Lankshear & Knoble, 2003a; New London Group, 1996; Street, 2003) are advocating a new look at literacy, reading, and the social nature of literacy. The New Literacy Studies view reading not as an autonomous process, but as a socially constructed one. The New Literacy studies illustrate that there are multiple places and ways that individuals read and write and that the context of the process is an important element. The New Literacy Studies advocate the understanding that readers build on what they know as they read and use what they know to make inferences from their reading.
These perspectives come from a sociocultural and sociolinguistic orientation in that literacy is intertwined with the cultural and social context in which it occurs (Bloome & Bailey, 1992; Brown, Collins, & Duguid, 1989; Rogoff, 1990). Literacy is primarily a social act (Bloome & Green, 1992) and the discussions or talk that can take place are a critical part of that social construction of understanding and meaning. As Almasi (1996) describes, “as participants gather in social context to exchange thoughts, new understandings and meanings may emerge as participants interact with one another. Thus... meaning resides in the event” (p. 6). Gambrell (1996) argues that this process of social construction through shared exchange “reflects a Vygotskian (1978) perspective that the ways in which we think are learned through our social interactions” (p. 29). From this perspective, knowledge is accepted that the community has constructed and agreed upon together. Vygotsky (1978), Rogoff (1995) and Wertsch (1998) have all theorized that learning and development occur at the highest levels when the participants can participate in the social nature of the community.

This social nature of discussion has been illustrated by Jewell and Pratt (1999) who write,

The interplay between each student’s personal response to the text and the context created by the discussion is a dynamic social process that encompasses a world beyond the reader and the text. This social dynamic shares the characteristics of the individual process students engage in when reading but diverges from it in distinct ways. (p. 846) In this environment the autonomous model of reader and text no longer exists. Instead, a larger social world is opened that provides for multiple interpretations from all members
of the group. These social settings provide the very means in which the construction of new knowledge, meaning, and interpretations are built through interactive language (Gavelek & Raphael, 1996). Jewell and Pratt (1999) continue by stating,

In the fluid interplay between individual response and shared topics, students continually incorporate the thoughts, ideas, questions, and opinion of their peers into the field of their own interpretations, and in turn respond to the responses of the others in the discussion group. (p. 846)

These discussions or conversations are the foundation of a socially shared experience (Almasi, O’Flahavan, & Arya, 2001; P. Smith, 2001). Thought processes that previously would have been hidden are now made public through the talking process. There is reciprocity through the experience of sharing and reaction in the building of collaborative texts and new understandings. As Galda (1998) explains, it is through dialogue that “we test, alter, and enlarge our constructed meaning” (p. 3). Alvermann, Dillon, and O’Brien (1987) illustrated that learning is facilitated through social exchanges.

Teachers often try to access student knowledge by asking questions that require minimal response. When knowledge is accessed in this way, students are not permitted to textualize their knowledge in a meaningful, public way. The process in which students narrate their thoughts and experiences is often rapidly passed over in superficial ways. As Barnes (1993) describes,

It is all too easy to treat students’ existing knowledge as if it were irrelevant to carefully prepared curricular plans and therefore to discount their ability to make sense of the world for themselves. This is why it is
essential for all teachers. . . to give students’ talk a central place in their lessons (p. 33).

Instead knowledge can be shared with others in a way that students are encouraged to discuss their understandings and narrate to each other the kinds of experiences and thoughts that they have. In this environment, a new “text” is created for the students or the “public” classroom. These experiences become a socially constructed text that can now be used intertextually with the printed text that the students have read.

Literature discussions and students’ comprehension can be deepened from intertextual practice. These intertextual practices are frequently seen in two different ways. The first way views the process as the juxtaposition of multiple texts and with the interaction of multiple people; however, the context focuses around the individual. Each individual is reading and creating his or her own meaning. The comprehension resides in each individual participant. Leal (1993) illustrates this interpretation stating, “a more informed child spurs his or her peers to consider other perspectives and rethink prior knowledge, leading to new interpretations” (p. 114). In this description one child helps other children build their own individual understandings and comprehensions.

A second perspective looks at intertextual practice in a collective, collaborative way. From this perspective, comprehension occurs as a group. There are individual perspectives shared and from the shared texts and shared understandings a group, collective meaning is created. Understanding becomes a collective act wherein a public interpretation is created. Leal (1993) states:

When one child expresses his or her personal prior knowledge, the prior knowledge of other participants is activated. These shared thoughts
stimulate further ideas from others in the group and the result is a collaborative construction of meaning for all. In essence, shared prior knowledge about a particular topic or text becomes corporate knowledge and part of the discussion group’s textual understanding. (p. 116)

This is a cyclic process as the students support their growing comprehension in a public way. As Leal (1993) writes, they were “helping each other to modify and extend individual interpretations. This new negotiated understanding would not have been available from an independent reading” (p. 114). Students in this environment can find meanings, solve problems, and enrich understandings through the collaborative understandings of each other. They collaboratively become co-constructors of knowledge rather than trying to guess at a right answer.

These practices of discussion illustrate that students need to act in concert with others in the co-construction of knowledge. Vygotsky (1986) illustrated in his work that learning is embedded in social interactions. These social interactions provide the basis for the construction of the intertextual relationships. Johnson (2004) reminds us that the “intellectual life is fundamentally social, and language has a special place in it” (p. 2). The students in this way can use social, public conversations to textualize their understandings of their reading that encourage them to organize and understand their comprehension in new ways. Gavelek and Raphael (1996) write that “social settings are the very means by which students come to acquire and construct new knowledge, new meanings, and new interpretations of text through interactive use of language” (p. 184). When we support our students to engage in a social environment that provides the opportunity to narrate their experiences and understandings, we encourage the creation of
an intertextual experience to be social constructed. This intertextual layering of multiple
texts deepens and enriches our students’ comprehension beyond the autonomous models
that have dominated research and instruction. These social interactions are not limited to
the confines of the traditional school walls, but can occur through alternative, multiple
spaces.

Re-conceptualizing Space

The understanding of space is turning from the belief that space is “empty,
available, and waiting to be filled up” (Sheehy & Leander, 2004, p. 1) to the re-
conceptualizing of space that is not situated and is flexible (Lefebvre, 1991; Sheehy &
. . it is dynamically relational” (p. 1). This statement illustrates that the spaces in which
we live and work fluctuate, change, and adapt. They are not inert and concrete. They
develop and fluctuate according to the content and context of the situation and are the
“product and process of socially dynamic relations” (Sheehy & Leander, 2004, p. 1).
Examining space from this perspective illustrates it not as the outcome of social
interaction but is instrumental in shaping the social practices that form it.

Soja (1996) argues for an understanding of how the social engagements of people
shape these new dynamic spaces. “Spatial practice (or social practice) involves
production and reproduction of relationships between people, people and things, and
people and practice” (Sheehy, 2004, p. 95). The space that is created and shaped through
social relationships and social processes is often referred to as a Thirdspace (Lefebvre,
1991; Soja, 1996). As Moje, Ciechanowski, Kramer, Ellis, Carrillo, and Collazo (2004) explain, “Some scholars refer to this in-between, or hybrid, space as “third space,” explicitly emphasizing the role of the physical, as well as socialized, space in which people interact” (p. 42). The concept of Thirdspace in this work is viewed as a socially constructed space that forms through the process and product of the participants talking and learning together.

Soja (2004) holds that space is made and remade through the people, thoughts, materials and other particulars that are present at a particular given time. As Moje et al. (2004) state, “we call this integration of knowledges and Discourses drawn from different spaces the construction of ‘third space’ . . . different or alternative space of knowledge and discourses (p. 41). As individuals talk, interact, work together new spaces are formed and these discourses are “socially constructed knowledges of some aspect of reality” (Kress & Van Leeuwen, 2001, p. 24).

This Thirdspace can in essence become a site for socially negotiated understandings of the group to be co-constructed out of the multiple and complex discourses of all those involved. Together the participants of any discourse come together to create a new “space” or Thirdspace that builds upon individual understandings into a shared meaning. As Lefebvre (1991) writes, “every discourse says something about a space (places or sets of places); and every discourse is emitted from a space” (p. 132). The creation of a Thirdspace can emerge from any social process or production such as a face-to-face interaction or in an on-line environment.

For example, Davies (2006) examined the Thirdspace that developed from the use of an on-line photo sharing website, Flickr. This site allows individuals to post digital
photos and write and respond to each other about the photos allowing for a written
dialogue to emerge. Through the dialogue of an on-line global community discussing the
photos, separate discourses of diverse individuals are brought together into a shared
Thirdspace. The talk and discourse of the participants created a new Thirdspace.

Students engage in the creation of a Thirdspace through their talk and work
together. Their discourse creates and shapes the space. The conception and
understanding of Thirdspaces provides a way to understand the spaces that develop when
students respond to their reading and to each other. In such a space, students and teachers
can together discuss, share, and co-construct their individual and collective
understandings of texts and their responses to the texts. This Thirdspace breaks the
stereotypical physical boundaries of the classroom walls and transcends into
arrangements that nurture the discourse of the participants and the co-construction of the
understandings that result.

“Ethnographers of writing and reading want to know where and when and for
what purposes reading happens; what the environments are and look like in which
reading happens” (Kress, 2003, p. 141). To investigate these environments,
ethnographers must consider environments that go beyond the ‘brick and mortar’
classroom walls. Research that goes beyond the stereotypical classroom space is critical
to explore the possibilities of learning in the Thirdspace.

The Important Role of the Teacher

The use of authentic literature, the incorporation of book discussions, the creation
of an environment that encourages the co-construction of knowledge as well as the
utilization of a Thirdspace are all facilitated through the involvement of a very important
person, the teacher. In the classroom, it is the teacher who chooses whether or not to
incorporate authentic literature into the curriculum. It is the teacher who determines
whether or not to make time for group book discussions. It is the teacher who decides
whether or not to nurture a classroom environment that incorporates student dialogue and
experience that builds a co-construction of knowledge and understanding. This section
discusses the important role of the teacher in developing and cultivating an environment
that allows for these important factors to take place.

*Teacher’s Role in the Use of Literature*

Teachers quite often are the driving force in whether or not authentic literature is
used in the classroom. As Huck et al. (2004) describe “the goal of all reading programs
should be not only to teach children to learn to read but to help them learn to love
reading, to discover the joy in reading” (p. 600). The discovery of the joy of reading does
not come from the completion of worksheets or the reading of stories that have been
developed for a basal series format. It also does not come from experiences and
classrooms that are void of authentic books or the use of such books. It is teachers who
read to students, who read with students, and who talk about their reading together with
students that model this love of reading and instill an appreciation for quality literature.

In this role, teachers may select the literature that they use or may incorporate
student recommendation and selection into what is chosen to be read (Calkins, 2001;
Routman, 2000). Teachers may purposefully choose a particular genre or author for
study. The teacher may also incorporate the type of book selection with a curricular unit
of focus. In this way the teacher may not only focus on finding a “good book” but also
other features the books may bring to the curriculum (Hanssen, 1998). The book should incorporate features that are provocative and engage the students in thought. The book should “challenge their view of the world and trigger deeper meaning” (Routman, 2000, p. 181). Rosenblatt (1995) describes that the book should “reflect a sense of the possible links between the material and the students’ past experience and present level of emotional maturity” (p. 42). Perhaps most importantly however, the choice of literature should center upon a story that is motivating, interesting, and engaging to students.

The Teacher’s Role in the Use of Book Discussions

After making the commitment to use authentic literature and the commitment to incorporate literature book discussions in the classroom, the teacher must make yet another decision – what type of role they will play in the utilization of discussion groups. Wiencek (1996) states that this is the “most important issue a teacher must resolve before initiating literature discussion groups” (p. 215).

The role that a teacher takes may hold a variety of forms and may adjust according to the needs of the students. As Almasi (1996) describes, in the book discussion environment, the teacher’s role can be similar to that of someone giving a recitation. Freedman (1993) refers to this as the transmission model in which the teacher feeds the information to the students and evaluates if the students have understood the ‘transmission.’ In this mode the teacher asks the majority of questions that he or she has predetermined and are text-based in nature. In this environment the teacher calls on students to respond and the questions and answers are directed to and through the teacher. The teacher also acts as the evaluator, providing feedback regarding the “correctness” of a student’s response. A consequence is that students often become reliant upon the
teacher and look to the teacher as the primary source of information. Thus students relinquish their responsibility for taking an active role in literature discussions (Alvermann, Dillon, & O’Brien, 1987). Overt teacher leadership fosters procedural interaction and encourages a limited, procedural understanding of the literature (Maloch, 2002).

In contrast, Almasi (1996) writes that the teacher may engage in the role of the facilitator. From this role the teacher asks only a few questions and often models the use of open-ended questions personally. The teacher nurtures the dialogue to go through the students rather than the teacher. In this environment the teacher stays as quiet as possible and only provides feedback in the best opportunities.

A third role the teacher may choose is that of a neutral role in which book discussion groups are facilitated by the students and the teacher does not fully participate throughout the length of time the book group meets. In this more neutral role, the teacher encourages the students to take charge of the conversation in what is often referred to as a “peer–led” discussion group. This type of environment, though lacking teacher participation and guidance, can provide students the opportunity to engage freely in conversations without teacher intervention, thus requiring students to manage the discussion without adult intervention (Almasi, 1995).

Each of these roles can provide opportunities and challenges for the student and teacher. In the recitation mode, the teacher can relay the information to the students quickly and efficiently, checking for understanding as they progress. Unfortunately, this model discourages student participation, can be very un-motivating for students to learn, and eliminates any possibility for co-construction of knowledge between the participants.
The peer-discussion model provides students the opportunity to discuss their understandings together, but without adult participation there is less opportunity for scaffolding and teacher support within the zone of proximal development. As Almasi (1996) explains, though students benefit from the experience of being given the freedom to discuss what is important to them, they also “profit from teacher guidance. Students need some direction in how to move toward more interpretative or critical stances with respect to their reading of text. Thus, teachers play a significant role in guiding students toward higher level discussions” (p. 34).

Teachers who utilize a facilitator role can often provide a balance within the discussion group between leader, guide, and model as the situation requires. Through these roles, the teacher can adjust his or her level of participation to the needs of the group. As the teacher flexibly adjusts, he or she can work to support the group members within their zone of proximal development (Vygotsky, 1978).

Particularly when students are new to using discussion groups, the teacher may fill the role of a leader. As Maloch (2004) writes, teachers play a central role in “providing preparatory experiences for students prior to the implementation of literature discussion groups” (p. 313). Prior to the beginning of utilizing discussion groups the teacher should engage the students in talk about the meaning, purpose, and procedures that are critical for successful discussions. These discussions and direct leadership give students the understanding from the beginning of the expectations and framework that will be used in the literature groups. In this way the:

Teacher assumes a leadership role, setting the focus of the discussion and determining both specific questions and probes. Serving as discussion
leaders, teachers are able to guide students toward better understanding of text and to draw attention to particularly salient themes and issues.

(Maloch, 2002, p. 94)

Gavelek and Raphael (1996) write, “Students need leadership from their teachers in making these situations educative and meaningful, as well as multiple opportunities in which to engage in discussions” (p. 184). Gavelek and Raphael continue that, “teachers play a critical role in establishing the environment in which students learn to respect one another, to engage in conflict around ideas rather than personalities, and to encourage each other and support peers’ learning” (p. 189). This environment is often established with direct and specific teaching from the teacher.

The teacher may also fill the role of a guide when utilizing literature discussion groups. In this role, the teacher guides the discussions and provides the advantage of demonstrating the genre tools and language within the students’ zone of proximal development (Wells, 1999). An advantage to teacher-guided discussions resides in the teacher’s ability to demonstrate the use of language and tools of the genre within the students’ zone of proximal development (Galda & Beach, 2001; Wells, 1999). Eeds and Wells (1989) articulate this process in literature discussion groups, when facilitated by teachers, can turn into “grand conversations” in which students’ responses are encouraged, student generated ideas are nurtured, and literate talk is demonstrated.

Eeds and Wells (1989) observed that the students and teacher built meaning by working together in literature discussion groups through discussing critical elements of the story and through co-constructing meaning and understanding together. As Huck et al. (2004) write:
As teachers listen carefully to children’s responses in book discussion groups, they can identify teaching possibilities, plan future conversations, or make use of a teachable moment to make a point. When the teacher is an active participant rather than the director of a group, children more readily collaborate to fill their own gaps in understanding and make meaning together. (p. 609)

Filling the role of a discussion guide can be challenging as there is a fine line for the teacher to negotiate in providing the support the students need without taking control away from them (Hanssen, 1998). It is important for the teacher to not enter the discussion with an agenda but rather encourage the discussion to develop naturally and spontaneously. Peterson and Eeds (1990) describe the teacher’s role as guiding “gentle inquisitions” where the teacher “has some ideas about direction and purpose but maintains a healthy uncertainty, and ability to live within the moment which leaves them open to respond to whatever emerges within the encounter” (p. 22). In this role “teachers must be receptive to students’ responses. This requires an atmosphere of trust so that students share openly and know their thoughts are valued” (Dugan, 1997, p. 89).

Finally, teachers may also fill the role of a model in the literature group discussions. As a model, the teacher provides an example in how to ask questions and in how to listen and respond to the responses and questions of other members of the group. Langer (1990a) holds the position that the students’ discussions of books are enriched when knowledgeable teachers model real questions and conversations about the literature. The modeling and receptiveness of teachers is critical in nurturing students’
responses. Teachers must build an atmosphere of trust for students to feel comfortable openly sharing and to trust that their thoughts are valued (Rosenblatt, 1982).

Teachers can discourage student talk in three ways as identified by McMahon (1996): “(1) deciding when and where to begin a discussion, (2) determining turn-taking, and (3) emphasizing particular curricular goals” (p. 225). The teacher’s talk becomes a model (Raban, 2001) for the students in either a positive or negative way. Through positive modeling, the teacher can provide appropriate scaffolding, supporting students with the time that they need to discuss among themselves the various aspects of the book they are reading and sharing. Through this modeling and time for independence, students can learn to monitor their own discussions. As Huck et al. (2004) write, “A teacher models reader behaviors that mature readers practice” (p. 610).

Almasi and Gambrell (1994) showed that during literature discussions in elementary school classrooms particular forms of social interaction foster the growth of strategies for literary interpretation. Wilkinson and Silliman (2000) write:

When teachers encouraged students to listen closely to one another, entertain multiple interpretations of text, and recognize alternative perspectives, the students gained – that is, they responded and challenged each other, interpreted the text’s meaning, challenged authors’ style, shared opinions, and questioned. (p. 350)

The teacher’s role in the creation and fostering of successful literature discussions is highly important for engaging, high level conversations to take place.
Teacher’s Role in the Co-Construction of Knowledge

The teacher is often the most frequent talker in a classroom. Therefore, the ways in which the teacher talks and the ways in which the teacher encourages or suppresses student talk is a critical component to the students’ ability to build intertextual understandings (Cairney, 1996). Knowing that the personalized and socialized way in which students make sense of their learning is critical. It “falls on teachers to create with their students a community in which meaning making is their intention” (Watson, 1993, p. 8). The work of Vygotsky (1978, 1986) and Rogoff (1990) have direct implications for the ways in which teachers can support or suppress the talking and learning of students as they co-construct knowledge and understandings.

Vygotsky work centers on the belief that learning moves through a process of being guided in learning to the ability to be independent. “Under adult guidance or in collaboration with more capable peers” (Vygotsky, 1978, p. 86) students are able to successfully experience and learn. This space or gap between learning with support and being independent was referred to by Vygotsky as the zone of proximal development (ZPD). In each lesson, an active teaching process happens, in which the more capable peer adjusts and adapts for the learner as needed. The teacher thus plays a vital role in supporting the students through the learning process to the point in which they are independent. This process, often referred to as scaffolding, provides support to the learner until he or she is ready to be independent.

From a related perspective, Rogoff (1990) encourages teachers to engage in guided participation. Rogoff views the role of the teacher as one who “builds bridges” in supporting students as they move from their current understandings to new knowledge or
understanding. This guided participation from teachers is collaborative as there is a sharing of understandings from the students and the teacher. Through this process there is a “cognitive, social, and emotional exchange between participants in learning” (Cairney, 1996, p. 175). A teacher’s role, utilizing the theories of Vygotsky and Rogoff, is to provide learning situations that are supported and scaffolded according to students’ needs and in which students are able to extend their current knowledge and understandings.

Bransford and Cocking with Donovan and Pellegrino (2000), in their report from the National Research Council, *How People Learn*, speak to the importance of the teacher’s role in scaffolding when they write, “Adults help children make connections between new situations and familiar ones” (p. 112). Teachers provide these opportunities for students when they create an environment that supports and encourages all participating members to talk and share their thoughts and understandings. A “critical role of the teacher is to . . . use dialogue to assist learners in accomplishing a task that they could not complete without assistance” (Barrentine, 1996, p. 53).

Through this dialogue, teachers create the opportunities discussed earlier in which members share their knowledge together and through that socially shared experience find meaning, solve problems and enrich understandings. As Wolf (2004) explains, teachers should “rather than simply deliver, do everything they can to up the ante on talk, because they know that through language – the ‘tool of tools’ – children come to express and expand their thinking” (p. 112). In this role “teachers should not only invite but also encourage students to make personal and intertextual connections (Cox & Many, 1992, p.
Allington (2001) writes emphatically that the teacher needs to provide students time to talk.

The role of the teacher’s “talk” becomes an essential component in fostering student learning and in building the classroom community (Freedman, 1993). Through the talk that teachers use, they must build the classroom community, model and challenge thinking, illustrate adult ways of talking and looking at things, offer direction, and nurture a social environment. This talk should be “personal as well as social and show that the teacher is also a learner. Thus, the teacher becomes both a guide and a participant” (Freedman, 1993, p. 223). Teachers who control the talk in the classroom and limit the amount of opportunities students have to interact with each other “dramatically reduce the opportunities for guided participation to occur” (Cairney, 1996, p. 175).

As Barnes (1992) has written, “the central problem of teaching is how to put adult knowledge at children’s disposal so that it does not become a straightjacket” (p. 80). This struggle for teachers can be challenging as they look to find the right balance between providing students the supportive instruction that they need without imposing their own process of understanding. Barnes (1993) describes the teacher’s role as shifting from one in which the teacher stops asking questions to ensure that students arrive at the ‘right’ answer to one in which the teacher poses questions that engage the students in exploratory talk.

Summary

This section provided a context to understanding the important roles that the teacher employs in the classroom. The teacher must not only decide to utilize authentic literature, he or she must also make wise choices regarding the books that are used.
Similarly, the teacher, once making the commitment to incorporate book discussions into the curriculum, must also decide what role to take within those literary discussions. As illustrated in this section, that decision must often change and adapt between the roles of leader, guide, and modeler, according to the needs of the group. Finally the teacher may also fill the role as a facilitator in the co-construction of knowledge. The role that the teacher takes in the classroom, and the kind of talk and dialogue that he or she engages in, directly impacts the experiences and learning environment of the students whether it be in a face-to-face environment or through the cyberspace of an on-line threaded discussion (Williams & Murphy, 2002). In the next section, the historical background and the importance of reader response in the classroom will be explored as the nurturing of reader response is critical in the utilization of authentic literature, literature book discussion groups, and the roles that the teacher takes in fostering the responses of students as they co-construct their understandings together.

An Examination of Reader Response

*To read well, that is, to read a true book in a true spirit, is a noble exercise, and one that will task the reader more than any exercise which the customs of the day esteem.*

*(Thoreau, 2004, p. 99)*

Reader response theory has a long and complicated history that has evolved over time. Hickman (1979) writes that “response to literature is a topic that is widely discussed but often narrowly understood” (p. 1). Purves and Rippere (1968) report that:
Response to literature is mental, emotional, intellectual, sensory, physical. It encompasses the cognitive, affective, perceptual, and psychomotor activities that the reader of a poem, a story, or a novel performs as he (sic) reads or after he (sic) has read. (p. xiii)

The complicated nature of reader response theory has led to a rich, developing body of research that has evolved through our history of understanding the reading process and the abilities of children and adults. Cooper (1985) writes that reader-response theory “emphasizes the value of literature for self-knowledge and for understanding others” (p. xii). He continues by explaining that reader-response theory shifts authority away from the text and to the responses of the individual reader. The development of reader response theory over time has eventually placed emphasis upon the reader and allowed for individual interpretations to be valued, giving validity to personal understandings (Many, 1994).

This section identifies what the literature commonly acknowledges as the major elements of the reader response process: (1) the reader, (2) the text, and (3) the context. A brief discussion then follows outlining the history of reader response theories, tracing their development over time. As Beach (1993) states, “an extremely wide range of attitudes toward and assumptions about, the roles of the reader, the text, and the social/cultural context shaping the transaction between reader and text” exist in the literature today (p. 2). This section provides an outline of these developments in the history of reader response and an exploration of the implications for instructional practice.
The reader-response process has been seen as including the following three components (1) the reader, (2) the text, and (3) the context (Athanases, 1993; Galda, 1983; Marshall, 2000; Martinez & Roser, 1991; Rosenblatt, 1985b; Smagorinsky & Coppock, 1995). Rosenblatt (1978/1994) writes that the transactional reading process between these elements forms the “poem.” As Hancock (2004) writes, reader response is “affected by who we are as readers, the books we select to read, and the broad and narrower contexts that surround the reading event” (p. 9). These components interact to form the reader’s response to literature.

Early in the history of reader response theory an emphasis was placed upon the author and the text. The author component of the text is studied less frequently in the current literature. From what was historically entitled the New Criticism viewpoint (Beach, 1993; Rosenblatt, 1978/1994a; Squire, 1994), in which it was believed there was one right answer from the literature to be taught, the author wrote the text and it was the responsibility of the reader to read the author’s work in the one right way. The focus then was on trying to understand what the author’s meaning was in the work and in finding the “right” answer. Over time, however, the importance of the author has faded so dramatically that there has been a “death of the author” (Barthes, as cited in Sipe, 1999, p. 120). Though most reader response theorists believe that the meaning of the text resides within the reader’s interpretation, the author’s influence is, in reality, still present in current reader response theories.

Sipe (1999) articulates three ways in which the author’s presence is felt in the reader response process with children. First, children often question the author as they
read. A child may ask “I wonder why the author chose to end the book that way?” or “Why did the author tell me that?” Second, the authority of authors is an important component in the reader response process. Children and adults often respond to texts in which a perspective is not valid or of authority. As Sipe (1999) writes, “it is interesting to compare the response to books by authors who are insiders to their culture with response to books by authors who are outsiders” (p. 121). Finally, Sipe identifies the importance of the author’s stance. He writes that there are three different stances that an author can take in which a reader might respond. They are “stances toward societal norms and ideologies, the politics of advocacy, or the politics of attack” (p. 121). Sipe describes that it is important for children to understand the author’s stance in order to understand the book and understand their own response.

As researchers began investigating the nature of the reader, text, and context of reading chemistry, an understanding began to grow that relied less on the power of the writer and more on the power of the reader. In essence, reader response theory began to articulate that a personal transaction occurred between the text and the reader that had less to do with the author than originally thought (Fish, 1980b, Rosenblatt, 1938/1995, 1978/1994a, 1985a). Beach and Hynds (1991) write that though this personal transaction perspective is held by most reader-response theorists, “there is considerable disagreement as to the degree to which the reader and/or the text contributes to meaning and how meaning is constituted” (p. 455).

The reader.

Readers can differ in many ways including their stance toward a text, in their cultural and social orientations, in personal characteristics and attitudes, gender, and in
their prior knowledge base (Beach & Hynds, 1991; Martinez & Roser, 1991; Sipe, 1999). The importance of the reader in the reader-response process has grown in understanding through time. Specifically, the belief that young children are active constructors of knowledge, capable of sophisticated thoughts and inferences has generated interest and research into what young children understand about print and story, how they construct meaning, and the ways that they respond to literature (Martinez & Roser, 1991). Readers of all ages interact and engage with texts to invoke a response (Galda, 1983).

Rosenblatt clearly illustrated this importance of the reader very early in the development of reader response theories in her text, *Literature as Exploration*, stating:

Terms such as the reader are somewhat misleading, though convenient, fictions. There is no such thing as a generic reader or a generic literary work; there are only the potential millions of individual readers of the potential millions of individual literary works . . . The reading of any work of literature is, of necessity, an individual and unique occurrence involving the mind and emotions of some particular reader. (Rosenblatt, 1938/1995, p. 24)

However, as will be illustrated through a brief review of the history of reader response, her ideas and understanding of the personal transaction of the reader with the text went unheard for decades. Probst (1992) articulates the importance of the reader stating:

A reading that really respects the integrity of the text must also pay attention, close attention, to the readers’ responses, thoughts, feelings, and memories, because without that close attention to self, readers have no
way of knowing where anything comes from. They have to define themselves against the background of the text, and the text against the background they themselves provide. Similarly, they must learn to pay attention to the shaping influence of context on the meaning and significance of the literary work. (p. 61)

In this way, Holland (1985) articulates that we individually construct the text being read, bringing to bear the individual, personal schema that each of us holds. Because of this, the “actual readings vary so much from one person to another. Reading is permeated with the uniqueness of your personality or mine” (Holland, 1985, p. 7). As Sumara (2002) writes, the reader is “always in the process of inventing a new relationship among what is remembered, what is currently experienced, and what is imagined” (p. 70).

It is important to note, however, the importance of a reader’s stance. A reader may accept, embrace, or reject a text (Sipe, 1999). Students reading different versions of a particular fairy tale may accept the different representations though embracing a favorite. A text that does not accurately represent a culture or that does not follow a reader’s expectations may be rejected. For example, Enciso (1994) describes in her work how students may reject a work that does not accurately represent their culture. Beach (1990) articulates that this process of response from the individual reader is a “social, cultural activity” (p. 73) that Rosenblatt (1985b) articulates as a “unique coming-together of a particular personality and a particular text at a particular time and place under particular circumstances” (p. 104).
Over time, research has been conducted that acknowledges the variety of ways in which a reader may respond to a text. Responses can include various artistic forms such as drawing, drama, painting, music or can be expressed verbally, in various types of writing and in many other ways. However, oral and written expressions of text responses have dominated the research field (Applebee, 1978; Fish, 1980a; Squire, 1964).

*The text.*

The text, for Rosenblatt, is only squiggles or marks on a page (Martinez & Roser, 1991; Rosenblatt, 1978/1994a, 2005). Rosenblatt (1978/1994a) describes the text as “merely scratches, marks on parchment or paper until some reader makes meaning out of them” (p. 23). She also describes the text as a musical score in need of interpretation by the reader and “inkspots on paper until a reader transforms them into a set of meaningful symbols” (Rosenblatt, 1938/1995, p. 24).

The text, though no longer the focus of reader-response critics, is still a critical component in the reader-response process. Without the text there would be nothing in which to respond. The reader’s individuality affects his or her response as the “parts of the text that resonate most deeply with each reader are the ones that speak most clearly to his or her own basic personality or ‘identity theme’” (Sipe, 1998, p. 76).

Different types of text promote different types of responses. Sipe (1999) utilizes categories created by Barthes to distinguish the difference between “writerly” texts and “readerly” texts. In a readerly text, the reader passively consumes the book and the information that it contains. In a writerly text, the reader must place him or herself within the work actively to construct the text for themselves. Sipe acknowledges that all
meaning making requires active participation, but distinguishes that some texts require more participation than others.

Children respond to all parts of a book. Title pages, end pages, and illustrations are all elements that a reader might respond to while reading literature. For example, Kiefer (1983) spent 10 weeks observing children’s responses to visual illustrations. As a participant-observer, Kiefer found that children responded to illustrations as individuals, as groups, and with other children. Kiefer found that students’ responses changed depending upon the books they were discussing and they talked about books in very different ways. She also found that their vocabulary grew as their familiarity with a wide range of picture books developed.

The text may also “act as mirrors and windows” (Galda, 1998) to which children may respond in their reading. The text as a mirror allows children the opportunity to see themselves in a text. As a window, students have the opportunity to look through the panes of glass and experience what another culture might be like. In this way, the same text may act as a window for some children while acting as a mirror for others.

The context.

The context of a situation in which a person reads and responds to text is beginning to receive increasing attention in the literature and in researchers’ work. Sipe (1999) describes the context as a “series of nested boxes or circles” (p. 125) in which the smallest of the shapes reflects the individual context, in which a reader builds out to the classroom community context, and then it moves out again to an environment outside of school, incorporating a student’s ethnic and socio-cultural world. In these different contexts or environments, students might respond to literature in different ways. For
example, in a classroom rich with literature, a student may easily respond by making intertextual connections with other texts that are accessible in the classroom environment. As a classroom community, a student’s response to a text may be influenced by his or her classmates and their responses to literature in what Fish (1980b) refers to as an “interpretive community” (p. 167). Finally, students reading outside of the classroom may react differently to literature when surrounded by their own socio-cultural environment. In fact, Langer (1994) writes that from her work she views that children’s responses are based “as much on a reader’s own personal and cultural experiences as on the particular text and its author” (p. 207).

An important component to the contextual factors that influence the reader response process is that of a supportive adult such as a parent or teacher. Researchers (Hickman, 1979, 1980, 1981, 1995; Martinez & Roser, 1991; McClure, 1985) have documented the effect that adults have upon the context for readers. Teachers (and parents) who create and foster a nurturing environment that encourages students’ responses to literature directly affect the quality of those responses in positive ways (McClure, 1985). Teachers are a critical component in forming and fostering communities of students in which reader response flourishes (Galda & Beach, 2001; Martinez & Roser, 1991).

Marshall (2000) identifies two assumptions prevalent in the research that explores the context of reader response. First, the research assumes that the “conventions of schooling have an enormous influence on the kinds of literary response that students will come to see as appropriate and even natural” (p. 393). Students respond in ways that they know meet the expectations for the rules and regulations that form the procedures of the
The second assumption centers on the belief that an individual will respond to literature in a way that is influenced by the “norms, values, and preoccupations of a reader’s cultural context, that these are internalized by readers and become the intellectual tools with which responses are built” (Marshall, 2000, p. 393). The reader’s culture is both inside the person reading and surrounding the reader outside. This prevalent culture directly affects the responses that are made.

These components of the reader response process (text, reader, and context), which are central to what defines reader response theory, have developed, changed, and fluctuated in importance through time. Early research in the history of reader response identifies the author as central to the meaning making process. Over time, text took on a predominant role in reader response theory. In recent research and literature, it is the reader and the context that are viewed as central to the understandings of the reader response process. This will be illustrated through a brief review of the history of reader response theory.

* A Brief History of Reader Response Theory

The study generally regarded as the beginning of reader response research was conducted by Richards in 1929. Richards studied his undergraduate students and their responses to 13 poems. His text, *Practical Criticism*, is still influential and frequently cited in historical reviews of reader response. Richards’ study looked at what students said in response to reading particular poems. However, the study focused on what they got “wrong” in the reading and interpreting of the poems. This research was conducted
under the influence of the New Criticism in that there was a right and wrong way to interpret a text (Beach & Hynds, 1991; Langer, 1994; Purves & Beach, 1972; Purves & Rippere, 1968; Squire, 1994).

Ten years later, in 1938, Rosenblatt wrote her foundational text, *Literature as Exploration*. This text is now seen as the first statement regarding the transactional approach to reader response (Rosenblatt, 1991; Tompkins, 1980). In this text, Rosenblatt (1938/1995) introduces her ideas of a transactional relationship in reading in which the literary work exists as a “live circuit set up between reader and text: the reader infuses intellectual and emotional meanings into the pattern of verbal symbols, and those symbols channel his (sic) thoughts and feelings” (p. 24).

Adapting the term transaction from Dewey and Bentley (1949), Rosenblatt stated that rather than seeing the interaction of the reader and the text as separate, a transactional relationship sees the process as “reciprocal or circular” (Rosenblatt, 1991, p. 60) in a bond that affects each component through the process. The reader, drawing upon individual cultural and social perspectives, transacts with the text to create “the new meaning, the literary work, whether poetic or nonpoetic, is constituted during the actual transaction between the reader and the text” (Rosenblatt, 1991, p. 60). From this transactional process, as Rosenblatt (1978/1994a) articulates in her later work, the “poem” is born. As Martinez and Roser (1991) write, the term transactional describes “the relationship between reader and text, with the reader as constructor of the literary experience guided by the text, rather than one seeking a precise interpretation of text” (p. 644). However, with the beliefs of New Criticism still dominant, Rosenblatt’s transactional theory went unrecognized for decades.
The publication of the *Dartmouth Seminar Papers* (Squire, 1968) redirected the focus of reader response instruction by insisting “that the proper concern of teachers is response to literature – not the literature itself, examinations of the history of literature, or knowledge of authors or literary periods” (Squire, 1994, p. 639). A turn in the history of reader-response had begun with this seminar as researchers began to acknowledge that there were additional factors at play rather than a single meaning being conveyed by an author. Hickman (1979) summarizes the report of the Dartmouth Seminar Group stating their three major premises as (1) a response incorporates active, not passive, involvement; (2) reader response includes immediate response as well as delayed, later effects, and (3) verbal responses may illustrate only a small portion of internal responses. These three elements illustrate a movement in accepting the influence of the reader in the reader response process.

In 1964, Squire conducted research that attempted to examine the reader’s response as it occurred, rather than after the reading was complete. Squire examined the responses of 52 ninth and 10th graders. Squire stopped the students five times during their reading of a text as well as upon completion to explore their responses to the reading (Birnbaum & Emig, 1991). Squire developed response categories in his research that focused on students’ struggles in understanding literature, such as failure to grasp meaning and irrelevant associations. Squire concluded that individual readers respond to texts in unique ways and that response is formed through a variety of factors (Hickman, 1979). Squire’s research illustrates the two developing shifts in the research and practice of reader response in the late 1960s. First, as discussed previously, researchers and teachers were beginning to understand the importance of focusing on responses to
literature and not the teaching of the literature itself. Second, researchers were beginning to examine and understand the impact of prior knowledge and personal schemata and how these factors influence the comprehension process (Squire, 1994).

*The Reader, the Text, the Poem* was written by Rosenblatt in 1978 and generated a great deal of excitement regarding the difference between aesthetic reading and efferent reading. Rosenblatt illustrated a theory that distinguished between responding to literary texts and informational texts, yet recognized that both kinds of reading are influenced by the reader’s prior knowledge and experiences (Squire, 1990). Rosenblatt (1989) articulated that “essential to any reading is the reader’s adoption, conscious or unconscious, of a stance” (p. 158). From Rosenblatt’s perspective, that stance is based upon either an aesthetic or efferent perspective of reading (Rosenblatt, 1978/1994a, 1980, 1982, 1985b).

An aesthetic reading refers to a reading in which the “reader experiences and savors the qualities of the structures, ideas, situations, scenes, personalities, and emotions that are called forth and participates in the tensions, conflicts, and resolutions as they unfold” (Rosenblatt, 1978/1994a, p. 68). Rosenblatt (1985a) later describes this as what the reader “is living through during the reading-event” (p. 38).

Rosenblatt chooses the word efferent from the word *efferre*, which in Latin means to carry away. Efference, as Rosenblatt (1985a) explains, occurs when a reader’s attention “is focused mainly on what the words refer to, on what is to be taken away from the transaction” (p. 38). Rosenblatt states that these two distinctions are often seen as “scientific” and “artistic” (Rosenblatt, 1994b). However, no reading is completely one or
the other. Instead, a reading moves along a continuum that necessitates taking into account a reader’s attention and stance (Rosenblatt, 1985a, 1994b).

Rosenblatt (1994b) writes that no two readings, even if by the same person, are ever the same. Throughout the reading, neither the text nor the reader remains fixed. Instead, the reader’s stance shifts which influences the text, which then influences the work of the text and creates what Rosenblatt calls “the poem.” Rosenblatt (1991) states that “whether the reading event will produce a literary or nonliterary work depends on the reader’s stance toward the contents of consciousness during the transaction with the text. The reader chooses whether to read the text efferently or aesthetically” (p. 60). Sumara (2002) articulates that for Rosenblatt it is “the relationship between reader and text as a site for the production of knowledge, not merely the interpretation of knowledge” (p. 92). In this way “readers and texts and contexts of reading collaborate in the continued inventing and interpreting of knowledge” (p. 93).

Applebee’s (1978) research examined the responses of children in alignment to Piaget’s stages of development. Through his research examining children’s response to literature, Applebee developed a continuum of characteristic responses that children made based upon their Piagetian mode of thinking (Applebee, 1978; Hade, 1990). Applebee asked each child, “What is the story about?” and categorized their responses. Applebee found that children move through a continuum of responses moving from a more personal response to a wider, more general base of understanding. For example, children in a preoperational stage tended to respond to literature through narrating the story. Children at a formal operational stage could generalize the work, considering its various literary elements (Applebee, 1978). Hepler and Hickman (1982) articulate
Applebee’s developmental stages in that “children use characteristic modes of responding which seem to be age related” (p. 278).

Bleich’s book *Subjective Criticism* (1978) is also seen as a keystone text in the development of reader response theory. Bleich articulated that the individual should personally explore his or her responses and that each particular reader will have a unique experience with the text. Bleich (1980) focused on the “active role of the reader – his (sic) status as a subject rather than an object – in developing his response, and it conceives this response as the outcome, or expression of, the reader’s relationship with the author or the text or both” (p. 142). Bleich (1978) sees the text as a mirror being held up to the individual and reflecting that reader’s self in the text.

Iser had a focus upon the reader in his theory of the reader response process. For Iser, who wrote *The Implied Reader* in 1974, the author wrote for a reader who was “right” for the book. He felt there was a reader for whom the book was made. Iser also wrote of the author’s use of “gaps” in which the reader is left to “fill in the gaps in his (sic) own way” (Iser, 1980, p. 55). In this interpretation, each reader will complete the gaps in his or her own way (Rosenblatt, 1991). Iser “seemed to believe that the reader’s strategies for ‘performing’ a text are a result of interacting with the language of the text” (as cited in Hade, 1990, p. 8).

Iser (1978) explained that the reader chooses to create meaning from the text being read, and for Iser, that meaning is created individually in the mind of the reader. The reader’s own experiences affect the meaning “whereby textual structures are transmuted through ideational activities into personal experiences” (p. 38). For Iser, the
text initiates the meaning, but it is in the hands of the reader to make meaning from that text.

Fish (1980b) also focused on the experience of the reader stating, “It is the structure of the reader’s experience rather than any structures available on the page that should be the object of description” (p. 152). Fish’s text, *Is There a Text in this Class?*, incorporated the debate stemming from a student who questioned a colleague on whether or not he would be using a text. The colleague replied to the student that there was a text, and began to describe the text. The student interrupted stating, “No, no. I mean in this class do we believe in poems and things, or is it just us?” (Fish, 1980b, p. 305). The student was searching for the professor’s beliefs in whether it was the reader or the text that held the authority. Fish would hold the reader as the authority.

Previous research had predominately focused on what the response is and not as much on the how the response came to be (Probst, 1991). Marshall (2000) describes this change of focus as research moving to examine the actual process of reader response rather than the factors affecting it. Though some researchers have suggested that cognitive development influences readers’ response (Applebee, 1978), others have shown that the degree of exposure to literature, as well as the contextual situation, greatly impact the responses children have in reading (Hickman, 1981; Kiefer, 1983; Lehr, 1988). Research at this time in history shifted to examine these elements of process and previous experience with literature.

Research conducted by Hickman (1979, 1981) is considered in the literature to be particularly noteworthy as it was one of the first to examine children’s responses in naturally occurring environments (Martinez & Roser, 1991). In her study she “tapped
dimensions of response that had remained untouched by more conventional approaches” (Martinez & Roser, 1991, p. 645). Hickman used an ethnographic, participant-observer role to identify “significant social and temporal factors influencing children’s responses” (p. 645). Through her research, Hickman (1979, 1980, 1981) broadened the definition of what “counts as a response to literature and where researchers need to go to study responses” (Hade, 1990, p. 16).

Martinez and Roser (1985) examined the effects of hearing a story multiple times upon the reader response process. In their two case studies of 4-year old children, they found that there were four major changes that illustrated the differences in response when children heard a story repeatedly. First, children would talk more about familiar texts than unfamiliar texts. Second, when a text was heard for the first time the children would ask more questions. When heard repeated times, the children made more comments. Third, as children heard the stories repeated times, they gained more control over the story structure and were able to change the focus of their attention over additional dimensions of the story. Finally, additional readings encouraged the children to discuss the story more deeply (Martinez & Roser, 1991).

A body of research also came into publication emphasizing the importance of adult interaction upon the reader’s responses to literature. Kiefer (1983) examined the influence of the teacher’s rereading of picture books. Kiefer noted the children’s deepening and broadening responses to the book as children had increasing opportunities to interact with the text supported by teachers. McClure (1985) studied students’ responses to poetry. McClure notes that the two teachers who had been identified as
using a great deal of poetry in their instruction had “created a physical and emotional climate which supported children’s emerging responses to poetry” (p. 274).

Hepler and Hickman (1982) summarize the importance of context in the reader response process stating:

The literary transaction, the one-to-one conversation between author and audience, is frequently surrounded by other voices... what children do with books, what they say about them, and what they seem to think of them are all influenced in part by other people. (p. 279)

As the work of these studies shows, that influence may directly impact the response children have with the text and definitely speaks to a social, contextual dimension of response. As Galda and Beach (2001) articulate, the ways in which readers respond to literature is influenced “as they acquire various social practices, identities, and tools not only through participation in interpretive communities of practice, but also through experience in acquiring social practices and tools and in constructing identities within specific cultural worlds” (pp. 66-67).

With this foundation, Langer’s research examined the multiple factors inherent to the response process. Langer’s (1990a) study focused on how students respond to text and what they do with it. In her research, Langer developed the term “envisionment” referring to “the world of understanding a person has at any point in time” (Langer, 1995, p. 9). The envisionment a student has refers to his or her understanding of a text, “whether it is being read, written, discussed, or tested” (Langer, 1995, p. 10). These envisionments change, develop, and enrich over time with the thoughts and experiences of reading. Langer (1995) writes that envisionments articulate the understandings a
reader has while reading, directly related to the transaction between the reader and the text.

Through her research, Langer (1990a, 1990b, 1995) identifies four stances that students utilize in responding to literature as they develop meaning. Langer names her first stance as “Being Out and Stepping in an Envisionment.” In this stance, the reader uses existing prior knowledge to identify with the world of the text and begins to construct an envisionment. In this stance, the reader utilizes all available clues to make sense of the text in relation to the reader’s personal understandings.

In the second stance, “Being In and Moving through an Envisionment,” readers become immersed and swept away by the story or by the discussion of an informational text. Readers become lost in the text, using their personal understandings to further advance the meaning making process. New information is immediately applied to schema.

The third stance, “Stepping Out and Rethinking What One Knows” is characteristically different than the other three. In this stance, the reader reflects on envisionment with the text and what the new meanings gathered from reading imply for existing prior knowledge. Rather than applying prior knowledge to reading, in this stance the reader systematically reflects on how growing envisionments from the text change and enhance existing prior knowledge.

Finally, the fourth stance is titled, “Stepping Out and Objectifying the Experience.” Through this stance, the reader distances him or herself from the envisionments that he or she has developed, “reflecting on and reacting to both the
content and the experience. The reader objectifies the text, judges it, and relates it to other texts or experiences” (Langer, 1990b, p. 813).

As has been illustrated through this brief history of reader response theory, a great deal of work has been conducted that examines and analyzes a reader’s process and effects in reading and responding to a text. Early in the history of this theory, researchers and teachers believed that the sole meaning of a text resided in the intentions of the author. Later, a growing understanding developed in the transactional relationship between a reader and a text. As Karolides (1997) summarizes, this is “the foundational idea: the reading act necessarily involves a reader and a text. Without a reader, text does not come into existence – does not have meaning or invoke feelings or sensations, but it is just squiggles on a page” (p. 7). Karolides goes on to explain that this transaction is not automatic. The reader must be “able to decipher the marks on the page and be willing to become engaged with the text” (p. 8). Distraction, indifference, or inattention may inhibit a reader’s response.

Rosenblatt (1978/1994a) described this process in which the reader creates a new work as “the poem.” She articulates this critical point by writing that “the poem” cannot come into existence without both the reader and the text working together. The transactional process demands a relationship that develops between the reader and the text to create the “poem” or the response.

Recent literature has advanced this understanding, illustrating the importance of the reader, the text, and the contextual elements of a reading. Researchers have been able to document that children’s responses to literature can be illustrated in a multitude of ways influenced by the cultural context of the reader (Martinez & Roser, 1991). Current
research has begun to illustrate the importance of the context in which a reader responds to literature. For example, the impact of a reader’s culture upon the reader response process has been studied and reviewed by Enciso (1994) and Galda and Beach (2001). Smagorinsky and O’Donnell-Allen (1998) have examined the role of alternative media in interpreting and responding to literature. Others (Chu, 1995; Larson, 2002; McKeon, 1999; Swan & Meskill, 1997a, 1997b) have researched the role that various technologies may have in the reader response process. Though it is beyond the scope of this chapter to review all of the contextual ways in which a reader may respond, it is important to note the great influence these factors have upon the reader response process. Responses to reading always occur within the context of the reading (Hickman, 1980) and are often shaped by the communities of practice (Galda & Beach, 2001).

Reviews of the literature reveal a multitude of ways in which to summarize the research on the response to literature; historically as this chapter has attempted, through categories of response (Beach & Hynds, 1991), through levels of response (Beach & Hynds, 1991), and others. However as Vipond, Hunt, Jewett, and Reither (1990) articulate, there is no one mode of response that should be seen as the best, but rather it is important for the reader to flexibly use a method of response that is most appropriate for the specific combination of text, purpose, and context. A reader who would be defined as successful would be able to use a complex combination of response options.

Though the opinions of reader-response researchers vary, there are two important elements that are consistent throughout the research. First, a shift has occurred from focusing solely upon the text to an understanding that there is a reader-text transaction, and, second, that the reader is an active meaning maker in the process of reading, not a
passive receiver of information (Athanases, 1993). This transactional perspective also must take into account the factor that readers determine their own purposes for reading (Wiseman, Many, & Altieri, 1992) and these purposes are often related to a reader’s stance (Rosenblatt, 1978/1994a, 1985a). Martinez and Roser (2003) articulate four characteristics that have emerged from this rich history of reader response research: (1) responses from children are varied and rich developing from the transactional relationship that Rosenblatt (1978/1994a, 1985a) described, (2) each child’s response will be individualized to his or her own personality and context, (3) the developmental age of the child will affect his or her response, and (4) as texts become increasingly familiar, responses to the text will be affected.

Squire’s (1994) review of reader response theory details 10 implications for practice that are supported by the substantial body of research that exists and that are important for researchers and teachers alike:

1. “The teaching of literature must focus on the transaction between the reader and the work” (p. 640).

2. “Response is affected by prior knowledge and prior experience” (p. 640).

3. “Response differs with time and place” (p. 641).

4. “Response to literature varies with the rhetorical model – narrative or non-narrative, efferent or esthetic” (p. 642).

5. “Readers generally have a common response to a literary text, yet no two responses are identical” (p. 642).

6. “Works of genuine literary quality can evoke richer, more meaningful experience than can ‘psuedoliterature’” (p. 643).
7. “It takes two to read a book” (p. 644).

8. “Important developmental differences can be seen in the ways children respond to literature” (p. 645).

9. “The sounds of words are often as important as their sense” (p. 645).

10. “The ways in which we teach literature will permanently affect our students’ responses” (p. 645).

The history of reader response illustrates the important role it plays in facilitating and nurturing student understanding and in encouraging students to express their thoughts, feelings, and reactions to the literature they are reading. The following section articulates the ways in which technology tools can enhance this important process of reader response.

The Application of Technology in Reader Response

Technology has become part of the culture in which our students live. Travis (1998) states, “this generation of readers will not feel much threatened by cyberspace, virtual reality, or hypertext . . . they live in a world in which the human and the technological are markedly coexistent, integrated, and mutually defining” (p. 96). Flood and Lapp (1997) write that the concepts of reader response need to expand to embrace the communicative arts, including the utilization of technology. The RAND Reading Study Group (2002) states that “we live in a society that is experiencing an explosion of alternative texts” (p. xv). These alternative texts are creating a cultural shift in the ways in which text is accessed and read.

The 21st century promises sweeping changes not only in the way children are taught to become literate but in the very nature of literacy itself. The
reason for these changes lies in the transition now in progress from traditional, print-based literacy to electronic representations of text. (McKenna, Reinking, Labbo, & Kieffer, 1999, p. 111)

As Lankshear, Peters and Knobel (2002) explain, “we live in a digital age “where more and more of our time, purposes, and energies are invested in activities involving new communications and information technologies” (p. 31). As more of our daily interactions involve technology, including our classrooms, the implications of this interaction needs to be explored and examined for its potential advantages and disadvantages as Knobel and Lankshear (2002a) explain:

Reading and writing as meaningful practice is always inherently bound up with some way or ways of being in the world. The tools or technologies of literacy (from print to computers) are always situated and employed within contexts or practice which permit certain productions of meaning and constrain others. (p. 6)

New perspectives regarding technology are encouraging an examination of its implications in society and, in particular, in classrooms. Rather than asking the question, “Are computers good or bad for education?” researchers are now exploring questions such as “How can computers best be utilized to support pedagogical goals?” Examining how the “social aspects of learning, as well as students’ responses to literature, implies a need to study what happens when computers are used as a vehicle for response” (McKeon, 1999, p. 700). This section explores the theory and research that articulates the ways in which technology can be applied in the reader response process.
Salomon, Globerson, and Guterman (1989) view computer tools as a potential “cognitive tool that can help the development of thinking skills” (p. 620). This belief comes from the premises of Vygotskian theory in which learning is mediated with a tool that scaffolds understandings and supports the learner’s understandings in the zone of proximal development.

Vygotsky’s (1986) theory centers on the belief that cognition is centered on social activity that becomes internalized. These interactions are supported and facilitated by various tools. Salomon et al. (1989) write “these interactions activate not yet fully developed cognitive functions that allow the learner to perform on a higher cognitive level” (p. 620). This area in between what a learner can do on his or her own and what he or she can do with appropriate guidance is referred to by Vygotsky (1978) as the “zone of proximal development.” The expanded understandings in the zone of proximal development are gradually to become part of the learner’s understandings, becoming internalized so that the learner can “perform on a higher cognitive level independently of the social interaction” (Salomon et al., 1989, p. 620).

Researchers such as Labbo and Kuhn (2000), McKenna (1998), Salomon et al. (1989), and Topping (1997) believe that the computer can serve consistently with Vygotsky’s theory of mediated learning serving as a tool to scaffold understanding. In their view, electronic print with the correct elements becomes the tool to scaffold learners’ understanding in the zone of proximal development. Salomon et al. (1989) write that following their experimental studies they found that an “intellectual partnership” (p. 625) with a technology based tool could provide “reading related, metacognitive guidance” (p. 625). This guidance led to the internalization of the text and
facilitated comprehension in which “a computer tool can serve as a ‘more capable peer’ (Vygotsky, 1978) in a learner’s zone of proximal development and can thus facilitate the development of competency” (p. 625). Salomon et al. (1989) write that the computer tool can provide metacognitive guidance that will increase a learner’s understanding and comprehension.

Labbo and Reinking (1999) illustrate these possibilities for integrating technology as identified through five goals. The first states that “new digital technologies should be available for literacy instruction” (p. 481). In this goal, the premise resides around the belief that technologies must be available for their application in literacy instruction. When the appropriate hardware and software are accessible, literacy practices and instruction will be enriched.

The second goal states that “new digital technologies should be used to enhance the goals of conventional literacy instruction” (Labbo & Reinking, 1999, p. 482). In this goal, literacy instruction is enriched by new accessible technologies. Many applications such as drill and practice software can be seen as a conventional literacy instruction put to a technological tool. Accelerated Reader, a program in which electronic tests are taken after a student has read a book to assess his or her comprehension of the story would also meet this goal.

“New digital technologies should be used to positively transform literacy instruction” (Labbo & Reinking, 1999, p. 484) is the third goal. Word processing and the creation of hypertexts are examples of digital technologies that have transformed the ways in which students write and read. These applications can be seen as transforming the ways in which students generate writing and complete a reading task.
The fourth goal asserts that “new digital technologies should be used to prepare students for the literacy of the future” (Labbo & Reinking, 1999, p. 485). Labbo and Reinking write from the perspective that the new technologies will demand a different future and that what literacy will mean and what the requirements of literacy will be in the future will be very different (Leu, 2000a; Reinking, 1998). These technologies are also believed to be changing the requirements of the future workforce (Mikulecky & Kirkley, 1998) and therefore students will need to be adept in their future careers. Facility in applications such as e-mail, word-processing, and computer data input will be beneficial or required in the future workplace.

Finally, Labbo and Reinking (1999) state that “new digital technologies should be used to empower students” (p. 481). This goal illustrates a sociocultural perspective (Gee et al. 1996) in which students are provided experiences that will prepare them for the future. Labbo and Reinking desire that students be able to “deconstruct not only texts and the technologies that produce them, but also the ideologies with which they resonate” (p. 487). Digital tools of today are embedded in our society and often disappear as we become accustomed to their use (Bruce & Hogan, 1998). When someone says, “I’ll send you a reminder” it is now assumed that the reminder will be sent electronically, rather than through the mail. Students can be supported to use these technologies in a way that is empowering when they understand the cultural impact and its effects rather than just understanding the process of use.

For example, the work of Meskill and Swan (1995) illustrates the integration possibilities of technology in the reader response process. In their research of technology and its role in the response-based classroom they state that “technology represents a
powerful means of promoting and enhancing the processes of literary understanding. We believe, in other words, that the technology can play a role in enhancing the activities of student-centered, response based classrooms” (p. 1).

Meskill and Swan (1996) articulate five ways in which technology can facilitate reader response pedagogy. First, technology can encourage students to control the environment and information they access and comprehend, thus supporting independent learning and response to literature. Second, technology can support a cooperative learning environment allowing students the availability of reading and responding to each other in a collaborative manner. Third, technology can support cognitive and constructivist learning, which aligns with students’ independent construction of knowledge in the reader response process. Fourth, access to an enormous wealth of information and text can be available through the various technologies accessible, which can encourage students to respond in multiple, varied ways. Finally, technology can provide teachers the opportunity to rethink their role as teacher/facilitator and their role as a learner opening up new possibilities for nurturing reader response instruction.

Reinking (1997) wrote that the inclusion of technology into the classroom environment allows for “authentic communication and meaningful tasks” (p. 639). The successful uses of these available technologies blur the boundaries between reader and writer where the reader shares in the creative process (Landow, 1992; Reinking 1995). These perspectives open the door to the consideration of technology enhancing the reader response process. Technologies, such as e-mail, word processing, Internet accessibility, and more can provide students the opportunities to read and respond in new ways (Kinnucan-Welsch & Arnold, 2000).
Connected to the notions of intertextuality, computers provide powerful ways in which information can be cross-referenced, indexed, and located. Students can find and respond to information as they choose (Tierney, Stowell, Desai, & Keiffer, 1993). Readers can “construct and communicate their own interpretations of the meaning within the multimedia information structure” (Kinzer & Leu, 1997, p. 132). This communication can support writers and readers in individual ways.

Beach and Anson (1993) articulate how responding to reading can be easier for some through writing rather than in oral conversation. Utilizing the power of electronic mail and threaded discussions, teachers can encourage students to respond in writing in their own time and space rather than “on the stage” of a classroom environment. In this way, multimedia can facilitate the voices of reserved students (Staarman, 2003). Students previously quiet and reluctant to verbally share their reading responses in a face-to-face environment, may find the on-line environment of disseminating and collaborating reader responses a safe and free place. It can be a “democratizing process, providing agency and extending voice to individuals silenced in conventional forms and forums of communication” (Travis, 1998, p. 98).

Technology can be an integral part to the student’s meaning making process. Projects that incorporate multimedia are often more collaborative and the information presented is often in a multi-linear format. Knowing that reader response is often presented in a variety of ways, students can use the flexible, interactive ways to express their responses to literature in personal ways. In developing hypertexts consistent with a response based approach, educators are looking to “incorporate students’ own and others’
responses so that students can link back to a whole class databank of previous responses” (Beach & Anson, 1993, p. 39).

For example, Joyce’s piece of literature entitled Afternoon allows readers to determine the story as they read. Created in hypertext, this story provides readers the power to determine their own path as they read the story through the available hyperlinks. As Bolter (1991) writes, “The nature of the readers’ responses determines the direction of the experience. Readers experience the story as they read: their actions in calling forth the story, their desire to make the story happen and to make sense of what happens, are inevitably reflected in the story itself” (p. 126). This reading experience articulates a transactional relationship (Rosenblatt, 1978/1994a) between the author and the text that creates the “poem” that Rosenblatt describes.

Others see the development of hypertext in relation to reader response only as an extension of the reader’s stance. A reader may choose or not choose to engage in the varied amounts of information. In this way, he or she may choose to utilize an active or passive stance (Beach, 1993). A technological environment can help create a dynamic community of readers which requires students to engage in their own thinking, writing, and reading activities, but that also requires them to engage in a community of readers and interpreters. A focus must be kept on the pedagogy of the reader response process, however, and not on the technology (Larson, 2002).

Technology can share and support the process of reading, responding in writing, sharing responses, rereading, and rewriting. These technologies are often referred to as computer-mediated communications (Tu & Corry, 2003, p. 303). Through computer-mediated communications, constructive thinking can be nurtured and interaction from the
participants can be fostered. Examples of technologies that provided for computer-mediated communications include electronic mail, chat rooms, bulletin boards, threaded discussions and “multi-user, object-oriented environment” or MOO (Carico & Logan, 2004, p. 293). Computer-mediated environments hold distinct differences from typical face-to-face conversations (Althaus, 1997; Larson & Keiper, 2002; Williams & Murphy, 2002). Computer-mediated environments do not require participants to be in the same place. In the same way, computer-mediated environments do not require the participants to converse at the same time. Someone may respond in the morning and another group member can respond in the afternoon. Computer-mediated environments encourage interactivity and collaboration. Althaus (1997) reports that “whereas much of classroom discussion is dominated by the instructor, studies of computer-mediated discussions have found that instructors contribute anywhere from only eight to thirty-three percent of the messages” (p. 163). Finally computer-mediated environments provide the possibility of richer discussions. As Harasim (1990) reports, the computer-mediated environments allow for more reflective thought time, more attention to the responses and thoughts of others, and provides equal social ground to all participants.

A threaded discussion is an on-line conversation in which readers and writers compose thoughts and questions, posting their work to a common “board” when done. Members of the group articulate their own responses and respond to each other’s thoughts and writing. This environment can provide students the opportunity to “negotiate meaning with the literature they read through a social context that specifically calls for thoughtful response” (Wolsey, 2004, p. 2). This environment provides the teacher an opportunity to extend the classroom into cyberspace.
Through a technology enhanced environment such as an on-line threaded discussion, the possibility exists for the nurturing of conversations that are more reflective in nature. Students in an asynchronous environment may have more time to reflect and deepen their thoughts and responses than an “on the spot” moment in class. They can step back and reflect on their reading, their response, and the responses of others, then come back to the multimedia application and/or conversation to record their thoughts. Students utilize the technology of a threaded discussion to articulate their responses to their reading and to share these responses with each other.

Utilizing the phases for developing literary understandings developed by Langer (1992, 1994), practical examples of facilitating reader responses by means of technology can be illustrated. As Meskill and Swan (1995) found in their research, successful integration of technology into response-based pedagogy should focus on the integration of the application with little focus on the actual application.

Before the literary experience, multimedia can be used to “ease access before reading” (Langer, 1992, 1994). Teachers can incorporate visual images, key information, and knowledge of the author’s craft before the students begin to engage in the text. For example, students can use an author’s websites, slides, and other media to expose students to texts they are to read. Software and on-line resources can be used to support student knowledge before engagement in the text begins. For example, in Bond’s dissertation study (2000) he provided students time to engage in the hypertext tool he was using to gain knowledge of the genre with which his students would be interacting (historical fiction) and to study the topic of his hypertext which relates to the events of the Civil War.
Technology resources can also be fruitful in “creating the literary experience.” Using images, videos, sounds and more, students and teachers can begin to share responses with each other, building a community and facilitating interaction. Teachers in primary grades often use “Living Books” as a way for students to interact together in pairs or small groups. Living Books are typically purchased in CD-ROM format and have been referred to as “talking books.” These resources can “support the child’s understanding and retelling of the story and involve meaning-making processes that weave together affective responses, cognitive processes, and metacognitive activities” (Labbo & Kuhn, 2000, p. 187). Using a Living Book resource in pairs or small groups can allow children to share their responses with each other, creating a social space to build collaboration and community around the text.

Multimedia can support reader response during the reading experience. Hypertext/hypermedia incorporates “written narrative, photographs, graphics, video, music, audio, as well as multiple links to connect the nodes into a web of information” (Bond, 2000). This style of text encourages the reader to respond and interact with a text while he/she is reading. A “choose your own adventure” environment exists, encouraging readers to respond and direct their reading in the direction of their choice. In this way, students can interact with the text, making responses that are juxtaposed with the text they are reading, while surrounded by supporting information, pictures, and so forth. “It allows students to explore a text on their own, by clicking on italicized [or colored] words or phrases to see what is embedded in them, or by navigating linked texts at their own leisure” (Cornis-Pope & Woodlief, 2003, p. 170). Students reading the
hypertext documents can use the extended margins for responding to the hypertext, asking questions and recording thoughts as they read.

Such is the rich environment for student directed response that Bond (2000) created for his middle school students during his dissertation research. Students were given a hypertext with multiple storylines, embedded in each other, and encouraged to read the hypertext in the path of their own choice. The role of author and reader become intertwined as the reader is actively involved in the construction of meaning and is encouraged to select and order the text themselves, adding notes and responses as they read.

Students can “construct and communicate their own interpretations of the meaning within the multimedia information structure” (Kinzer & Leu, 1997, p. 132) when applications such as a response journal, sticky notes, and others are included in the hypertext application. A hypertext environment can encourage all students, but in particular, an otherwise passive student to become engaged and interactive in their reading and response to a text.

Multimedia applications can “invite understandings” and “develop interpretations” (Langer, 1992, 1994) to support students’ reading. On-line threaded discussions can be used to foster and facilitate student responses to text and encourage students to engage in conversations around the text with each other and the teacher. Multimedia projects (such as slide shows, web pages, video anchors, etc.) can be created by students to deepen their understandings and interpretations. For example, in Melragon’s (1999) dissertation study her students created rich hypertext Web pages as a culmination to their readings of Civil War texts. Students clarified and deepened their
understandings, as stated by Melragon (1999), “students learned to combine this new knowledge [text comprehension] and these new perspectives [their reading responses] and to present their understandings through a medium- computer hypertext technology” (p. 158). Melragon later confirms the positive benefits of her project, “the exposure to and development of computer skills provides students with a powerful tool for their continuing literacy development” (p. 161). Students’ understandings were invited, deepened, and enriched.

Multimedia can also provide avenues for readers to “make connections” (Langer, 1992, 1994). Students, upon reading and connecting to what they read, can illustrate new connections in a creative, meaningful way. Woodlief’s (1997) students engaged in discussions where those connections became a rich component of the dialogue. Melragon’s (1999) students created hypertextual web pages that illustrated the connections that they made personally, culturally, and through additional literary sources.

“Exploring the author’s craft” (Langer, 1992) can be facilitated through on-line resources, author created Web-pages, and teacher (or student) created resources. “Living Books” often include links for students to engage with the author and learn from their interactions. Teachers can incorporate hyperlinks through the hypertexts their students read providing access to author notes and thoughts regarding the text. Rich resources exist that provide insight and commentary to the author’s craft.

Finally, “stocktaking” (Langer, 1992, 1994) can be easily taken advantage of in a multimedia environment. Students can return to a particular section of text to re-engage in the reading with a simple click. The hyperlinked environment encourages students to navigate their own course, returning easily again and again, to any particular passage or
supplemental notes with relative ease. This personally constructed reading path is a powerful opportunity for students to continually interact and develop their understandings of a text (Meskill & Swan, 1995).

Through all the stages of reading, multimedia can foster student construction of meaning and understanding through the facilitation of meaningful reader response. As Meskill and Swan (1995) state:

Multimedia represents a tool with which these meanings can be discovered and developed, a potential means of access to a text’s multiple dimensions through which students – with their teacher, with peers, and independently – can enter, and where meaning can be built rather than delivered. (p. 5)

In these ways, the technologies serve as the vehicle for students to explore a text, develop their own interpretations, construct their own responses, and then share those responses within a community. It can be a perfect complement to a reader response classroom when it serves as a motivator and delivery tool. The technologies allow the readers to interact with the text more closely, engage and create their own reading path, and juxtapose their responses to the text as they read. It provides for an extension of their knowledge and understanding through meaningful, personal projects that connect understanding and responses within themselves and that can then be shared in a larger community.

Studies that Examine Technology in the Reader Response Process

Though technology is becoming ubiquitous in today’s classrooms, there is a limited body of research documenting the effects of technology, particularly upon the reader response process (Chu, 1995; Kamil, Intrator, & Kim, 2000). As Lankshear and
Knobel (2003b) write, “There is a paucity of research in the area of technology and literacy” (p. 60). Current reviews of reader response research such as Galda and Beach (2004), Marshall (2000), and Martinez and Roser (2003) do not incorporate any reviews that directly relate to technology’s influence in the reader response process. However, a limited number of studies were identified to examine some examples of the methodologies used to examine technology’s influence on the reader response process.

Chu (1995) examined 3 first grade boys interacting with electronic books. None of the 3 had previous experience with reading books on the computer. The boys interacted with a different book each day for a total of 5 days. Using “quantitative and qualitative methods” (Chu, 1995, p. 356), Chu collected data regarding the boys’ use of mouse clicks and their literary responses, including spontaneous and kinesthetic responses that the boys displayed. Chu counted these responses as well as collected field notes and video tapes to support her analysis. Chu (1995) found that, for the 3 boys in her study, reading the electronic books was “exciting, meaningful, and most of all, enjoyable. The three children were active in the reading process and were very capable of responding to literature in their own individual, unique ways” (p. 361). Chu also states that the students were not passive readers in the electronic environment, but were actively involved in making meaning from the text and in the response process. Chu illustrates in this study that though technological readings have been seen as “efferent reading” (Rosenblatt, 1985a, 1994a, 1995), transactional experiences can occur in which electronic literary resources encourage aesthetic readings and nurture a variety of reader responses.

Meskill and Swan (1995) conducted a study focused methodologically on a content analysis of currently published CD-ROM books examining the elements
consistent with encouraging and supporting reader response. Eight teams of researchers identified broad categories they felt represented applicable attributes to nurturing reader response, such as intertextuality and juxtaposition, facility to make links, accessing multiple perspectives, and facility to share responses. Analyzing 49 pieces of software according to these categories, Meskill and Swan (1995) write that at that time “software attributes complementary to response-based practice are sorely lacking in the representative sample of products we reviewed” (p. 18).

Using a “constant comparative method of analysis” (McKeon, 1999, p. 701), McKeon matched pre-service teachers with 9 and 10-year olds to investigate the patterns of reader response generated by electronic mail communications between the pairs. McKeon found that the pairs engaged in social communications almost as frequently as they responded to the literature. This finding supports the importance of social and cultural communication in a person’s literacy development. In this study, students were also able to conceptualize and articulate their responses through the interactive, electronic writings with adults (McKeon, 1999) who were able to scaffold students’ understandings.

Labbo and Kuhn (2000) conducted a study that incorporated three phases. First, they examined the effective elements of interactive features of CD-ROM talking books by conducting a content analysis of electronic books. The researchers then focused on a case study approach that examined one child’s meaning making process during his interactions with CD-ROM talking books. The researchers analyzed the child’s retellings of these interactively read stories.

From their examination of CD-ROM texts Labbo and Kuhn (2000) found that interactive texts can be “considerate and inconsiderate.” Considerate Living Books
incorporate multimedia effects that are congruent and in-line with the story. For example, in the Living Book Stellaluna, when a reader clicks on an additional bat sleeping in Stellaluna’s tree, it awakes and flies off into the night. This is defined as “considerate” as it is consistent with the story and what might really happen. However, in the Living Book, Arthur’s Teacher Trouble, the reader can click on a hot pad sitting at the table where Arthur is engaged in his homework. The hot pad then turns into a butterfly and flies around the kitchen. This is not consistent with the story, or reality, and is thus defined as “inconsiderate.” Labbo and Kuhn (2000) report that students may become disengaged and their ability to make logical connections may become impeded as events in inconsiderate text do not follow the logical consequences they know to expect and thus disrupt the story-telling process.

In phase two, Labbo and Kuhn (2000) implemented a case study approach in order to study more closely one child’s interactions with electronic books. The two researchers became participant observers in the classroom, collecting field notes, video and audio recordings, conducting informal interviews, observing the usage of electronic books, and collecting samples of work that was computer-related. The researchers felt that this methodology was important to “conduct an in-depth, intensive examination of a child’s meaning making process” (p. 196). From this work Labbo and Kuhn identified elements of their participant’s interactions with electronic books consistent with their findings regarding considerate and inconsiderate texts.

In the final phase of their study, Labbo and Kuhn (2000) analyzed their participant’s digital retellings of his electronic storybook readings. Continuing to use qualitative methods, the researchers analyzed the participant’s retellings. They concluded
that this young child was able to retell the story in a clear way that represented the story’s structure upon interacting with a digital text.

Larson (2002) conducted a study similar to McKeon’s (1999) in which sixth graders were paired with pre-service teachers to share responses to common readings through e-mail. Utilizing qualitative methods of analysis, Larson found that the students’ responses to the literature followed three response styles: (1) text engagement, (2) media connections, and (3) prediction of events. As students became engaged with the text, their electronic mail correspondences incorporated “meaningful and interactive responses” that often incorporated judgments, advice, and personal relations to the events. As students developed their responses, they often made intertextual connections to previously experienced books and movies. Finally, as the pairs advanced their responses with each other they often challenged each other to predict the story’s events, often confirming or denying previous predictions. Larson (2002) writes that the experience inspired students to “raise their own expectations of themselves as readers and responders” (p. 61).

Few studies currently exist in the literature that examine the usage of on-line threaded discussion with intermediate students. However, some studies exist that examine the use of threaded discussions with adults and secondary students. For example, Beeghly (2005) reports of her use of an on-line threaded discussion board with graduate students enrolled in a literature course. The 40 students were assigned to one of five literature discussion groups and shared their thoughts and responses over a 2-week time period to the assigned reading, Roll of Thunder, Hear My Cry by Mildred D. Taylor. Beeghly (2005) reports that overall the students felt that engaging in the on-line
discussion “enhanced both their individual understandings and the quality of their group’s discussion” (p. 16). The students report that they felt this way because (1) the on-line environment gave them time to organize and voice their thoughts without interruption, and (2) that they could articulate their thoughts anytime that they happened or that was convenient, not being constrained to the time in class.

Beeghly (2005) states that “being able to read, reflect, and respond in one’s own time did more to meet individual needs than anything else” (p. 18). Students were able to read their text and their classmates’ thoughts, then take the time each needed individually before responding. Beeghly also illustrates that through using the asynchronous threaded discussion, students’ individual needs were met as they could engage in the conversation at various points that were appropriate to them. Finally students reflected on the fact that the electronic format made it possible for the shy or quieter students to participate more fully and more comfortably.

Beeghly’s students also reported that a community was fostered through the on-line discussions. “Students said that unlike class discussions where it is possible for one or two people to dominate, in an electronic discussion, everyone has an equal opportunity to share ideas and thoughts” (Beeghly, 2005, p. 18).

In a study published in 2003, Staarman reports of her work looking to see if the use of student dyads at the computer enhances the quality of communication and discussion in a technology environment. For this study, Staarman worked with sixth grade students in a Dutch primary school. Nine dyads of students were paired together heterogeneously and 10 students worked individually. Staarman reports that though the students were accustomed to working together in the classroom, they previously had not
worked collaboratively together on the computers in the classroom. From her study, Starrman found that the students who worked in dyads wrote nearly twice as many contributions to the discussion as did the students who worked individually. She summarizes her research stating, “the children who worked in dyads contributed more to the computer-mediated discussion and their contributions were of a more collaborative nature than the contributions from children working individually” (Staarman, 2003, p. 79). Staarman illustrates that the students in the dyads were not merely taking turns but were scaffolding each other’s thinking through their conversations at the computer and thus “thinking before talking” (p. 18) as they composed their responses together.

The investigation of technology’s impact upon the reader response process can learn from the history of research previously conducted in reader response. Quantitative methods can provide useful data as articulated through studies such as Applebee’s (1978), Many and Wiseman’s (1992), and the quantitative elements of Chu’s (1995) study. Quantitative work, documenting students’ developmental stages, categories of response, numbers of interactions and more can all be captured through the use of quantitative methods of investigation.

However, as Rosenblatt (1994b) has written, the complexity of the reader response process also requires qualitative methods in exploring a complex, robust process where a great deal often occurs below the surface of the metaphorical iceberg. Case studies, longitudinal study, and content analysis all provide a deeper layer of information and understanding of the reader response process. Considering the additional complexity of using technology in the process, qualitative studies can provide a knowledge base for future research and understanding.
Summary

Martinez and Roser (1991) write that “classrooms where responses to literature thrive seem to be characterized by teachers’ valuing of responses as the crux of literary growth. Valuing of response in the classroom is evident when teachers (a) provide opportunities for response, (b) provide response models, and (c) receive children responses (in all their diversity)” (p. 652).

Remembering the quote by Thoreau (2004), “To read well, that is, to read a true book in a true spirit, is a noble exercise, and one that will task the reader more than any exercise which the customs of the day esteem” (p. 99) reminds us of the complexity of reading and the reader response process that it demands. Though Thoreau could not have foreseen the additional complexity of technology in the reader response process, he easily understood the ‘noble exercise’ that reading and understanding requires. Today’s reader interacts with the text to continually meet those demands. In this way, the reader responds to the text, in individual ways, both efferently and aesthetically, and in relation to social and cultural influences, including the increasing usages of technology.

Summary

This chapter has presented a review of the theory and research that articulates the complexity of the use of literature discussion groups, the co-construction of knowledge, the re-conceptualizing of space, and the important role that they teacher plays in the classroom environment. In addition, this chapter traced the historical development of reader response and its applications to today’s classrooms, including a review of the ways in which technology can facilitate students’ reader response.
In reviewing the relevant research, it has been shown that there is a need to examine the ways in which students and teachers together nurture their responses to texts throughout the context of the learning environment. However, that learning environment may exist outside the “brick and mortar classroom” and in a Thirdspace. This review also illustrated the need to look more closely at the important role that the teacher plays in nurturing the reader response process. Finally, this review illustrated the important element that technology can play in facilitating the reader response of students and the need to study more closely how a technological environment impacts the ways in which the teachers and students talk and collaborate together in their responses to the literature and to each other. This study looks to contribute to these important pieces. In the next chapter, the methodological procedures are explained.
CHAPTER 3

RESEARCH METHODOLOGY

Introduction

This chapter includes five sections that document the methodological elements that were planned and implemented to accomplish this study. The first section provides an overview of the study as well as an overview of the methodology engaged in the study. The second section details the context to the study including a description of the research site, my process of gaining entrance, the setting of the environment including the classroom context and how technology was used within that classroom context, and finally the participants (both teacher and students) involved in the study. In the third section, the data collection process is described incorporating my role as the researcher and the types of data collected. An explanation of the data analysis process is then detailed for each of the three research questions. The fifth and final section presents the ways in which the issues of trustworthiness were addressed throughout the study.

Overview of the Study

The purpose of this study was to examine how students in a fifth-grade classroom utilized a face-to-face group environment and a technology-based, on-line threaded
discussion environment to facilitate their responses to common literature that they were reading. By talking together, either verbally or through the facilitation of a technology tool, students can support and scaffold each other’s understandings and thus socially construct their understandings together (Almasi, 1996; Bloome & Egan-Robertson, 1993; Gavelek & Raphael, 1996; Mazzoni & Gambrell, 1996). Though many studies have been conducted to examine the multiple ways that students respond to text in group environments, little research currently exists that explores the technological ways that are now available for students to respond to their readings and thus facilitate their understandings. This study expands upon the reader response literature examining the ways in which the responses of students can be nurtured in two different environments. This study focused specifically on the ways students and the teacher utilized an on-line, Web-based technology often referred to as a threaded discussion or discussion board. The study also examined the ways that students and the teacher constructed their responses in the group conversations that they had together. These two different environments were examined for their individual characteristics as well as their commonalities and differences.

The on-line discussion board environment provided the students a technological environment to write and post their responses to a Web page embedded within their school Web site. The Web site was organized by the different books that the students were reading, though any student could post a response on any board. Together the students wrote questions and responses to the common readings they were participating in together. (See Appendix A for computer screen shots that illustrate what these environments looked like).
This study examined the role of the teacher throughout this process analyzing his participation to provide insight into the way the teacher nurtured and guided the students’ responses. The students’ responses were also examined to reveal the ways in which they responded to the text and to each other in the two different environments. This study also examined the ways in which the two contexts influenced each other.

In specific, this study addressed the following research questions:

1. In what ways does the teacher facilitate student responses:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?

2. How do the students respond to texts and to each other:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
   c. In the physical computer environment?
   d. Across the multiple contexts?

Overview of the Methodology

In order to examine these elements of the classroom, this study employed a qualitative research design from a constructivist paradigm (Guba & Lincoln, 1994). Best and Kahn (1998) describe the qualitative research setting as one that “assumes the value of context and setting, and that searches for a deeper understanding of the participants’ experiences” (p. 240). In alignment with this description, this study involved a design that incorporated daily involvement for 3 hours over a 6-week time period in the fifth-grade classroom as the students and teacher engaged in a unit of study. The teacher was
purposively selected for this study due to his extensive use of technology, his authentic uses of literature and nurturing of the reader response process, and for his utilization of an on-line threaded discussion board. The study consisted of observing two groups of children reading two different texts over the 6-week book unit as designed by the teacher. The researcher engaged in the role of participant-observer as the two groups of students (one consisting of 7 girls and one consisting of 2 boys and 1 girl) were observed throughout their daily language arts time period. Data for this study were collected using interviews, observations, field notes and document analysis.

The 10 group discussion meetings were videotaped and transcribed by the researcher. Time spent by the students working on the computers, writing and posting their responses, were also videotaped and transcribed by the researcher. The teacher was interviewed six times over the 6 weeks. Each interview was audio-taped and transcribed by the researcher. Conversations were held informally as different relevant events occurred over the 6-week time period that the researcher wanted to investigate more closely. Each of these conversations was also audio-taped and transcribed. At the end of the 6-week study, each student was interviewed to gather additional insights into his or her thoughts and feelings regarding the on-line and group discussion environments as well as his or her perceptions regarding the teacher’s role in the different environments. Extensive field notes were recorded throughout each day of observation. Finally, documents were collected and digitized for analysis such as the on-line responses of the students, their reading packets, and final project requirements.

Data were analyzed utilizing the NUDIST (Non-numerical Unstructured Data Indexing, Searching and Theorizing) N6 program (Version 6) in which significant
patterns, common elements, and specific events were identified and overarching themes developed. A recursive process was utilized in which the data collected, the research questions, and the review of the literature were all incorporated to process the data.

My Background for the Study

My engagement in technology and reading and my interest in studying the reader-response process in a technological setting sponsored the creation of my research questions. My previous teaching experiences include 3 years as a classroom teacher and 5 years as a media specialist. I have always enjoyed utilizing literature and technology applications in authentic ways to support student learning. Through my doctoral studies and competency examinations I have read the current research examining the ways in which students engage and respond to texts. Research has shown how this response can take many forms (Hickman, 1979) and new research (Beeghly, 2005; Bond, 2000; Carico & Logan, 2004; Kamil, Intrator, & Kim, 2000; Labbo & Kuhn, 2000; L. Larson, 2002; Staarman, 2003; Wolsey, 2004) is beginning to illustrate how technologies can sponsor and enhance the ways in which readers engage and respond to texts for themselves and others.

In addition, I have always been personally interested in the ways that technology influences learning and teaching. As a classroom teacher I utilized technology in authentic ways whenever possible. As a past media specialist, I worked to support teachers and students as they utilized technology tools to support learning. Currently, I teach graduate classes in technology-enhanced learning as well as reading courses at the University of Dayton.
The Research Site

The research site for this study was the fifth-grade classroom of Mr. Tyler Springs who was teaching in an elementary school in southwestern Ohio. This building is the only elementary school for this small, rural district. This section contains a discussion of the purposeful selection of this site, the process of gaining entrance, and a description of the research site.

Choice of Research Site

At an earlier point in time, I was employed at this elementary school as the building’s Media Specialist/ Technology Coordinator. During the 6 years that I worked there I had the opportunity to build a professional relationship with Mr. Springs, the teacher involved in this study, who incorporated a great deal of technology and authentic uses of literature into his teaching in meaningful, authentic ways. As a veteran teacher, Mr. Springs employs a constructivist framework in his classroom. Guided reading groups are constructed to meet each child at his or her instructional level. Problem-based learning experiences are often utilized to provide students authentic, meaningful learning experiences. Students are frequently engaged in group work experiences and allowed to socially construct and support each other’s learning. Knowing that my research interests matched Mr. Springs’s teaching style, I had discussed the possibility of a study with him and asked for permission to visit and work in his room should the opportunity present itself.

When one of my research methodology courses required a field site to engage in the collection of qualitative data, I found the opportunity to spend time in Mr. Springs’s room as I experienced the utilization of different qualitative data collection methods.
Having the previous experience and knowledge of the teacher and his classroom as described, I asked Mr. Springs if I could observe informally in his classroom to collect data on the ways in which he used technology in his teaching, particularly in his reading instruction.

During the time spent in his room, I observed students talking with each other and responding to multiple texts in literature circles, and through the use of a threaded discussion board. This threaded discussion board was organized to provide a different Web page for each book the students were reading in groups. While observing in his classroom I observed the students using this on-line threaded discussion to discuss their reading together. In small groups the students were communicating with each other in a face-to-face situation, sharing their thoughts on a common piece of literature they were reading. Using the on-line threaded discussion, students were writing responses to each other after talking with each other and then “posting” their written responses on their designated Web site. I observed the students socially talking and “constructing” their responses together verbally at the computers before posting them on the threaded discussion board. I spent time observing the students and collecting documents that reflected the responses that they were creating in both the “face-to-face” environment and in the on-line threaded discussion environment. I was intrigued by the ways in which students physically talked together, first socially co-constructing their thoughts together, before turning to the keyboard to individually write their responses.

The students utilized multiple texts (the printed text, their written text, and their socially constructed verbal texts) to support their understanding and enrich their
responses. This experience left me with a growing interest in the ways that technology might support students’ responses to literature.

Through these observations, I became fascinated with the dynamics of the face-to-face and on-line dynamics of reader response, and thus purposefully selected this site for my research study as it provides an interesting environment to examine the impact of technology and social talk at work in the reader-response process.

Knowing that I wanted my research site to incorporate the areas of literature and technology usage, I employed purposeful sampling for as Patton (1990) writes:

The logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. Information-rich cases are those from which one can learn a great deal about issues of central importance to the purpose of the research, thus the term purposeful sampling. (p. 169)

My issues of “central importance” as relative to this research study involved the utilization of technology to support the reader response process and the engagement of students in literature discussion groups both in a face-to-face and on-line environment. Having experienced Mr. Springs’s room for previous data collection purposes and knowing these elements to not only be present but integrated fully into the curriculum, Mr. Springs’s room was selected as an optimal site for the research study.

Gaining Entrance

During the month of September 2005, I contacted the teacher to determine his interest in participating in my research. He agreed that he was interested and we tentatively planned for a data collection time in the winter or spring time frame.
In October 2005, I returned to the teacher’s classroom to observe his class during this school year and to have a more specific conversation regarding my potential involvement in his classroom. The teacher was enthusiastic about participating and was looking forward to being involved. We discussed his use of the on-line threaded discussion board thus far in the year and a potential time frame for my data collection. At this time I also met with the building’s principal to inform her of my interest and to receive official access from her for my involvement in the building. A formal letter of request was sent to her with a copy sent to the district’s superintendent (see Appendix B for a copy of the letter).

Setting

The elementary school for this study was built literally in the middle of the town and staff members are proud of their well-developed relationship with the citizens of the community. The location of the school in this study is a small village of about 4,000 residents. Compared with neighboring communities in the county, the citizens are considerably more diverse in their backgrounds, economic status, and ethnicity. The community enjoys and celebrates a multitude of rich resources within its diverse population. The residents include nationally-known artists, naturalists, educators, business professionals, and more. Many of the residents are actively involved in the school.

The district of this village community has only one elementary school and one combined middle school and high school. The district serves approximately 672 students in kindergarten through 12th grade. Approximately 74% of the students were European-
American, 14% African-American, and 12% multi-racial. In the district, 10% self-report as economically disadvantaged, and 17% of the students have disabilities.

The school selected for this study had an enrollment at the time of the study of approximately 273 enrolled in kindergarten through sixth grade. Approximately 71% of the students were European-American, 14% of the students were African-American, and 15% reported as multi-racial. In the school 18% of the population qualified for the free or reduced lunch program. Fifteen percent of the students qualified as students with disabilities. Several of the staff members were graduates of the school and even more had children that were members of the school community.

The school has celebrated many achievements. In 1999 it was awarded the National Blue Ribbon of Excellence Award. In 2002 it received a National Endowment for the Arts award and consequently participated in a year-long experience of professional artists visiting and working within the classroom context to integrate art into the grade level curriculum. The school also features a school Web site that has won multiple national awards. In addition, the school has been awarded multiple Ohio Reads Grants and has a well-developed volunteer reading program that goes throughout the grade levels as needed.

The classroom utilized in this study was one of three fifth-grade classes. All three of the fifth-grade teachers shared a close relationship and departmentalized in the mid-morning and afternoon for math, science, and social studies. Each teacher taught his or her home base class language arts in the morning time period. The students participated in physical education, band and orchestra, and art each week with certified teachers. The
library and technology media center were also physically located next to the fifth-grade classroom of this study.

The primary setting for this study was the fifth-grade students’ home base classroom in which they have their reading class. Occasionally, due to scheduling conflicts or the need for everyone to utilize a computer at the same time, the students used the school’s computer lab to access the on-line threaded discussion or other computer programs such as Inspiration®. This computer lab was thus a secondary collection data site.

The Classroom

Tyler’s classroom was approximately 25 feet by 35 feet and contained a variety of bookshelves, storage cabinets, and was covered in student created work. The entire side wall was made of windows that overlooked the school’s green campus area. A large section of the room was set apart with beanbag chairs and a couch for group and classroom meetings. Three computers were located across the back wall of the classroom. These computers were placed in a row, one next to the other, so that students were in close proximity to each other. One additional computer was located in the center of the room and was attached to a presentation system so that the computer could be projected onto the large screen at the front of the room. The screen at the front was a SmartBoard that features interactive touch screen for the students and teacher to easily present from throughout the day. (Appendix C provides a schematic map of the room).

The overall nature of the classroom was one in which the students and teacher co-constructed the environment and atmosphere together. Lockers on the one side of the room were personalized on the outside with student chosen art work. Posters around the
top perimeter of the room were all student creations that emphasized instructional content. Bookshelves lined other areas of the room. A long table in a back corner was always available for students to spread out and work together on collaborative projects. With approval from the teacher, students self-selected the arrangement of their desks and groups. A variety of weekly extension activities were located throughout the room, such as the “Weekly Mystery Person” and the weekly “Measurement Activity.”

Each 4 to 6 weeks, Mr. Springs selected a different genre of study such as fantasy, nonfiction, and poetry. During the time period of this study, the genre focus was on realistic fiction, utilizing the writings of Jerry Spinelli. From this genre and this particular author, four pieces of literature were provided for students to preview and then self-select their first, second, and third choice to read. Mr. Springs then created book discussion groups balancing students’ choices and instructional reading levels. Book groups were formed utilizing the texts of Stargirl, Crash, and Maniac Magee. For the purpose of this study, the Stargirl and Crash reading groups were chosen as focus groups as these groups consisted of the students who had returned their permission slips to participate in the study.

Each morning Mr. Springs dedicated approximately 2 hours for reading instruction and activities. During this time period the students were engaged in a variety of activities including projects that were individual, small group, and whole group in design. For example, on some days Mr. Springs would read aloud a picture book that engaged the entire class in a deepened understanding of story design elements and that met Mr. Springs’s instructional content standards. Mr. Springs also developed a system in which the students rotated through a variety of activities in small groups that were
created around their book groups. Mr. Springs would engage in a face-to-face group conversation with one book group about their reading, while other student groups were engaged in individual assignments, small group work regarding their reading, or posting on their threaded discussion board.

Classroom Technology Use

As previously discussed, the students and teacher in this classroom utilized technology throughout the day as a tool to advance and support their teaching and learning. Students moved to and from the computers as needed during the day when they needed to utilize a technology component. The students would often arrive in the morning anxious to share a new Web site they had found the night before. During the course of the data collection, the Winter Olympics were being held in Italy. Different students held responsibility each morning to locate the daily Olympic medal counts for each country and used the information to update a classroom chart that displayed the number of gold, silver, and bronze medals that each country had won.

The teacher also purposefully used technology in his instruction. For example, the teacher would often use his classroom projection system and SmartBoard to display student work and provide instruction that was curricular oriented. In addition, Mr. Springs kept a rich, up-to-date Web site for parent information, homework instruction, and displaying students’ work. Mr. Springs also wrote a weekly blog (electronic newsletter) for parents and community members to read regarding classroom events.

The students also utilized the nearby school computer lab when additional computers were needed or when each member of the class needed to individually use a computer. The teacher toward the end of the data collection period had the students
create an Inspiration® project. Inspiration® is a commercial software program that allows the user to create a graphic organizer or outline. The students utilized this program to represent the setting, characters, and plot of the book they had read during the 6-week data collection period. See Figure 3.1 for an example of a student-created project.
Figure 3.1: Example of one Inspiration® project detailing plot, setting, and characters.
In addition, the students utilized the classroom technology for posting their responses to their reading on the teacher created on-line threaded discussion board. An on-line threaded discussion board is typically found on a Web site. The visitor to the Web site can read the writings that are there, usually referred to as “posts.” The visitor can also write and “post” his or her own response. The topics are organized into what is often referred to as “threads” in that each similar topic of conversation is its own “thread.” The board is thus organized by topics in which the visitors can read and respond and the writings are organized by the particular topic of conversation or discussion, thus the term “threaded discussion board.” See Figure 3.2 for an example of the structure created by the various threads and posts in the *Stargirl* threaded discussion board.

![Stargirl Discussion](image)

Figure 3.2: A screen from the *Stargirl* on-line threaded discussion.
In this study’s classroom, the students participated in a threaded discussion board to write their responses to the book they were reading and to read and respond to the writings of their group members. Students were encouraged to visit other boards to read and respond to other students if they had read the book, or were currently reading the book for their own pleasure. Parents were often reminded of the project, provided the address, and encouraged to read and respond to the students’ writing through newsletters and teacher sent emails.

The Participants

*The Students*

The classroom had a total of 20 students directly before the study began. On the first day of the study, the students and teacher were informed that one of their classmates had been admitted to the hospital over the weekend. The student remained in the hospital for cancer treatment during the remainder of the study. No additional students entered or left during the course of time of the study.

Of the 19 students in the class during the time of the study, 14 were European-American, 1 was African-American, and 4 were of mixed descent. There were 10 girls and 9 boys in the class. Two of the students in the class received reading assistance from the reading intervention tutor in the building and none of the students participated in the special education program.

In order to engage the students as participants I explained to them that I was a university student interested in learning from them the various ways that they read and learn together. I then observed in their classroom for several months prior to the
beginning of the study. Before beginning data collection, I again explained to them the 
purpose of my presence in wanting to explore and learn how they talked, read, and 
learned together. I presented them with the permission slips for both the students and 
their parents and read through the permission slip with them. Twelve of the 19 students 
returned the permission slips.

The teacher in this class created the guided reading groups based upon their 
reading ability level and their self-selections of the Jerry Spinelli books he had provided 
as options. For the purpose of this study, the teacher also created the groups based upon 
their book choice, reading level, and their decision whether or not to participate in the 
study. Upon examining who returned the permission slips and which students selected to 
read the available Jerry Spinelli texts, two groups emerged. One group of 7 female 
students who had returned their permission slips were interested in reading Stargirl 
(2000) by Jerry Spinelli. A second small group of three students who returned their 
permission slips and were interesting in reading the book Crash (1996) by Jerry Spinelli 
was also chosen.

The students were told that I would be focusing on the Stargirl (Spinelli, 2000) 
and Crash (Spinelli, 1996) reading groups for my involvement in the classroom. The two 
volunteers who were interested in participating but had selected to read Maniac Magee 
(Spinelli, 1990) were given the option to change groups if they liked; they preferred to 
remain with the Maniac Magee (Spinelli, 1990) group. Both of these students were 
personally thanked by me for agreeing to participate. A book was given to every student 
in the class (regardless of their participation in the study) to thank them for having me in 
the class.
The 10 student participants were thus in two of the three guided reading groups created by the teacher in this fifth-grade classroom. Of the 10 students who agreed to participate, 8 were female and 2 were male. Seven of the female students selected to read the Jerry Spinelli text, *Stargirl* (2000). Two males and one female selected to read the text *Crash* (1996). The remaining 9 students that were not a part of this study selected to read the text *Maniac Magee* (1990).

*The Teacher*

Mr. Tyler Springs, the teacher of the class, was also a participant engaged in the study. Mr. Springs is a Caucasian male who has been teaching for 15 years. He has provided leadership for his team and the school in administration and technology coaching. He recently obtained a master’s degree in technology-enhanced learning from a nearby university. Tyler has also been a long time advocate of using authentic literature and trade books in his reading instruction and does not use a basal series. He believes deeply in teaching children from authentic texts and with purposeful instruction. His constructivist philosophy provides an environment in which children and the teacher work and talk together to build individual and common understandings.

*Research Protocol*

All participants were protected under Internal Review Board (IRB) procedure. A letter of consent was written explaining the study to the students and to the parents, requesting their consent. This letter was read to the students in class and they were asked if they had any questions. I called each parent to inform them of the study personally and ask if he or she had any questions about the study. Parents and students were informed
that there would be no negative consequences should they choose not to participate. The students, parents, and the teacher participating signed a letter of consent. (See Appendix D for an example of the participants’ and parents’ consent letters.) Students’ anonymity was protected through the pseudonym screen names they previously selected to use in the on-line threaded discussion environment. These pseudonyms are used throughout these chapters.

Data Collection

This section will provide an overview of my role as the researcher in the classroom and an overview of the types of data that I collected while participating in the classroom environment.

*Role of the Researcher*

In my role as researcher, my position in the classroom flowed along a continuum between observer and participant-observer, though most frequently I stayed in the role of observer. As Clifford (1988) has written, the role of participant-observer requires a careful balance between the inside and outside of events. The participant-observer must place him or her self within the context of the event attempting to understand the specific circumstances of particular events, but then also be able to step back and “situate those meanings in wider contexts” (Clifford, 1988, p. 34).

In my role as participant-observer, I shared in the daily events of the classroom context. I would work with the children as they appealed for advice in areas such as writing their responses, working on their posters, and spelling support. Often when the students went out to recess, I would remain in the classroom and provide instructional
support to students who had not completed their homework or finished an assignment. In addition, on a day in which the teacher had to be absent during the language arts time period, I provided the instruction while the students worked in the computer lab to complete an Inspiration® assignment related to the research study.

When the students were working together in a face-to-face group conversation and when they were posting responses to the threaded discussion board, I utilized more of the role of the observer. I took careful field notes, as well as audio taped and videotaped the events, while the teacher and the students interacted together. Occasionally the teacher and the students would invite me into the conversation to contribute to a particular topic. Once I contributed a suggestion to a student who was struggling to understand a particular response from a group member.

While the face-to-face conversations were occurring I would sit on the outside edge of the group. In this position I could participate when the students or teacher prompted me, but could also physically “sit back” from the group and observe the dynamics of the entire group. Because of my previous time spent in the classroom and because the students were accustomed to visitors in the classroom, my presence was seen and accepted as another member of the group.

To gain this comfortable status with the students, I visited the classroom approximately once a week for 3 months prior to the beginning of the study to gain acceptance in the room and to not be seen as a “stranger.” As I got to know the students, I helped and participated in their activities. My role in the room developed as the students became used to my presence and appreciated my involvement. This allowed me
to observe the children and talk with them about the events that occurred throughout the
data collection period in a more natural, less intrusive way (Wolcott, 1995).

However I was always aware that I was an outside member of the community. The students greeted me warmly each day but knew that I was going to leave at the end of the language arts period and that my time in the classroom was only for the length of their book unit of study. Though I participated in classroom discussions and facilitated learning when invited by a student or the teacher, I did not engage in managing or disciplining the students in any way.

Types of Data Collected

To adequately address the research questions proposed for this study a multitude of data collection methods were employed. Observations, interviews, field notes, and a collection of all written documents including the Web-based responses for analysis were all utilized to gather data. An Excel® spreadsheet was developed to organize the types of data collected and to document the dates on which they were collected.

Observations were conducted of the selected participating students for each day they were engaged in the on-line threaded discussion as well as their group’s face-to-face conversations that they engaged in during class time. Observations of the teacher’s involvement were also a part of the data collection. Interviews with the teacher were conducted to solicit information and deepen understandings regarding classroom events observed. Informal conversations with the students were conducted throughout their engagement with the on-line threaded discussion and their face-to-face discussions to serve as a member check on student work produced and social interactions observed in
class. Field notes were taken every day to collect day-to-day dynamics, student interactions, and my own thoughts and reactions to the current events. Finally, the student and teacher on-line responses as well as student work were collected and used for analysis regarding the nature of the responses and themes that emerged from the responses in the on-line format and classroom discussions.

*Observations*

Observations for this study took place daily during the teacher’s 2-hour defined time for reading instruction. The observations occurred every day during a 6-week time period, which was the length of time the teacher allotted for the reading and discussion of his book genre study. (See Appendix E for a detailed description of the students’ reading schedule). As described previously, my role fluctuated between that of observer and that of participant-observer. During the students’ face-to-face group meeting times and times spent working on the computers, my role took on that of an observer, watching the students and teacher interact together and taking careful notes as well as making sure my recording equipment was functioning. When the students were working together on additional reading assignments, having recess, or other classroom events, I utilized the role of a participant-observer in which I engaged in the “social setting rather than reacting passively” to the situation (Angrosino & Mays de Pérez, 2000, p. 678).

My observations followed a fairly similar pattern each day. As currently described, the class worked in three different reading groups that had been created by student self-book selection, reading ability, and participation in this study. During the students’ language arts 2-hour time period, the students either were engaged in a whole class activity or worked in small groups on various projects as determined by the teacher.
On the days that the students worked together in the small groups that developed from their book selection, they would work in a rotation through four events as time permitted. The four topics of engagement or “stations” included (1) working on their group poster, (2) face-to-face group book discussions, (3) on-line threaded discussion of the book, and (4) silent reading.

The group poster project was a long-term project that small groups of students worked on throughout the 6 weeks that resulted in the creation of a poster that reflected the setting, characters, and plot of the book. On the outside edges of the poster the students illustrated various images that communicated the setting of the book. On the inside of the border the students utilized post-it notes to communicate the major happenings of the story. The students then put the post-it notes in order of the events of the book and created a mountain (or roller coaster) that portrayed the energy of the events resulting in the climax(es) of the story and its ending. Chapter 4 provides a more detailed description of this project and example photographs of the completed posters.

During the face-to-face group conversations, the teacher would select a book group to gather together in the class meeting area. (See Appendix C for a schematic of the room). This class meeting area consisted of a couch and beanbag chairs that the students and teacher could easily arrange into a circle so that they were comfortably facing each other. The students and the teacher would then engage in conversation about their reading of the book or other teacher determined topics as needed.

The students also utilized the four computers in the room to participate in the on-line threaded discussion with the other members of their group. During their group’s designated time, members of the reading group would use the computers to read the posts
of their fellow reading group members and reply to them or to post questions and responses of their own. The students were given a block of time to complete this work, but were also given the freedom to leave the computer area and return to their other work anytime they felt they were finished with no other responses, reading, or posting of questions to add. Finally, students were also given time during the reading block to either silently read in their Jerry Spinelli book, their own book choice, or to complete other reading assignments as prepared by the teacher. Occasionally, students were also allowed to use this silent reading time to complete additional assignments or catch up on work that they were behind in finishing.

I centered my observations on the two groups that were selected based upon signed participation forms, the Stargirl and Crash reading groups. I observed these groups during their “on-line” time and during their “face-to-face” time with the teacher as well as during their other available times in the room. The teacher and I created a rotational schedule that allowed me to consistently observe the same two groups during their computer and face-to-face times when applicable. The groups that I observed for this study are in bold. (See Table 3.1).

<table>
<thead>
<tr>
<th>Time</th>
<th>On-Line</th>
<th>Face-to-Face</th>
<th>Silent Reading</th>
<th>Poster Work</th>
</tr>
</thead>
<tbody>
<tr>
<td>9:00</td>
<td>2</td>
<td>1*</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9:30</td>
<td>1*</td>
<td>2</td>
<td>4</td>
<td>3</td>
</tr>
<tr>
<td>10:00</td>
<td>3</td>
<td>4*</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>10:30</td>
<td>4*</td>
<td>3</td>
<td>2</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 3.1: Rotation schedule of students during the language arts time period.
During the 2-hour time period, I observed both groups as they worked on the computers for their on-line response time and while they were engaged in face-to-face group conversations with their fellow group members and the teacher. Following the students from their face-to-face conversations with the teacher and student group members to their on-line work allowed me to observe students in both settings, in addition to when they worked in groups throughout the reading time period.

During the face-to-face group book discussions that the students had with their teacher and fellow group members, my observations centered upon seeing and listening to the ways in which all the group members (students and teachers alike) responded to their readings utilizing multiple texts and helped to scaffold each other’s understandings. My role during the time the students worked in the on-line environment fluctuated between the role of an observer to that of a participant-observer. As an observer I focused upon the ways in which the students socially interacted with each other as they worked. As a participant-observer, I answered students when they engaged me to enter into their talk with them as they worked and socialized together. In this role, I could answer questions that the students asked of me and interact with them as requested. It also allowed me to have informal conversations with the students regarding their responses in both environments. In this role I could quickly follow-up on events that took place during the face-to-face situations without interrupting their work. These conversations were able to naturally occur as the events of the classroom between the students themselves and their teacher unfolded.

Observations in both settings were audio taped and video taped to allow for the creation of transcripts to be analyzed. Two cameras were utilized in the taping of the
classroom events. One camera was stationed in proximity to the students using the computers and a second camera was placed near the students engaged in conversation with the teacher. Both cameras utilized an omni-directional microphone that was placed in the center of the students’ groups to record the participants’ conversations. The omni-directional microphone provided high quality recordings of the face-to-face meetings as well as the times the students worked on the computers. Occasionally while sitting at the computers the students would whisper to each other. The microphone did not record these quiet conversations and I would ask the students after they left the computers if they were comfortable sharing with me what they whispered about while working. Their summaries of the “whispered conversations” were then recorded in the field notes.

Having two cameras in the room eliminated the need to move the camera as the groups rotated through their stations and thus prevented the distraction of moving cameras during class time. I began videotaping a week prior to the data collection period so that the students were acclimated to the video camera and thus negated some of its intrusiveness.

The video cameras captured both groups of students each day as they worked on the computer for their on-line responses and as they interacted in their face-to-face discussions. Detailed field notes directed me to potentially relevant places that informed my research questions.

Conversations and Interviews

During the data collection process informal conversations and interviews were utilized to gather insight into what the participants thought about the classroom events and to gain additional information on student interactions that were observed as students
worked together. Interviews with the teacher were done informally each week to gather feedback from the teacher on his thoughts and feelings about the classroom events and how he thought the reading groups were doing. This section details each of these types of interviews.

Informal conversations were held with the participating students to gather more information on events observed throughout the day. These conversations served the purpose of gaining additional insight into what the students were talking about as they socially interacted throughout the day, particularly while posting responses on the computers. They also were utilized as an extension to explore and understand more deeply (Fontana & Frey, 2000) the events of the classroom and the products that students created as part of their classroom assignments. For example, on one particular day the students were talking together about a post that had generated interest. At some point in the conversation, the two students began whispering quietly; their comments could not be recorded by the videotape. When the students finished working at the computers, I quietly found time to ask both if they were willing to share what they had talked about with me. On a different day a student commented verbally that he did not understand what he had read in a different student’s response. A follow-up conversation was held with that student to gather additional insights into why the student made that statement. Through these conversations I captured the topics of conversation and additional insight that my videotaping and field notes could not.

After the students had finished their books and final projects and the data collection period was nearing an end, I asked each participating student to talk informally with me regarding his or her thoughts and opinions of the various areas of interests that
were emerging for me from the data. I asked the students about their “likes and dislikes” in the face-to-face group environment, about their feelings toward their group members and how their group functioned, if they felt there was a need for their teacher’s participation in both environments, and other related questions. (See Appendix F for a listing of the general themes talked about in these conversations).

These conversations were informal and unstructured to allow them to occur when needed and to allow them to address the context of the particular situation. They were also reflexive (Fontana & Frey, 2000) in nature, allowing for understandings of the event as well as the conversation itself. Questions in the conversations were limited to the content of the reading and writing produced in the context of the classroom.

In addition, interviews with the participating teacher occurred throughout the data collection process to gather the teacher’s thoughts and insights into the process. The teacher was interviewed six times: once before the study began, four times during the context of the study, and once at the conclusion of the study. Interview questions were developed to gather the teacher’s insight into the students’ social interactions and individual performances. A portion of the interviews were dedicated to observing and reflecting upon the collected data. Vignettes of events observed and recorded were shared with the teacher to elicit additional insight from the teacher on the context of the event. In this manner, the teacher’s thoughts and perspectives enriched the study as they provided his understanding of the events that were observed.

Observational Field Notes

While observing the classroom, spiral bound notebooks were used to take field notes for a variety of purposes. Most predominately, I took notes of the daily events of
the day. These notes included a summary of the daily events, particular items of interest, and any changes that occurred in the schedule of classroom events. In addition, I took notes of my own thoughts and responses as they occurred throughout my time in the classroom. The field notes were also a way to record particular points in time on the videotapes that I wanted to review and process more deeply. I would frequently make self-reflective notes on my own learning and reflection of the data as they developed. Often I would make notes of my reflections upon the children and my interactions with them. Finally, I would use the notebook to track the documents that I collected throughout my time in the classroom.

Document Analysis

All of the students’ responses from the on-line threaded discussion boards were printed and digitally collected for document analysis. Hand-written documents created by the students during class time were also collected to provide additional insights into the students’ reader response process. Teacher created items used in the classroom were collected, such as the teacher-created rubrics utilized in the assessment of student work. Through analysis of the documents, I attempted to identify layers within the documents that contributed or influenced the social construction of knowledge in the classroom for as Hodder (2000) describes Derrida’s work, “meaning does not reside in a text but in the writing and reading of it” (p. 704).

Data Analysis

This section serves to detail the historical process of data analysis that took place during and after the data collection period. The transcription process is detailed followed
by an explanation of the qualitative data analysis process and concludes with a discussion regarding the process of gaining trustworthiness.

Transcriptions

Once the artifacts were collected the informal conversations with students, interviews with the teacher, and classroom events were transcribed and compiled to examine the events for emerging themes. Though I did consider having the transcription process done by a professional, the process of transcribing the data myself became highly valuable work. First and foremost, I became immersed in the data in an intimate and time-intensive process. Second, there were sections of the videotapes that were hard to hear. The accuracy of the transcription process greatly benefited from my ownership of the process having just participated in the conversations and understanding the context of the situations. At such times when the audio was harder to hear because of background noise or because a student spoke quietly, I could refer to my field notes to support my memory of the context and what the person was talking about in the particular situation. Finally, the transcription process allowed me to engage in the process of data reduction, eliminating sections of videotape that were recorded but not related to the research questions of the study.

Data Analysis Process

Once the data were collected and transcribed, they were uploaded into the NUDIST N6® qualitative software analysis program. This program facilitated the process as I examined the data for significant patterns, common elements, and specific events that illustrated overarching themes. Reading multiple times through the data, themes emerged and were coded appropriately. These categories developed through
multiple readings of the data as well as knowledge from reviews of the literature and the
defined research questions for this study. A recursive process was used utilizing the data
collected, the research questions, and the review of literature to continually sift through
the data for thematic patterns.

*Data analysis for research question #1.*

The first research question stated:

In what ways does the teacher facilitate student responses:

- In the group environment discussions of books?
- In the on-line environment discussions of books?

This first research question focused on examining the ways in which the teacher
facilitated the students’ responses both in the on-line threaded discussion and group
conversation environment. Thematic data coding revealed that the teacher utilized a
flexible presence when engaged with the students, modifying his participation based upon
the needs of the students and the environment in which the students were responding.

Data were coded according to this varying presence and are presented in chapter 4
according to ways he facilitated the students’ responses to texts.

An analysis of the questions asked of the students in the group meeting time was
conducted to provide a closer look at the types of questions that were used by the teacher.

Categories were created as they emerged from data analysis and from the reviews of
literature. Table 3.2 documents the coding categories utilized for this analysis.
<table>
<thead>
<tr>
<th>Coding category</th>
<th>Operational definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging</td>
<td>Question that initiates conversation or that initiates a member to contribute</td>
</tr>
<tr>
<td>Probing</td>
<td>A why question. A question that digs deeper beneath the surface of what the students initially respond</td>
</tr>
<tr>
<td>Leading</td>
<td>A question that is trying to take the students somewhere or that is trying to bring them to a particular revelation or understanding</td>
</tr>
<tr>
<td>Extending</td>
<td>A question that pushes the conversation deeper without having a particular direction in mind</td>
</tr>
<tr>
<td>Clarifying</td>
<td>A question that tries to make a question or comment clearer</td>
</tr>
<tr>
<td>Restating</td>
<td>A question that utilizes the students’ words in a different way</td>
</tr>
<tr>
<td>Managing</td>
<td>Questions that are for the sake of class order and directions.</td>
</tr>
</tbody>
</table>

Table 3.2: Coding categories for types of questions posed.

Each question that was asked in the different settings was defined as the unit of analysis. If a student or teacher asked two questions within one response or within one post in the on-line environment, each of these questions was coded independently. For example:

<table>
<thead>
<tr>
<th>Who</th>
<th>Type of Question</th>
<th>Conversation</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>Engaging</td>
<td>Okay – so quickly fill me in. What is going on right now? What is going on? We are in Section Three – yeah – everybody is in a different place, but section three is supposed to be the section between pages 73 and 105. Do you want to take a quick look to remember that section? Thumbs up if you are past that.</td>
</tr>
<tr>
<td></td>
<td>Restating</td>
<td>I just finished reading up to pages 110.</td>
</tr>
<tr>
<td>T</td>
<td>Managing</td>
<td>Excellent you are right on target. Excellent. Okay – what is going on then?</td>
</tr>
<tr>
<td>S6</td>
<td>Engaging</td>
<td>Leo was just like showing that he likes <em>Stargirl</em> and so he’s like at Archie’s house they tell him about how she got kicked off the cheerleading squad.</td>
</tr>
<tr>
<td>T</td>
<td>Engaging</td>
<td>Cheerleading, when I read your packets a lot of you talked about the fact that it was cheerleading that made her popular. That is what a lot of you said in the book. And now you say she got kicked off – what happened?</td>
</tr>
</tbody>
</table>

Video Transcription, *Stargirl* Group Discussion, February 6, 2006
Coding of the questions was made in a recursive manner in that several passes were made of the data in which emerging categories were allowed to be added, deleted or combined as the themes emerged. Serving as a peer debriefer, a doctoral student also conducted an independent analysis of data sections utilizing the categories that had emerged. Findings between the different coders were 85% consistent. The multiple analysis reviews done by the researcher and the peer debriefer provided an additional purpose in illustrating sufficiency of the data and the coding categories.

An analysis was also conducted to examine the ways that the teacher interacted with the students through the on-line threaded discussion environment. The number of questions and responses that the teacher posted were coded and analyzed to explore the presence of the teacher through his posts. The teacher’s questions and responses were examined to illustrate the quieter presence of the teacher in this context and is further described in chapter 4.

Finally, the face-to-face conversations and on-line conversations were analyzed and coded for patterns in the dialogue between the teacher and the students (Cazden, 2001; Mehan, 1979; Newkirk & McLure, 1992). The number of evaluative statements that the teacher made was counted and analyzed to examine in which context the evaluative statements were made and if they were positive or negative in nature. This analysis was also conducted with the posts written by the teacher in the on-line threaded discussion environment to investigate the patterns of dialogue in this context. In addition, the teacher’s use (or lack of use) of evaluative statements was explored and the nature of those responses was analyzed.
Data Analysis for Research Question #2.

The second research question stated:

How do the students respond to texts and to each other:

a. In the group environment discussions of books?

b. In the on-line environment discussions of books?

c. In the physical computer environment?

d. Across the multiple contexts?

This question focused on examining the roles that the students utilized in both the
face-to-face group conversation environment and the on-line threaded discussion
environment as well as in the physical computer environment and finally how the
relationships across these multiple contexts influenced each other.

Coding of the responses that students made in the different contexts was made in
a recursive manner in that several passes were made of the data in which emerging
categories were allowed to be added, deleted or combined as the themes emerged. A
doctoral student, served as a peer debriefer, also conducting an independent analysis of
the data utilizing the categories that had emerged. Findings between the different coders
were 85% consistent.

When the data analysis revealed a distinct shift in the nature of the questions
being asked on the Stargirl discussion board, a return to the data was made to examine
the nature of the conversations in relation to the time and date in which they took place.
From this analysis, it was found that particular classroom events caused an impact upon
the nature of the students’ questions and responses that they posted in the on-line
threaded discussion board. The details of this discovery are further discussed in chapter 4.

The responses of the students and the ways that they responded were analyzed according to the book discussion group (Stargirl and Crash) and according to the environment in which they were responding (group conversations and on-line conversations). An analysis was conducted to examine the number of times each student and the teacher engaged in conversation both in the on-line and group environments. In relation, an analysis was conducted to examine the patterns in which the students and teachers engaged in turns of talk within the two environments. In addition, an analysis was conducted of the various topics of discussion that were initiated and sustained and which created a conversation like environment. Finally, the conversations that students had while seated in the physical computer environment were analyzed to examine the content of the students’ conversations. Conversations were categorized and the resulting themes are discussed in chapter 4.

Finally, the data were analyzed for ways in which the students’ group conversations, on-line conversations, and other “side conversations” supported and enriched the students’ individual responses to the text. Each of the conversations that took place in these environments was analyzed and examined across the dates in which it took place. This analysis was done to reveal the ways in which the multiple contexts influenced each other.
Trustworthiness

Qualitative data analysis requires close attention to the issues of validity to strengthen and develop the internal validity of the research. Lincoln and Guba (1985) illustrated the importance of trustworthiness through four major themes; (1) credibility, (2) transferability, (3) dependability, and (4) conformability. This section will detail how these four major themes were met to provide trustworthiness to the study and the findings of the data.

*Credibility*

To establish credibility in a study Lincoln and Guba (1985) refer to five major techniques that establish a credible study. First, the study should incorporate activities that will increase the probability of producing credible findings. Second, the study should provide an “external check on the inquiry process” (Lincoln & Guba, 1985, p. 301). Third, negative case analysis should be integrated. Fourth, preliminary findings and interpretations should be compared against raw data and fifth, member checking with data sources should be incorporated.

*Activities included that produce credible findings.*

Three major activities were incorporated to support the probability of credible findings: prolonged engagement, persistent observations, and triangulation.

To ensure credibility, I engaged in a prolonged engagement with the teacher and the students. The teacher and I had worked together for 5 years when I was a media specialist in the building and had continued to work collaboratively together through my work at a local university and during my doctoral studies. I began my observations in his room during the year prior to the study and continued to observe in his classroom prior to
the beginning of the study. I increased my observations before the study began to at least once a week so that the children knew me and saw me as a part of their classroom culture. During the data collection time period, I observed every day beginning with the time that the students arrived and socially interacted before class began until the language arts period ended and the students physically changed rooms for mathematics instruction. In addition, I stayed past the completion time of their book unit to ensure saturation of the data materials.

As Lincoln and Guba (1985) define, “the purpose of persistent observation is to identify those characteristics and elements in the situation that are most relevant to the problem or issue being pursued and focusing on them in detail” (p. 304). Persistent observation is focused on providing depth to the study. In this study, I focused my attention on two groups of students as they interacted with each other during their language arts time. I persistently focused my observations in their face-to-face group conversations and their time together working on the computers to write and post their responses to their reading. This persistent observation allowed me to provide depth and focus to my research questions but also allowed me to avoid closing myself off to other events in the classroom that impacted the students and the teacher.

Finally, triangulation (Lincoln & Guba, 1985; Denzin & Lincoln, 2000) incorporates the multiple sources of data types that support each other in a study. To support the triangulation of the data types, interviews, observations, document analysis and field notes were all utilized and collected in this study to provide multiple sources of data to the analysis.
Peer debriefer.

To provide an additional outside look at the data analysis that was being conducted, a fellow doctoral student in the field of reading was chosen to provide the role of “peer debriefer” in this study. This doctoral student was currently engaged in the Ph.D. program for reading and was currently focused on also collecting data for her dissertation study. I participated in conversations with the peer debriefer regarding discussions of data collection and possible interpretations and findings. In additional, the members of my dissertation committee served the role of peer debriefers as additional conversations took place over the duration of the study and writing process.

Negative case analysis.

Important to qualitative work is the process of attending to negative case analysis. By focusing attention on those instances, situations, and causes that may not fit the pattern or previous interpretations, I provided assurance that my predisposed notions were not guiding the data analysis nor was I forcing each part of the data analysis to fit to a pattern. For example, in conducting data analysis in response to Research Question #2, several negative case examples were found. These cases were analyzed and included in the data collection and analysis and are thoroughly discussed in chapter 4.

Referential adequacy.

In describing referential adequacy, Lincoln and Guba (1985) state that “recorded materials provide a kind of benchmark against which later data analyses and interpretations can be tested for adequacy” (p. 313). Following this definition, segments of data that had not been previously analyzed were examined to determine if the patterns and interpretations continued to match in data not previously coded. For example, after
much of the data had been coded for the types of responses that students utilized in their face-to-face conversations, a new segment of video, that had not been utilized as of yet was transcribed and coded according to the developing codes to assure their adequacy in the coding and analysis process. Sections of video that had not been previously used were identified and utilized for each category of data analysis conducted. Shifts that were made in the coding categories throughout the data analysis process required multiple reviews of the data. This recursive process strengthened the testing for adequacy of the analysis and the interpretations.

**Member checking.**

As Lincoln and Guba (1985) emphatically state, the member check is “the most crucial technique for establishing credibility” (p. 314). The process of member checking in which the researcher confirms that the reconstructions of conversations and events are adequate representations of the individual’s meaning is critical to the validity of the study. In this research study, the students were shown the transcripts of the informal conversations and asked if there was anything they wanted to clarify or any part they wanted to delete. The teacher was also provided the transcripts of all video transcriptions and his interviews for a “member check” on these particular pieces. In this way all of the participants verified the accuracy of their interviews.

The students read through their transcripts quickly and requested minimal changes. The changes that they requested included the removal of “um’s” and “oh’s.” One student clarified that though she stated she did not post anything to the threaded discussion board at home, she did enjoy reading the board when she was at home. The teacher read through all of his transcripts and though he expressed no interest at changing
or clarifying anything, he did express appreciation for having the opportunity to read and reflect upon the conversations that we had shared over the data collection time period.

**Transferability**

No qualitative study could directly transfer to another situation as no time and place could be ‘the exact same’ as another. However the researcher must provide a “thick description necessary to enable someone interested in making a transfer to reach a conclusion about whether transfer can be contemplated as a possibility” (Lincoln & Guba, 1985, p. 316). For this purpose I have provided throughout this document details and rich descriptions that will hopefully be helpful to others in their discretion towards transferability.

**Dependability**

In describing the purpose of dependability, Lincoln and Guba (1985) refer to the need for an “overlap” (p. 317) of data methods to ensure stability of the data. This overlap should include the data collection and the theoretical base from which the data are presented. In this study, there were multiple ways in which this overlap took place. First and foremost, the students were observed throughout multiple contexts in the ways that they read, discussed, and responded to texts. Whether it was in a whole class session, a face-to-face small group session, or in the computer environment, these contexts were similar and overlapping with each other. Secondly, the review of the research and theoretical perspectives detailed in chapter 2 were used to support the research process, data analysis, and development of findings. This process also allowed for an overlap of the research with the development of the study.
**Conformability**

Findings that are embedded in the data themselves (Guba & Lincoln, 1994) describe the notion of conformability. The findings need to be from the data and not from a pre-conceived notion or pre-determined position of the researcher. In this study, the development of conformability was incorporated through the multiple analyses of the data, the creation of the findings directly from the data, and that numerous examples drawn directly from the data were used to support the findings presented from the study.

**Summary**

This chapter provided five sections that articulated the methodological processes that framed this study. An overview to the study as well as an overview of the methodology was presented. A rich description of the context to the study including a description of the research site, my process of gaining entrance, the setting of the environment including the classroom context and how technology was used within that classroom context, and finally the participants (both teacher and students) involved in the study were provided. The data collection process was described that illustrated my role as the researcher and the types of data that I collected. An explanation of the data analysis process was then described for each of the three research questions. Finally, the issues of trustworthiness in relation to the credibility, transferability, dependability, and conformability to the study were detailed.
CHAPTER 4

FINDINGS OF THE STUDY

Introduction

This chapter presents an analysis of the ways in which the teacher and the students responded to texts in both face-to-face and on-line relationships in a fifth-grade classroom as they read and discussed common texts in the two different environments. It begins by providing the context of the classroom in which the students and teacher worked and learned together. This context includes an overview of the teacher’s philosophy and the philosophy of the school, a description of the physical environment in which the students and teachers worked, and an explanation of the teacher’s constructivist learning style that impacts the ways in which the members of the community worked and learned together.

Following this discussion, the remainder of the chapter is organized in relation to the two research questions to present the findings of the study.

The first research question was:

1. In what ways does the teacher facilitate student responses:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
In this section the ways that the teacher supported and guided the responses of students in the two different environments are analyzed. The teacher’s responsibilities are explored from how he guided and directed the students in a way that was flexible according to each students’ and group’s need. An analysis of the teacher’s use of questions in the face-to-face environment is incorporated to illustrate his ability to utilize questions in nurturing student response to literature. In addition, an examination of the teacher’s conversational style is portrayed, illustrating how he used a modified version of the Initiate, Respond, Evaluate pattern.

The second research question was:

2. How do the students respond to texts and to each other:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
   c. In the physical computer environment?
   d. Across the multiple contexts?

This section incorporates many of the central constructs of the research study, examining the ways in which students construct their understandings of the texts they are reading in the different environments. It also centers on the belief that a “text” can include but also be much more than the printed book that the students read. As Bloome and Egan-Robertson (1993) write, “a text is the product of textualizing” (p. 311). The students experienced their printed text, the electronic text of the on-line threaded discussion board, the texts that were created as they talked together in their face-to-face conversations, and the texts that they socially created as they talked together while socially engaged in the activities of the classroom.
In answering this second research question, the data are presented from the coding and categorizing that were described in chapter 3. This section includes a description of the individual responses that students made and how that impacts student interactions. The number and type of responses that students made and the interactions that develop are analyzed. This section also provides evidence of the different ways the two reading groups responded to the literature in both environments including an analysis of the ways in which the students took ownership of creating questions and responding to their questions independently in the on-line threaded discussion environment.

The chapter is thus organized in the following manner:

**Providing the Context of the Environment**

Overview of the School’s and Teacher’s Philosophy

The Physical Environment Surrounding the Students and Teachers

A Constructivist Place to Learn and Work

Reading Together

*The Role of the Teacher (Research Question 1)*

The Teacher’s Presence in the Face-to-Face Environment

The Teacher’s Presence in On-line Threaded Discussion Environment

The Teacher’s Presence through Modified IRE Conversations

*The Role of the Students (Research Question 2)*

Responses of Students in the Face-to-Face Environment

Responses of Students in the On-Line Environment

Responses of Students While in the Physical Computer Environment

Relationships Across Multiple Contexts

136
Providing the Context of the Environment

Overview of the School’s and Teacher’s Philosophy

According to the school’s Web site the school’s mission focuses on supporting students as they not only learn academically, but as they learn the importance and features of what it means to be a productive citizen in society. The school’s handbook states the following:

Our mission is to produce capable, lifelong learners who demonstrate positive qualities of citizenship, character, and self. We strive to be a good place for people to be – a place where intriguing things go on throughout the day. Our school is a place where people arrive early and enjoy lingering at the end of the day. We want our school to be an exciting place where children and adults learn in an atmosphere of warmth, cooperation, and respect.

(Retrieved June 11, 2006 from the school Web site)

In specific, grant applications from the school define its language arts program as:

Revolving around a literature-based approach, which stresses integration through thematic units. Children are individually assessed. Needs are addressed, and expectations developed. Our teachers use the most current literature, utilizing the media specialist to develop their classroom collections. Children read for authentic purposes and are asked to think critically about reading content. Teachers integrate writing across the curriculum. (Blue Ribbon Grant Application, 1999)
In addition, teachers work to integrate the four areas of reading, writing, listening, and speaking. The elementary school is committed to the authentic uses of literature and classroom instruction at every grade level and utilizes trade books as the focus for literary instruction.

Mr. Tyler Springs is the fifth grade teacher in whose classroom this study was conducted. Mr. Springs followed a philosophy of teaching and learning that flowed with the philosophy of the school. Mr. Springs had previously taught in Maryland and came to the school utilized in this study 9 years ago. His family lives in the town and his children attend school in the district. Tyler participates in many district-wide professional development opportunities, attends the National Council of Teachers of English conference, and is an avid reader of children’s literature. Tyler strives to design a program that meets the needs of all students and encourages them to engage in authentic reading and writing purposes.

Tyler received his masters of education from a neighboring four-year university in Technology-Enhanced Learning. This program focused on the utilization of problem-based learning instruction with meaningful applications of technology. Tyler’s instruction encouraged him to strengthen his knowledge of technology applications with a focus on how they can support his content instruction. Tyler believed that technology should never be used “for technology’s sake” but rather is only a tool that should advance and support learning in the classroom. Children utilized technology daily in an integrated and purposeful manner.
The Physical Environment Surrounding the Students and Teacher

To understand the ways in which students socially learned together, it is important to examine the dynamics of the classroom environment in which they worked. During the time in which this study was conducted, Tyler’s room was located directly across from the second of three fifth grade classrooms and also adjourned the library and technology center.

The three fifth grade teachers taught their own language arts in the morning and then departmentalized for math, science, and social studies instruction. Consequently, Tyler’s language arts time occurred daily from 9:00 to 11:00 each day with the exception of Friday. On Friday, because of pull-out programs, Tyler held his language arts time in the afternoon from 1:00 to 2:30.

Tyler’s classroom was approximately 25 feet by 35 feet and contained a variety of bookshelves, storage cabinets, and spaces for group work. The room’s décor incorporated a great deal of student created work. The entire side wall was made of windows that overlooked the school’s green campus area. A large section of the room was set apart with beanbag chairs and a couch for group and classroom meetings. (Appendix C provides a schematic map of the room).

The overall nature of the room was one in which the students and teacher created collaboratively with each other. Lockers on the one side of the room were personalized on the outside with student chosen art work. Posters around the top perimeter of the room were all student creations that emphasized various instructional content areas. Bookshelves lined other areas of the room. A long table in a back corner was always available for students to spread out and work together on collaborative projects.
desks were arranged in groups that students had self-selected with approval of the
teacher. A variety of weekly extension activities were located throughout the room, such
as the “Weekly Mystery Person” and the weekly “Measurement Activity.”

A Constructivist Place to Learn and Work

Tyler worked hard to create a constructivist environment in which students were
responsible for themselves and for their learning. Group projects were a central part to
their daily work and were open-ended, encouraging the students to control and own their
learning. This section will detail the ways in which students seized ownership of their
own learning and were encouraged by the teacher to work socially together by (1)
detailing the group projects in which students socially constructed their understandings of
the common texts they were reading, (2) describing the ways in which students were
given voice in determining the nature of some projects, and (3) providing examples of the
modifications and specific instruction that Tyler provided when the students were not
working well together or using their time appropriately.

Utilizing group projects to build understanding.

Tyler often incorporated collaborative projects that required students to work
together socially to articulate and display their common understandings. For example,
small groups of students worked together to create a poster that reflected their thinking
and understanding of the book that their particular group was reading. At the beginning
of the study, Tyler modeled for the students, utilizing an example poster that he had
created himself of what they were going to do. Tyler had currently finished reading The
Thief Lord by Cornelia Funke (2002) and he used this piece of literature as the basis for
his own poster. Through whole group instruction, Tyler showed the students his own poster and described for them the steps he wanted them to follow to create their own that followed his format in a small group.

The outside four inches of the poster were divided off with a thick black border. This outside border space was used by the students to illustrate the name and author of their book as well as the setting of the book with pictures and words as they saw fit. Tyler had the students working on the outside border of the poster that included the name and author of their book as well as visual images of the setting for the first week. After they had completed reading the first section of the book, Tyler brought the students together in small groups according to the common text they were reading to instruct them on what they were to do on the inside section of the poster board. Tyler modeled the process for them in small groups, asking the group members to reconstruct some of the important details that they had read in their books thus far. As the students named important events, Tyler wrote what the students said on small Post-It® notes. Tyler then put the Post-It® notes on the poster.

Thus, the inside rectangle of the poster was used to recreate the major elements of the story that the students were reading. Each small group of students, using small Post-It® notes determined what they thought the major events of the story were. The students summarized these major events on the Post-It® notes and then kept the events in order. In addition, the students were to decide as a group what they felt the climax or climaxes were and to arrange the Post-It® notes in a way that reflected the movement of the story. See Figure 4.1 and Figure 4.2 for examples of two group posters.
Figure 4.1: A finished poster developed collaboratively by one of the *Crash* small groups.

Figure 4.2: A finished poster developed collaboratively by one of the *Stargirl* small groups.
Following Tyler’s instruction, students worked on these posters collaboratively throughout the 6 weeks that they were reading their books together. The students were encouraged to add to the poster whenever they wanted to and were asked throughout the time to continually change and improve their work based upon their developing understandings of the book’s plot and story structure.

*Having voice in the classroom.*

It was important to Tyler, following his philosophy of nurturing a constructivist environment, that the students have voice and ownership over as many decisions as possible throughout the school day. Students were asked throughout the study to articulate what they thought and were involved in decisions regarding the classroom events.

During the time that the data were collected, one of the students’ classmates was diagnosed with cancer and was in the hospital for the duration of the study. The students were understandably very upset for their friend and classmate. Tyler provided them time to process what was happening and then asked them to brainstorm a list of what they could do for this student while he was in the hospital. After they had brainstormed a list, Tyler asked the students to vote for their favorite one. In the end, the students’ favorite choice was to create a video for their friend. Tyler had the students decide what would be on the video and how they would create what they wanted. When it was time to video tape, the following conversation took place:

*Iris asked Tyler, “Who is going to operate the camera? Tyler replied, “Not me. But that is a good question.” After a student-led discussion, the*
students decide that the students who have experience being the camera person on the morning news should operate the camera.

Field Notes, February 8, 2006

The students were accustomed to having a role and a say in the events of their classroom. Even on Valentine’s Day the students were responsible for themselves and their environment. When the students arrived that morning Tyler had set one cup of candy at each table. Tyler told the students they were responsible for deciding how they would distribute the candy and when they would choose to eat it. The students also inquired as to when they could hand out their Valentines and were then told by Tyler that they could decide as a class how and when they would handle the festivities.

*Modifying behavior in a constructive environment.*

Not every moment was as successful as the previous example. On one particular day the students were off task and noisy as they worked in groups and on the computers with their postings. Tyler was very unhappy with their off-task behaviors. He stopped the room early from their reading time and pulled them together into a whole class discussion. The field notes document the following event.

*Tyler then tells the class that he is very disappointed with their behavior and how distracting they were. He tells them that he was unable to concentrate fully with the discussion group because he was paying attention to their distracting behaviors in the room. Tyler asks the students to rate themselves on how they did at staying focused and working during the reading time. He then asks students individually what they gave*
themselves and why. Tyler asks them to identify what distracted them – and why it distracted them.

Field Notes, February 22, 2006

As this example shows, Tyler’s students were occasionally off task and distracted. However, Tyler brought them together and clearly articulated that he was disappointed with their choices. Tyler then identifies that they need to be responsible about what distracted them and why, giving them ownership over their behaviors. Tyler ended this group time by having the students each write about their own behavior, how they think they did, and what they would do differently next time. Tyler tells the students:

“It is important to reflect when things go well and when things do not go well”

Audio File, February 22, 2006

Tyler lived this advice with the students on a regular basis. On a different day I arrived to find the room rearranged and all of the chairs in a large circle in the center of the room. Tyler had received a complaint from two other teachers regarding the way his students were working together when they were not with Tyler and as a result Tyler had called a class meeting to talk through the problem. Tyler asked the students to talk through these issues and to discuss why they were not working well together in the different environments.

These examples are important to illustrate the portrait of Tyler’s room and how the students were encouraged to think for themselves and to work through any problems that developed. Tyler consistently handed responsibility back to the students, not only
for their work but for their behavior and for the ways in which they interacted and worked together.

It is critical to understand the classroom environment that has been illustrated in understanding the ways in which the students respond to each other and their responses to texts. The students in this room are nurtured to think for themselves and to hold responsibility for their learning and behavior. The constructivist environment that permeates the room encourages the students to utilize the platform to respond to texts in a safe and encouraging environment.

Reading Together

As previously described in chapter 3, two groups of students were the focus of this research study. One of the groups engaged in reading the book *Stargirl* (2000) and the other read the book *Crash* (1996). Both books were written by Jerry Spinelli. This section begins with a brief summary of the two books to provide a context to the storyline the teachers and students engaged in discussing. Each of these texts incorporated themes of social justice. However, the theme of social justice was not observed to develop through the responses of the students and the teacher.

Summary of *Stargirl*.

*Stargirl* was written by Jerry Spinelli and focuses upon common high school themes, that of individuality, acceptance from peers, and conforming for the sake of belonging. Stargirl is the “new kid” at Mica Area High School and makes a memorable entrance. She wears strange outfits, has a rat for a pet, performs anonymous random acts of kindness for people she doesn’t know, and sings “Happy Birthday” to students in the
cafeteria accompanied by her ukulele. In the beginning, Stargirl is shunned but through a variety of events is accepted and many in the high school follow her and her style. Leo and Stargirl fall in love and Leo is overjoyed at her acceptance among their peers.

However, when Stargirl chooses to cheer for an opposing basketball team at the high school tournament (wanting happiness for everyone) the students turn hostile against her. Leo is unable to leave the security of belonging to the group and tries to convince Stargirl to change who she is to “fit in” within the dominant high school culture. Though Stargirl tries for a short time, she is unable to deny who she is at heart for the sake of uniformity. After a climactic scene at the school’s dance, Stargirl disappears forever and leaves Leo sadly reminiscing his choices.

Summary of Crash.

Crash’s storyline focuses primarily upon the character development of the main character Crash, who begins the story as a jock and a bully. Crash received his nickname as a young child when he received his first football helmet and proceeded to knock over and tackle his young female cousin upon her arrival for Christmas dinner. Crash continues to grow into a “tough guy” who is competitive and mean to those he perceives as weaker. When Crash meets Penn Webb, he continues his reign of bullying upon this new neighbor. Penn however continues to try and befriend Crash despite his poor behavior.

When Crash’s beloved grandfather moves in with his family and shortly afterwards suffers a debilitating stroke, Crash begins to re-evaluate the person he is and the person he realizes his grandfather would like him to be. Crash begins to engage in acts of kindness towards Penn and his sister and refuses to engage in bullying behaviors
as he had in the past with his old friends. In the climactic ending, Crash allows Penn to win an important neighborhood race and embraces the new Crash and his friendship with Penn. The following section details the teacher’s presence as he facilitates the students responses to these texts.

Examining the Teacher’s Presence

The first research question focused upon examining the ways in which the teacher facilitated the students’ responses in the group discussion environment and in the on-line threaded discussion environment. This question specifically asked:

1. In what ways does the teacher facilitate student responses:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?

Examining the data collected throughout the study provided an insight into the presence of the teacher as he supported the conversations in both the face-to-face group conversations as well as the on-line threaded discussion conversations to provide structure and support the students’ understandings of the reading.

The teacher in this classroom utilized flexible roles when nurturing the reading responses of the students in both environments and held a different presence in those two environments. This section illustrates how the teacher, Tyler Springs, nurtured students’ responses in different ways depending upon the needs of the group and the environment in which they were working.

The first section illustrates how the teacher adjusted his role based upon the needs of the group in which he was working and responding in the face-to-face environment.
This section also explains the questioning style of the teacher and what types of questions he posed to the students. In addition, the teacher’s own personal responses that were shared in the face-to-face environment are discussed. Finally, this section illustrates the different presence of the teacher as he responded and interacted with the students in the on-line environment.

The Teacher’s Presence in the Face-to-Face Environment

An overview.

I feel like I take less of a role with some groups than I do with others because often they can get their own conversation going. If it starts to flounder, I’ll put a question out there but oftentimes with discussions I do as much responding to them I think as they do to me. Now with the other groups I lead it because they need that and they are not going to have the same type of discussion if I don’t.

Teacher Interview, February 21, 2006

This quote illustrates the flexible teaching styles and constructivist philosophy that permeated Tyler’s classroom teaching style. As observed throughout the study, Tyler generated classroom activities and lessons that provided the opportunity for the students to take ownership and leadership whenever possible. For example, on Valentine’s Day Tyler was asked by his students when they could hand out their valentines to each other. Rather than dictating the schedule, Tyler told the students to independently decide as a group when they would like to take care of that activity. On a different day the students were creating a video of themselves for their classmate in the hospital. The following scene was observed:
I watch as Tyler encourages the students to own all of the work. For example, a student asks, “Who is going to work the camera?” to which Tyler only replies, “I don’t know. It is not going to be me.” The students then discuss who should work the camera and they decide that the students who are on the morning news show and who have experience working the camera would be the best fit. Those three students take responsibility for the camera and take turns rotating through.

These examples illustrate the ways in which Tyler encouraged and nurtured the students’ ownership and involvement in their daily classroom. This teaching style permeated the reading group discussions that were observed during the course of the study. As Tyler articulated in the quote that began this section, he wanted the students to take as much ownership of the discussions as possible. Tyler stated in the earlier quote that he begins by trying to provide them the opportunity to “get the conversation going.” If they cannot, then he adjusted and provided direction for them.

This ideology from the teacher was directly observed throughout the study. During the 6-week data collection period, the Stargirl reading group and the Crash reading group met in a face-to-face session five times each. Depending on how much time was available on a particular day for language arts, and depending on what Tyler felt the needs of the group were, Tyler would decide which group to call, in what order, and for how long they would meet. However, following his constructivist environment and philosophy, Tyler encouraged the students to determine the direction of the conversations that were held in the face-to-face environment. Table 4.1 illustrates lines taken from
transcripts of opening questions that the teacher asked in the face-to-face conversations that I observed.

<table>
<thead>
<tr>
<th>Date</th>
<th>Group</th>
<th>Question</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 30</td>
<td>Crash</td>
<td>What do you feel some of the important events from the section are that really helped move the story forward?</td>
</tr>
<tr>
<td>February 1</td>
<td>Crash</td>
<td>Is there anything from your reading that you want to discuss?</td>
</tr>
<tr>
<td>February 6</td>
<td>Stargirl</td>
<td>So fill me in. What is going on right now in your reading?</td>
</tr>
<tr>
<td>February 15</td>
<td>Stargirl</td>
<td>To start today, I would like to hear what you think are some climactic events.</td>
</tr>
<tr>
<td>February 21</td>
<td>Crash</td>
<td>How’s your reading – what is going on?</td>
</tr>
</tbody>
</table>

Table 4.1: Opening questions that the teacher asked the students in the face-to-face discussions.

In both groups Tyler was observed to provide the opportunity for students to generate the direction of their responses to the text. The above lines illustrate that he did not begin with his own agenda, but instead wanted the students to initiate the themes from their reading that they wanted to discuss. They chose the major elements of interest for them from their reading.

Though Tyler encouraged both groups to engage in the conversation from the beginning and asked opening questions that provided students the opportunity to choose the direction of the conversation, the two groups functioned differently when talking together in the face-to-face environment. The Stargirl group consisted of 7 girls that were observed to work together as a cohesive unit throughout their time together. When examining the dynamics of the Stargirl’s face-to-face group time Tyler stated,
This is the first time that this entire group has been together in a book and it has been that all of the pieces have fallen together.

Teacher Interview, February 21, 2006

The 7 girls that formed the “entire group” that the teacher referred to were all friends inside and outside of the classroom. The members of this group were observed to interact with each other throughout the school day and to socialize together at recess and lunch. The girls also were observed talking about their out of school activities that they all shared. When interviewed, the girls that were members of the Stargirl group also indicated their understanding that they worked well together as they considered themselves friends. The girls in this group articulated their enjoyment of the book as well as their enjoyment in talking together about the book. With the exception of one student, the girls were observed to always have their reading done by or before the assigned date.

One student, upon finishing the reading of a particularly exciting section, physically bounced over to me because she was so excited to share what she had just read and to express her thoughts about the specific section of the book. The students in this group enjoyed reading the book and talking together about the book. As one of the students summarized in an interview regarding their interactions together as a group,

Like girls, they think about the same thing, and they know what each other are thinking, so it is really cool.

Student Interview, February 28, 2006

The Crash group, consisting of 2 boys and one girl, did not have as easy of a time completing their reading by the assigned time or participating together as a group. I observed the students coming to the face-to-face meetings without having completely
read the assigned pages. They came without the materials that the teacher asked them to bring and would have to return to their desks or lockers to find the needed items. One of the students summarized in a conversation I had with him about his group and the way they worked together:

_Well, as you know, we had a little bit of trouble._

Student Interview, February 28, 2006

Because of the different dynamics of the two different groups, Tyler flexed his role based upon the needs of the group. When working and interacting with the _Stargirl_ group, Tyler engaged in a role consistent with that of a guide. As a guide he did not provide explicit instruction but instead assisted the students as they held their conversations. When interacting with the _Crash_ group, Tyler served as the leader of the group, providing direct, explicit instructions to the students.

_Guiding Stargirl._

_It is interesting to be able to sit back and watch the students take charge of the conversation themselves and lead the discussion without as much talking from Tyler at all. They talk and give their responses independently._

Field Notes, January 27, 2006

As field notes and observations illustrated, the _Stargirl_ group easily engaged in conversation about their reading. During their five group conversations, they were observed to come to the meeting area quickly and eagerly. As indicated earlier, Tyler often began by asking them what they would like to discuss and they always were ready to engage in a topic. When Tyler asked this group about what they felt were some of the
climactic events or to talk about what was happening in their reading, they were observed to instantly engage in answering his prompt with their own thoughts and personal responses to the text. Each of the group sessions was observed to be a fun and enjoyable time, and the students never wanted to leave the group when the time came to a close.

In only one instance were the Stargirl group members observed to engage in asking their own questions when meeting together in the face-to-face environment. Instead, they relied on Tyler’s guidance in posing the questions that they responded to throughout all of the face-to-face sessions. Only during one of the five times in which the group met together in the face-to-face environment was one student observed to pose her own question. In this one event the student was responding with her opinion of an event in the text but became confused as to how the Stargirl discovered personal details about people. In line three and four the student posed a question regarding how it is that Stargirl discovered Leo liked a particular kind of tie. In lines 5 and 6, two members of the Stargirl group answered the student’s question which provided the prompting she needed to remember the details and finish her response.

<p>| | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Olivia</td>
<td>1</td>
<td>Like at the beginning – remember, - okay I have a question first. Okay – how – Stargirl finds out all these things, like peoples’ birthday’s and stuff by looking in the newspaper where other people don’t look and stuff, but how does she figure out that Leo likes porcupine neckties?</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grace</td>
<td>5</td>
<td>Because it said it in the newspaper.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mikela</td>
<td>6</td>
<td>Because she has all these files and everything where she puts everything.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Olivia</td>
<td>7</td>
<td>Okay she finds out that Leo likes porcupine neckties and gives him one for his birthday and at the end of the book, after she leaves the process starts all over.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Video Transcription, Stargirl Group Conversation, February 15

Though Tyler participated thoroughly in the conversations, his participation regularly involved questions that were intended to enhance and strengthen the students’
conversations, rather than providing his own personal responses to the text. As Table 4.2 illustrates, Tyler asked questions that engaged the students, probed for additional information and extended their understanding in over 75% of the questions that he posed.

<table>
<thead>
<tr>
<th>Stargirl</th>
<th>Total</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging</td>
<td>21</td>
<td>31.8%</td>
</tr>
<tr>
<td>Probing</td>
<td>20</td>
<td>30.3%</td>
</tr>
<tr>
<td>Extending</td>
<td>9</td>
<td>13.6%</td>
</tr>
<tr>
<td>Clarifying</td>
<td>5</td>
<td>7.6%</td>
</tr>
<tr>
<td>Managing</td>
<td>4</td>
<td>6.1%</td>
</tr>
<tr>
<td>Restating</td>
<td>4</td>
<td>6.1%</td>
</tr>
<tr>
<td>Leading</td>
<td>3</td>
<td>4.5%</td>
</tr>
<tr>
<td>Totals</td>
<td>66</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.2: Types of questions asked by the teacher in the Stargirl face-to-face discussions.

For example, in the following transcript, Tyler engaged the students in lines 1-2 with an engaging question regarding their perceived climactic events from the assigned reading. In line 3, Mikela provided a climactic event in which one of the characters slapped Stargirl. Tyler probed Mikela for more information, asking in line 4 if things changed because of this event. When Mikela answered with “Yeah, everything changes” (line 5), Tyler probed for additional information asking how things changed (line 6). After Mikela answered, Tyler engaged a different student to share her thoughts on what a
different climactic event might be (line 9). When the student provided her response, Tyler probed this student for additional information with a why question (line 11).

<table>
<thead>
<tr>
<th>Tyler</th>
<th>1</th>
<th>Engaging</th>
<th>Okay – to start today I would like to hear what you think are some climactic events.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mikela</td>
<td>3</td>
<td></td>
<td>I think one is when Hillary slapped Stargirl.</td>
</tr>
<tr>
<td>Tyler</td>
<td>4</td>
<td>Probing</td>
<td>Do things change after that?</td>
</tr>
<tr>
<td>Mikela</td>
<td>5</td>
<td></td>
<td>Yeah – everything changes</td>
</tr>
<tr>
<td>Tyler</td>
<td>6</td>
<td>Probing</td>
<td>How – how do things change?</td>
</tr>
<tr>
<td>Mikela</td>
<td>7</td>
<td></td>
<td>She leaves and she doesn’t come back</td>
</tr>
<tr>
<td>Tyler</td>
<td>8</td>
<td>Engaging</td>
<td>Okay so you would consider that a climactic event in the story. Okay – Lea?</td>
</tr>
<tr>
<td>Lea</td>
<td>10</td>
<td></td>
<td>I think a climactic event is when Stargirl changed into Susan</td>
</tr>
<tr>
<td>Tyler</td>
<td>11</td>
<td>Probing</td>
<td>Why is that?</td>
</tr>
<tr>
<td>Lea</td>
<td>12</td>
<td></td>
<td>Because the whole time she has been Stargirl and has been turning into someone else</td>
</tr>
</tbody>
</table>

In only 10.5% of the questions that he posed, Tyler asked questions that incorporated leading and restating the students’ responses and that refined the students’ conversation. However, as illustrated in this transcript, there are subtle nuances to the teacher’s questions and responses. For example, in this transcript the teacher is also questioning and responding to the students to support their understanding of the operational definition of the word climactic. The teacher worked to facilitate additional understandings of the text that is more complex and deep that can be captured by any one coding system. Though a coding system is used to analysis these transcripts for the types of questions and responses the teacher and students had, there are multiple factors and happenings woven into the interactions of the students and teacher that no one coding system could analyze.
Analysis of the data also included the number of times the teacher made comments during book discussions in the face-to-face context with the *Stargirl* group members. During the five times the *Stargirl* group met together, Tyler made only 22 comments in comparison to the 66 questions that he asked. Only four of the comments directly or indirectly revealed the teacher’s personal responses to the *Stargirl* text that the group was reading (Table 4.3). The remaining comments incorporated general directions that the teacher provided to the group members, such as to one student who had read further ahead in the book, “I want to remind you, don’t give away too much that is going to happen” (Teacher, February 15, 2006).

| January 24 | I wanted you to see that so you could see that *Stargirl* sometimes is doing things sometimes that don’t fit in. |
| January 27 | I picture her doing a cheer. Doing a cheer for them. |
| February 15 | I don’t think Leo and Stargirl ever get to meet again. That is the way I picture it. Gone, done, over. |
| February 22 | Well my impression is that Mrs. Arnold sits here very quietly in class and I don’t get that impression of something Stargirl would do – to just sit quietly. |

Table 4.3: Comments made in the *Stargirl* group that illustrate the teacher’s personal responses to the text.

These few comments illustrate that though the teacher takes a participating role in the students’ conversation in the face-to-face environment, he extends his own responses and thoughts about the text into the conversation in only four comments.

An example of Tyler’s guidance during the group’s face-to-face interactions can be seen in the following transcript wherein the students of the *Stargirl* group were discussing whether or not Stargirl should be removed from the cheerleading team because
she was cheering for both teams, and not just her own. Tyler opened the conversation in the first line by asking the students to provide a summary of what is going on currently in the story. In lines 2-3, one of the students provided a brief summary of what they had currently read.

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>1</th>
<th>Okay – so quickly fill me in. What is going on right now? What is going on?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace</td>
<td>2</td>
<td>Leo was just like showing that he likes Stargirl and so he’s like at Archie’s house they tell him about how she got kicked off the cheerleading squad.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>4</td>
<td>Cheerleading – can I ask you a question about that? When I read your packets a lot of you talked about the fact that it was cheerleading that made her popular. That is what a lot of you said in the book. And now you say she got kicked off – what happened?</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Olivia</td>
<td>8</td>
<td>Well she was cheering for both of the teams and whenever and um like let’s say one of the basketball teams was called – any name – the Wildcats and the Electrons and if the Wildcats scored a goal she would start cheering and then if the Electrons scored a goal, she would start cheering.</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td>So she would cheer for both of the teams and then so some of the other people didn’t like that and they said you are only supposed to be cheering for our team but she feels like that cheering for both the teams is good and being a good sport. But people from her – what is it called – Mica Area High School – they don’t like that she is cheering for the other team.</td>
</tr>
</tbody>
</table>

Video Transcription, *Stargirl* Group Conversation, February 6

In lines 4-7, the teacher asked an engaging question that builds from the summary the student previously provided. Through the finishing lines Olivia provided a detailed explanation regarding the plot of the book and the happenings that have taken Stargirl to this critical moment. Through these few lines, Tyler guided the students into a conversation regarding the “fairness” of whether or not she should be removed from the cheerleading team because of her determination to cheer and support everyone, not just her high school team. The conversation continued as Tyler engaged them in the question posed in lines 17-18 in which Tyler asked them to move beyond the details of what has happened in the story and began to engage in conversation about the event and whether
or not they thought it was fair for her to lose her place on the cheerleading team because she cheered for both sides.

| Mr. Springs | 17 | What do you guys think about that? Was it fair that they kicked her off – was it not fair? What do you think? Iris? |
| Iris | 19 | Well I think it is sort of fair and sort of unfair. But sort of fair because if you are a cheerleader, you shouldn’t really be cheering for the other team. You should be cheering for your team. |
| Mr. Springs | 22 | I have to be honest, when I go when I go to my kids’ basketball or . . . |
| Iris | 23 | Indicates that Tyler has interrupted her so Tyler motions that he zips his lips and lets Iris finish. |
| Iris | 25 | And then I think it is good because she is being a good sport and cheering on the other team but they are giving her a hard time for it to tell her to cheer for her own team. |

After one of the students began to provide her opinion, Tyler began to articulate his own thoughts though the student quickly informed him, as lines 23-24 show, that he had interrupted her before she had finished. Tyler figuratively stepped aside and the student finished her response.

This transcript illustrates Tyler’s ability to guide the conversations and provide the students the opportunity to share their own thoughts and responses. Tyler opened the conversation by asking the students to choose what they would like to discuss. Tyler then engaged them in questions to further the discussion. When Tyler interrupted one student, that student felt comfortable enough to inform the teacher of his interruption. The teacher acknowledged his mistake by physically and playfully “zipping his lips” and sat quietly while the student finished. The students and the teacher were all members of the conversation and everyone knew they were there to openly share their ideas and thoughts.
Summary of Stargirl.

The Stargirl group was observed to enjoy their time in the face-to-face setting sharing their thoughts with the teacher and with each other. The teacher guided their time responding to what they had read through a variety of engaging, probing, and extending questions. The teacher guided their talk and responses to the literature through these questions and provided only four comments that illustrated his own personal responses to the text.

Steering Crash.

As discussed previously, the 2 boys and one girl that constituted the Crash group struggled throughout this study. One member of the group had difficulty in maintaining appropriate school behavior throughout the day and was on a behavioral contract privately with the teacher throughout my time spent in the classroom. As a group they struggled in their ability to work together. One of the students was frequently observed to be rejected by the other group members from joining in small group projects regardless of the topic. The students in this group were observed to come to the face-to-face meeting times unprepared and not having finished the assigned reading.

Despite these difficulties, the teacher was observed to begin the Crash group’s conversation in a similar way to the Stargirl’s conversations, always giving the group members the opportunity and choice regarding where to begin the conversation. The teacher engaged the students right away by asking questions such as “What is going on in your reading” and “How’s your reading going? What is going on?”

Similar to the Stargirl group, this group also relied on the teacher to ask the questions that steered the group’s conversation. Analysis of the teacher’s questions while
working with the *Crash* group found that the teacher asked 121 questions over the five face-to-face sessions that the group met together. As Table 4.4 documents, over 58% of these questions were probing and engaging.

<table>
<thead>
<tr>
<th>Crash</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Probing</td>
<td>39</td>
</tr>
<tr>
<td>Engaging</td>
<td>32</td>
</tr>
<tr>
<td>Managing</td>
<td>15</td>
</tr>
<tr>
<td>Clarifying</td>
<td>10</td>
</tr>
<tr>
<td>Leading</td>
<td>10</td>
</tr>
<tr>
<td>Extending</td>
<td>7</td>
</tr>
<tr>
<td>Rhetorical</td>
<td>6</td>
</tr>
<tr>
<td>Restating</td>
<td>2</td>
</tr>
<tr>
<td>Totals</td>
<td>121</td>
</tr>
</tbody>
</table>

Table 4.4: Types of questions asked by the teacher in the *Crash* face-to-face discussions

The largest amount of the questions (32%) were probing in nature because the teacher probed and pushed the students to provide additional information in the responses that they provided as the students answered with short responses that lacked description.

For example, in the transcript below, Tyler engaged the students in lines 1-3 in a conversation regarding how Crash, the main character, might have changed due to his grandfather having a stroke. Upon asking “does that change Crash?” Josh only answered “yes” (line 4). Tyler then probed the student by asking how the character changed (line

161
5). Again the student minimally answered the teacher in line 6. Tyler again probed the student in line 7 by asking him to explain what his response meant. The student again answered Tyler with a short, minimal response (line 8). Tyler tried again, probing the student to explain his answer (line 8). Finally, in lines 11-12, Tyler posed a leading question, steering the students toward an understanding of how the main character had changed due to this climactic event of his grandfather becoming ill.

<table>
<thead>
<tr>
<th>Tyler</th>
<th>1</th>
<th>And friends can be like that. Sometimes friends get upset with each other. Um – how does the grandfather going into the hospital – does that change Crash?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyler</td>
<td>2</td>
<td>How does it change him?</td>
</tr>
<tr>
<td>Tyler</td>
<td>3</td>
<td>He becomes a dud.</td>
</tr>
<tr>
<td>Josh</td>
<td>4</td>
<td>Yes</td>
</tr>
<tr>
<td>Tyler</td>
<td>5</td>
<td>What does that mean?</td>
</tr>
<tr>
<td>Josh</td>
<td>6</td>
<td>He doesn’t act as mean.</td>
</tr>
<tr>
<td>Tyler</td>
<td>7</td>
<td>Why?</td>
</tr>
<tr>
<td>Sophia</td>
<td>10</td>
<td>He is sad and sorry</td>
</tr>
<tr>
<td>Tyler</td>
<td>11</td>
<td>Does he start to see the way he has been acting? And he sees he doesn’t like it?</td>
</tr>
</tbody>
</table>

This transcript illustrates that Tyler provided support when engaged in face-to-face conversations with the *Crash* group. Though Tyler initiated the conversations in a similar style to the *Stargirl* group, he supported the *Crash* group through the conversations as the students struggled to provide detailed responses of their thoughts and feelings to their reading.

An analysis was conducted to examine the number of responses that Tyler had in the face-to-face environment and the type of comments that Tyler provided. This analysis found that Tyler made 45 comments in the discussions with the *Crash* group. Examining the 45 comments that Tyler made illustrated that only three related to his
responses and opinions of the text as documented below in Table 4.5. In these three comments, Tyler provided his thoughts and responses to the common text they were reading.

<table>
<thead>
<tr>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 1</td>
<td>That doesn’t seem like him does it – that is interesting.</td>
</tr>
<tr>
<td>February 14</td>
<td>Maybe he doesn’t want to cheer for Crash because Crash is always bullying him. Maybe he doesn’t want to support him anymore.</td>
</tr>
<tr>
<td>February 21</td>
<td>He was starting to act that way out of respect for Scooter.</td>
</tr>
</tbody>
</table>

Table 4.5: Comments made in the Crash group that illustrate the teacher’s personal responses to the text.

The remaining 42 comments that Tyler made while interacting with the Crash group in the face-to-face setting centered upon managing the students’ behaviors and work. For example, during one group session Tyler made 13 comments that focused upon managing the students’ behavior and asked only eight questions regarding their thoughts about the reading. This session was different in nature as it was designed to be an “intervention” session in which the students were not provided the opportunity to talk but instead were directed to write their responses independently. The students had been responding inappropriately in the on-line threaded discussion environment. Tyler used their face-to-face meeting time to lead the students step by step through the process of how they should be writing and responding to each other. In this session Tyler instructed the students directly on what they were to do throughout their time together, managing their behavior as well as their work.
Though Tyler utilized a supportive approach in the *Crash* group and though the *Crash* group struggled to work together and engage in the text, Tyler never imposed his own thoughts and personal responses to the read text upon the students. Instead, he adjusted his style and type of questioning according to the students’ needs to help enrich and encourage their responses to the reading. As one of the students, when asked about whether they needed Mr. Springs in their *Crash* group discussions stated,

*Yes – because he was always the one to ask us the questions. How we thought about it and stuff because we didn’t really know what we were supposed to ask each other.*

Student Interview, March 6, 2006

*Summary of Crash*

The *Crash* group was observed to struggle with their engagement in the text and in their responses to each other. This group relied upon the teacher to ask the questions and to manage the group’s dynamics. The teacher in this setting asked probing and engaging questions during the discussions, but also utilized managing questions 12% of the time that refocused the students’ responses and attention to the group conversations. The teacher also had over 45 comments that he made to the students with only three comments that shared his personal thoughts and responses to the text read by the group.

*A comparative examination.*

Tyler exhibited a different presence when working with each of the two different groups. While working with the *Stargirl* group, Tyler asked less questions and the students provided longer responses in the conversation. In the *Crash* group, Tyler
provided a supportive role and asked more questions of the students than he did with the 
*Stargirl* group. The following table (Table 4.6) summarizes the frequency and amount of 
questions that Tyler asked of each group.

<table>
<thead>
<tr>
<th></th>
<th>Stargirl 5 Sessions 30 minutes each</th>
<th>Crash 5 Sessions 30 minutes each</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engaging</td>
<td>21</td>
<td>32</td>
</tr>
<tr>
<td>Probing</td>
<td>20</td>
<td>39</td>
</tr>
<tr>
<td>Extending</td>
<td>9</td>
<td>7</td>
</tr>
<tr>
<td>Clarifying</td>
<td>5</td>
<td>10</td>
</tr>
<tr>
<td>Managing</td>
<td>4</td>
<td>15</td>
</tr>
<tr>
<td>Leading</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td>Restating</td>
<td>4</td>
<td>8</td>
</tr>
<tr>
<td>Totals</td>
<td>66</td>
<td>121</td>
</tr>
</tbody>
</table>

Table 4.6: Amount of questions asked in each group.

Though both groups each met five times for approximately 30 minutes each time, 
Tyler posed almost twice as many questions to the *Crash* group as he did to the *Stargirl* 
group. These data illustrate the different presence Tyler exhibited when working with the 
two different groups. While interacting with the *Stargirl* group, Tyler utilized fewer 
questions than with the *Crash* group. Tyler probed the *Crash* group members almost 
twice as often for additional information. In the *Stargirl* group he utilized questions that 
extended their responses more often than he did in the *Crash* group. Additionally, in the 
*Crash* group, Tyler asked management questions four times more often than he did in the 
*Stargirl* group. Overall, Tyler asked twice as many questions in the *Crash* discussions as 
he did in the *Stargirl* discussions. Figure 4.3 further illustrates the difference between the
groups, showing the different types of questions that Tyler used in channeling the students’ conversations.

Tyler changed his presence in the two groups according to the students’ need in the face-to-face environment. Tyler led the group discussions when the students needed support and utilized a guiding presence when they did not. He modulated his presence based upon what he felt the students needed to facilitate their conversations.

Figure 4.3: Comparison of questions asked in the Stargirl and Crash group discussions.
The Teacher’s Presence in the On-Line Threaded Discussion Environment

As is illustrated in this section, Tyler’s presence was less prevalent in the online threaded discussion environment. To start each of the boards, Tyler posted a higher-order question to guide the students through the first post. For example on the Crash board, Tyler began the discussion by posting:

*You have recently completed the D.A.R.E. Program. Part of the program was teaching about positive ways to make decisions and how to avoid peer pressure. Based on what you learned in D.A.R.E., what do you think is the best way to handle a situation where someone is bullying you?*

Threaded Discussion Board, January 22, 2006

On the Stargirl discussion board, Tyler began the conversation by posting the following question:

*Think about what makes you unique. We know everybody has different names, fingerprints, family, etc. What else makes you uniquely you? Tell us about what makes you special.*

Threaded Discussion Board, January 22, 2006

In this way Tyler provided a model example for the students from their first thread on the discussion board. This provided not only the first prompt for responding and initiating the on-line conversation, but modeled the process of writing a higher-order question.

However, after Tyler posted those initial two questions, he only posted one additional question on the Crash threaded discussion board, for a total of three questions. The students posted the remaining 61 questions (see Table 4.7). The students thus
initiated new topics of conversation and questions that they wanted to discuss. Tyler purposefully chose to post only three questions. As he stated,

*I am generally putting responses to other students – I do that intentionally

– I don’t post a lot of questions intentionally.*

Teacher Interview, February 24, 2006

Tyler described in this interview his intention of creating the on-line space for the students to interact with each other without his presence (both physically and figuratively) being required at all times.

<table>
<thead>
<tr>
<th></th>
<th>Number of Questions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher</td>
<td>3</td>
</tr>
<tr>
<td>Students</td>
<td>61</td>
</tr>
</tbody>
</table>

Table 4.7: Number of questions posed in the on line threaded discussion environment.

Tyler’s third question came on the Crash discussion board. This group struggled to write posts to the on-line threaded discussion board that were appropriate and acceptable to the teacher. The students began responding appropriately but quickly began writing short, off topic comments that included the use of Pig Latin. In an attempt to model again for them an acceptable question, Tyler posed a second question on their board that asked, “Why do you think Penn keeps trying to be friends with Crash when Crash is always so mean to him?” Three students responded; however, they were all considered inappropriate responses. At this point in time, Tyler stopped the students from using the on-line threaded discussion board. Instead, Tyler chose to meet with them
in the physical face-to-face environment, re-teaching the ways in which Tyler wanted them to ask and answer questions when in the on-line space.

Through his limited responses to the students’ posts, Tyler continued to restrict the presence he had in the students’ conversations. Tyler wanted to participate in their conversations, but wanted the students to initiate and have ownership over their topics of conversation. In a discussion related to the students’ independence on the threaded discussion in asking and responding to questions, Tyler stated,

*On the discussion board I pushed them in that direction from the very beginning and from the very first time we did it, it was like they did a post and then they came back and said – you didn’t respond to our posts and I said – “No, I’m not going to every time. When I have something, I’ll put it in, but this is for you guys.” So I pushed that from the very beginning.*

Teacher Interview, March 2, 2006

Tyler articulated his desire to maintain a presence in this environment and provide support when needed but to support the students in taking the leadership of asking and answering questions. This is illustrated in an analysis of the amount of responses that were posted by the students and by the amount of responses that are the teacher’s as shown in Table 4.8.

<table>
<thead>
<tr>
<th></th>
<th>Teacher Responses</th>
<th>Total Number of Student Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Stargirl</strong></td>
<td>8</td>
<td>74</td>
</tr>
<tr>
<td><strong>Crash</strong></td>
<td>6</td>
<td>45</td>
</tr>
</tbody>
</table>

Table 4.8: Teacher and student number of responses posted on each board.
Though Tyler wanted the students to hear his “voice” in this virtual environment, he did not want his voice to be the most prevalent one heard. As a result, his posts constituted less than 13% on each of the boards. In this way, Tyler articulated his own responses to the students’ questions and the common text they are reading while not taking leadership of the conversation that takes place through the on-line threaded discussion board.

The responses that Tyler crafted were typically an average of seven sentences long and articulated a thorough response to the question that was asked. He always incorporated the question into his written responses and utilized correct spelling, grammar, and punctuation. Tyler incorporated examples from his own life into his responses and modeled comprehensive answers to questions students posed on the discussion board. For example, in response to a student’s question, “Have you ever felt left out of something? Tell me about it, what did you feel like (sad, mad...)?” Tyler wrote,

There are times when I've felt left out of things, and it doesn’t feel very good. What I've found, though, is that sometimes people don't really mean to leave a person out. They might think the person wouldn't be interested in what they were doing. That's what happened to me. My friends just thought it was something I wasn't really interested in doing, but it would have been nice to have the choice. Even if I had said, "no thanks," at least I would have known they were thinking of me and that I was invited if I wanted to participate.

Threaded Discussion Board, January 24, 2006
In response to the question “Have you ever wished on a star? I know I never did but if you did, did your wish come true?” Tyler wrote:

*I’ve wished on stars before, but the only wishes that come true are the ones that I can make come true for myself. Sometimes wishing on a star, or making a wish when you blow out birthday candles can make you focus more on achieving whatever your goal is. So in that way you help your own dreams come true.*

Threaded Discussion Board, February 1, 2006

One of the students responded back to Tyler on the threaded discussion by writing, “You know, you don’t have to write a paragraph.” (Stargirl Threaded Discussion, January 27, 2006). Several days later this topic came up in the students’ face-to-face discussion. As the students began discussing the threaded discussion prompts that they had been writing, a student told Tyler that he wrote a paragraph on the discussion board and that it was too long. Tyler answered by saying,

*My response was that long on purpose. I wanted you to see that a response should have more than one sentence and that it needs to have deeper writing.*

Video Transcription, Stargirl Group, January 27, 2006

Tyler clearly articulated for the students how he was modeling in his own writing what he wanted to see in theirs. Later in an exit interview, a student stated:
I was thinking of Mr. Springs where he said on the discussion – because he wrote like a paragraph and I wrote back “you don’t have to write a paragraph” and now I am writing a paragraph – I am writing more than him.

Jackie: Why do you think that happened?

Grace: Well he just – when he discusses it – it makes more sense when it is complete and when it is not complete if you are just saying yes – then – like he always says – when you read the answer it should incorporate the question and it makes more sense when you do that and I think that is sort of – I was thinking about that – when other people – because then you don’t know what you are responding to unless you read what it says first so I like to know what they are responding to without reading the question.

Student Interview, February 28, 2006

Tyler’s presence, though quieter in the on-line threaded discussion environment than in the face-to-face environment, was heard by the students.

The Teacher’s Presence through Modified IRE Conversations

The Initiate, Respond, Evaluate pattern is a common model used by teachers in classrooms (Cazden, 2001; Mehan, 1979; Newkirk & McLure, 1992). In this pattern the teacher initiates a question or a topic and the students then respond to that question or topic. After the responses are provided the teacher then typically presents an evaluative statement. In this pattern the teacher controls the initiated topics of conversation, the students respond to the teacher’s engagement of topic and the teacher then provides a comment that evaluates their response. An example of this pattern might look like the following:

<table>
<thead>
<tr>
<th>Teacher</th>
<th>1</th>
<th>Initiate</th>
<th>What is the capital of Ohio?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>2</td>
<td>Respond</td>
<td>Columbus.</td>
</tr>
<tr>
<td>Teacher</td>
<td>3</td>
<td>Evaluate</td>
<td>Very good! That is correct.</td>
</tr>
</tbody>
</table>
In this example, the teacher initiated the conversation in line 1 with the question regarding the capital of Ohio. After a student made a correct response in line 2 the teacher responded in line 3 with a positive statement evaluating the student’s response.

Data analysis from this study found that the teacher in this classroom utilized a modified version of the Initiate, Respond, Evaluate (IRE) pattern. In the face-to-face sessions, the teacher engaged the students with a question, initiating the conversation. The students were then observed to respond to the teacher’s proposed topics of conversations. These responses were directed at the teacher and did not always initiate conversation between the students. Rather, after the teacher’s question was answered by the student, the turn at talk came back to the teacher who engaged them in another question. The question would either probe the students for additional information or would initiate a new topic of conversation. The following conversation illustrates this pattern that was observed to occur within both groups’ face-to-face conversations.

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Initiate</th>
<th>Respond</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Well if you don’t think I should have gotten kicked out, do you think Stargirl should have gotten kicked off her team? Is there something different between my cheering and Stargirl cheering?</td>
<td>Yeah</td>
</tr>
<tr>
<td>2</td>
<td>What is different about it?</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>She shouldn’t get kicked off the team since she probably didn’t know better.</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>You think so? I don’t know. Lea what do you think?</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>Well you are a person in the stands and Stargirl, she is a cheerleader and that makes a difference</td>
<td></td>
</tr>
<tr>
<td>6</td>
<td>So it is different because she is actually a cheerleader – that makes a difference? Why? Why does that make a difference?</td>
<td></td>
</tr>
<tr>
<td>7</td>
<td>Because she is a cheerleader and it is her job to cheer for her team. But people think it is her fault that the team lost because of her cheering, but it is really because one of the players got hurt.</td>
<td></td>
</tr>
</tbody>
</table>

173
<table>
<thead>
<tr>
<th>Teacher</th>
<th>18 19</th>
<th>Initiate</th>
<th>That helped, too, didn’t it? So you don’t think it was just her cheering that made them lose?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student</td>
<td>20 21 22 23</td>
<td>Respond</td>
<td>Before she got kicked off, the last thing when the boy got hurt, and like after they lost she got kicked off. But it is the final straw when she helps the other team member who got hurt.</td>
</tr>
</tbody>
</table>

In this conversation the students were discussing an event in the book where the main character, Stargirl is kicked off the cheerleading team because she would cheer for both teams, not just her home school team. Previously in this face-to-face conversation the teacher had stated that when he attends games for his children he cheers for both sides. The group members had then discussed whether this was an acceptable choice for the teacher to make. In lines 1 through 4 the teacher engaged the students with a question moving the topic of conversation from his own choices to that of the Stargirl’s group members and whether it was acceptable for a cheerleader to cheer for both sides. In line 5 a student answered with a simple one word response, “Yeah.” The turn at talk returned to the teacher who probed for additional information. A new student answered in lines 7-8 and the turn at talk again returned to the teacher. In line 9 the teacher specifically asked a student what she thought about the conversation. After the student answered, the turn at talk again returned to the teacher who expanded upon the student’s response with a question that asked for more detail (lines 12-13). In lines 14 through 17 the student responded again, clarifying her answer and providing additional evidence from the text. After the student finished her response, the teacher summarized her answer in lines 18-19. These lines could also be seen as part of an evaluative statement as the teacher states, “That helped, too, didn’t it” appearing to agree with the student. However, these lines were coded as initiating as the teacher appears to be probing and initiating additional
information from the students. Finally, one additional student provided her thoughts on the conversation, closing the topic by stating, “It is the final straw when she helps the other team member who got hurt” (line 20-23).

In this short example, the teacher held five turns at talk and the students responded to him five times. Each initiated question that the teacher asked generated a response from a student. After each response that the students articulated, the teacher asked additional questions which guided the conversation. This modified IRE pattern was observed throughout the 6 weeks observing in the classroom.

Across the 10 30-minute sessions that were observed, the teacher made evaluative statements in only 12 instances. In two instances the teacher made statements that were evaluative in nature and that were attached to probing questions. In the on-line threaded discussion environment, data analysis illustrates that the teacher only initiated the topics of conversation three times, and though he provided responses to the student initiated topics, he never provided an evaluative statement when conversing in this space. The following sections describe Tyler’s modified use of the IRE sequence in both the Stargirl and Crash face-to-face discussion environments and the on-line threaded discussion environment.

Talking with Stargirl.

As previously discussed, the Stargirl group was observed to enjoy their time talking and responding to the common text they were reading. The teacher was observed to initiate the topics of conversation with a question and then the members of the group responded with their thoughts.
As one of the students articulated,

Mr. Springs comes [to meeting] and he asks the questions that he wants to ask and then we pretty much take over from there.

Student Interview, March 2, 2006

In each of the five face-to-face sessions for *Stargirl* the teacher initiated the conversation with questions such as “What do you think some of the climactic events are?” and “Why in the world is she climbing across the goalpost?” The students were observed to respond quickly to each of the teacher’s opening questions and share their thoughts and responses. The teacher then responded to them either with a new question or a comment. The following transcript provides an example of this pattern.

<p>| | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyler</td>
<td>1</td>
<td>2</td>
<td>Do you have some ideas about what you would like to see happen?</td>
</tr>
<tr>
<td>Grace</td>
<td>3</td>
<td>4</td>
<td>Well I want to know what she looks like when she is grown up and if she is married. Where she lives and...</td>
</tr>
<tr>
<td>Mikela</td>
<td>5</td>
<td>6</td>
<td>And if Stargirl and Leo get to marry because that would be hilarious</td>
</tr>
<tr>
<td>Olivia</td>
<td>7</td>
<td></td>
<td>And if she is really a live person</td>
</tr>
<tr>
<td>Tyler</td>
<td>8</td>
<td>9</td>
<td>I don’t think Leo and Stargirl ever get to meet again. That is the way I picture it. Gone, done, over.</td>
</tr>
<tr>
<td>Mikela</td>
<td>10</td>
<td></td>
<td>She knows where he lives and where he is.</td>
</tr>
<tr>
<td>Olivia</td>
<td>11</td>
<td>12</td>
<td>I want to know if Stargirl is actually a person because when she leaves, Leo goes to Archie and they say she is actually a Star Girl so I was thinking...</td>
</tr>
</tbody>
</table>

This transcript illustrates the way in which the teacher initiated the conversation but then turned over the conversation for the students to respond as they chose. This section of the conversation is in relation to the students’ frustration with the open ended conclusion of the book as the author ends the story not telling the reader what has happened to the main character, Stargirl. In lines 1 and 2 the teacher initiated the
conversation by asking the students what they would like to see happen for Stargirl.

Three students provided their thoughts as to what they would have liked to have happened in lines 3 through 7. In lines 8 and 9 the teacher responded with his own opinion as to what might have happened if the story continued. Though the teacher provided his own response to the topic of conversation initiated, he included in his response, “that is the way I picture it” (line 8 and 9) to articulate to the students there was no definitive answer to the topic of conversation. In the end, Olivia initiated a new topic of conversation for the group to explore. In this example, the teacher initiated the topic followed by the students and teacher providing their responses to the initiated topic. However, at no point in this conversation did the teacher provide any evaluative statements to the students’ responses.

In the five sessions that the teacher had with the Stargirl group, the teacher made four evaluative statements. All of these statements made by the teacher were positive evaluative statements as the table below illustrates. (See Table 4.9).

<table>
<thead>
<tr>
<th>Date</th>
<th>Comment made to</th>
<th>Comment made to</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 24</td>
<td>Mikela</td>
<td>But she doesn’t care – that is an excellent point to make Mikela. So what does that mean – why does that matter?</td>
<td></td>
</tr>
<tr>
<td>February 6</td>
<td>Iris</td>
<td>Excellent, you are right on target. Excellent. Okay – what is going on then?</td>
<td></td>
</tr>
<tr>
<td>February 15</td>
<td>Iris</td>
<td>Thank you, Iris. Iris, that is a really neat comment.</td>
<td></td>
</tr>
<tr>
<td>February 15</td>
<td>Iris</td>
<td>Okay, I think that is a great response.</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.9: Evaluative statements made to the Stargirl group members in the face-to-face context.
An examination of these four comments revealed that three of the comments were made within one face-to-face session. In addition, three of the positive evaluative statements were made to one student within two of the sessions.

Talking with Crash.

As explained previously, the Crash group struggled to participate and engage with each other in conversation when meeting together in the face-to-face environment. The teacher was observed in this environment to initiate the students in conversation with a question, but then had to probe and continually question the students to continue the conversation. The teacher was observed to ask twice as many questions in this group as he did with the Stargirl group.

Analyzing the teacher’s IRE pattern in the Crash group indicates that, though he did ask more questions, he initiated and responded to the students with only eight evaluative statements, similar to the four evaluative responses that he made to the members of the Stargirl group. However, in this context the teacher utilized evaluative statements that were both positive and negative responses.

The transcript below illustrates the IRE pattern that the teacher utilized without providing evaluative statements when talking and responding with the students. In line 1 the teacher initiated the students to talk about what they had currently been reading in their text. When one of the students responded that the grandfather had gone to the hospital in line 2, Tyler initiated the student to explain this event in the story asking why and what happened (line 3).
The student responded to the teacher’s current question (line 4) and the teacher initiated the students with a new question asking how the main character reacts to his grandfather becoming ill (line 5). When the student responded with one word, the teacher probed for more information (line 7). In lines 8 and 9, a different student articulated her response documenting her experience when her grandfather became ill at which point Tyler asked if Crash had reacted in a similar way (line 10). At this point, both of the students responded with their thoughts to this question (lines 11-13). Through this short conversation, the teacher engaged the students with questions to which they responded. The teacher asked five questions that directed the conversation. However, he did not provide any evaluative statements to the students’ responses.

Of the eight evaluative statements that Tyler made to the Crash group, five of these statements were analyzed as positive and three as negative (see Table 4.10).
<table>
<thead>
<tr>
<th>Date</th>
<th>Person</th>
<th>Type of comment</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 30</td>
<td>Josh</td>
<td>Positive</td>
<td>You are doing a great job. Last week you were behind in your reading and now you are ahead. Good job, sir.</td>
</tr>
<tr>
<td>February 1</td>
<td>Group</td>
<td>Negative</td>
<td>You guys are avoiding answering my question.</td>
</tr>
<tr>
<td>February 7</td>
<td>Group</td>
<td>Positive</td>
<td>As I look over your shoulders, some of you have some great responses.</td>
</tr>
<tr>
<td>February 7</td>
<td>Sophia</td>
<td>Positive</td>
<td>Interesting question.</td>
</tr>
<tr>
<td>February 7</td>
<td>Kurt</td>
<td>Negative</td>
<td>That is not showing that you put any thought into it. I’d like to see some thought there to show that you are really thinking about the question. That is showing that you were just taking the easy way out.</td>
</tr>
<tr>
<td>February 7</td>
<td>Kurt</td>
<td>Negative</td>
<td>Okay, I am going to give you a permanent marker and I want you to cross it out because that doesn’t belong. That is a wimp out answer. Just like in the beginning and I had you change them; some people had wimp out questions and I made you rewrite them, that is a wimp out answer.</td>
</tr>
<tr>
<td>February 7</td>
<td>Group</td>
<td>Positive</td>
<td>You guys have these terrific questions and terrific responses in your minds.</td>
</tr>
<tr>
<td>February 14</td>
<td>Group</td>
<td>Positive</td>
<td>I like how that really sounds like a real conversation going back and forth. There is a question, a response to the question, some really quality responses and that is nice.</td>
</tr>
</tbody>
</table>

Table 4.10: Evaluative statements made to the Crash group members in the face-to-face context.
As detailed earlier, the Crash group struggled to talk together but also struggled to write and respond to each other in the on-line threaded discussion environment in the appropriate manner that the teacher had defined for them. As a result, the face-to-face session on February 7 was designed by the teacher to model again for them the process of writing and responding appropriately to text-based questions. The teacher brought the students together in the meeting area and said to the students:

*Now what I want you to do now, I want you to skip a line after your name and I want you to write what you think would be an interesting question. I would like you to write an interesting question, something that you have been wondering about as you read the book. Now if nothing jumps to your mind, take a minute to think about it. What is happening in the book that made you wonder, what character have you been thinking about, what event made you ask a question as you read? Take a minute right now. Make sure you have a capital letter at the beginning and a question mark at the end. I am going to give you a couple of minutes, so it can be a long one if you want. It doesn’t have to be a short one. So take a minute right now and be very silent.*

Video Transcription, Crash Group, February 7

After the students had finished writing their questions the teacher had them pass their clipboard to the person next to them and stated:

*What I would like you to do right now without talking, I would like you to pass your clipboard to the person on your right. Without talking, without saying anything to the person who wrote the question, I would like you to*
respond to that person’s question. Now just a minute, before you start writing, let me remind you before you start writing that we are looking for quality responses. And something that shows you are putting some thought into it. It is okay to ask a question back to the person as part of your answer but show some thought in what you write back to the question.

Video Transcription, Crash Group, February 7

When the students had completed their responses to the question on the clipboard passed to them, Tyler instructed them to pass the clipboard again to the next person and they responded to that question on the new clipboard they had been handed. This process continued until everyone had responded to each person’s question. At the end of this process, Tyler asked them to read all of the responses that their group members had written. Tyler then told the students:

Have you had a chance to read over everyone’s responses? Well what I am going to do right now is to hand you a pen because I want it to stand out from the pencil and what I am going to ask you to do, is where the question is I want you by the side to write a response to the question – and then you can write a response to people’s responses. Write your response to two of the responses on your paper. Make sure they are meaningful and in response to your question and the person’s comment about your question. Make sure your response is meaningful. You don’t have to agree with what the person said, but if you disagree make sure you give a
reason as to why you disagree. Take a few minutes and write two responses.

Video Transcription, Crash Group, February 7

After the students had completed this task, Tyler asked who would be interested in sharing their initial question, their classmates’ responses, and the students’ responses to their classmates’ responses. It is during this part of the session that Tyler spoke five of the eight evaluative responses made throughout the five face-to-face sessions that were observed. To begin this part of the activity, Tyler stated, “As I look over your shoulders, some of you have some great responses.” Tyler then selected a student to begin sharing her question and consequential responses. After the first student read her question Tyler responded with the evaluative statement, “Interesting question.”

Later in the session when one of the students shared his question and responses to his classmates’ responses, Tyler spoke two of his three negative evaluation statements from the five face-to-face sessions with the Crash group. He told Kurt that he had written a question that did not illustrate thought (see Table 4.10) and later after Kurt had read his responses to his classmates writing, Tyler told him to literally get a marker and cross the inappropriate responses out (see Table 4.10). This session ran out of time before the students finished sharing. When they physically came back together as a group, the teacher instructed them to finish sharing their questions and everyone’s responses to the questions together. When everyone had shared their work, Tyler stated his last observed positive evaluative statement to this group. He praised them for their writing that sounded like a “real conversation” (see Table 4.10) that went back and forth
and stated that he was looking for it to happen in the on-line threaded discussion environment.

_Talking in the on-line threaded discussion environment._

As discussed previously, the teacher stated his desire that the students pose questions and respond to those questions independent of his involvement and guidance in the on-line threaded discussion environment. The teacher did post to the discussion board 13 times across the two groups. The teacher initiated the first conversation or “thread” on each of the boards with an opening question. On one additional instance in the second week of the study the teacher posted a question to the _Crash_ discussion board when they were writing questions and responses that the teacher identified as inappropriate. At no other instance during the study did the teacher pose any additional questions to either board.

Though the teacher only initiated conversations three times through posting his own questions, he did respond to the students’ posted questions. Analysis of the teacher’s posts found that he responded to the students’ on-line questions 14 times. On the _Crash_ board he responded six times and on the _Stargirl_ board he responded eight times (see Table 4.11).

<table>
<thead>
<tr>
<th>Board</th>
<th>Number of posts made by the teacher</th>
<th>Percentage of posts made by the teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Crash</em></td>
<td>6</td>
<td>9.5%</td>
</tr>
<tr>
<td><em>Stargirl</em></td>
<td>8</td>
<td>10.8%</td>
</tr>
</tbody>
</table>

Table 4.11: Number and percentage of responses made by the teacher in the on-line threaded discussion environment.
In this environment Tyler articulated in interviews his interest in the students providing the majority of the questions and responses. Following this desire, Tyler opened both of the on-line threaded discussion boards with a question and did not initiate any other topics of conversation until one of the groups was posting in a manner he found inappropriate. Consequently, the students initiated the remaining 11 threads of conversation in this environment.

Similarly, only 10% of the responses to the initiated threads of conversation in this environment were the teacher’s. In interviews, Tyler articulated his desire for the students to be independent in initiating and responding to each other. Tyler told the students “I will respond sometimes, but it is yours to write and respond to each other” (Video Transcription, January 23, 2006). In addition, there were no instances in which Tyler provided any positive or negative evaluative statements in writing on either of the two groups’ on-line threaded discussion environments. The teacher did however provide his thoughts and responses to the book when responding to the students. On the *Stargirl* threaded discussion board he wrote twice with answers that clearly illustrated his personal responses to the text.

<table>
<thead>
<tr>
<th>Mikela</th>
<th>1</th>
<th>Why do you think that Stargirl left? Tell why.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyler</td>
<td>2</td>
<td>I think she left because she found she couldn't fit in with anyone. I think if just one person (Leo) had accepted her for who she was, she would have stayed. She wouldn't have cared what anyone else thought.</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>She would have put up with it all, if Leo had been nicer to her. Bad Leo! (I'm still mad at him and it's been a year since I read the book!)</td>
</tr>
</tbody>
</table>

*Stargirl* Threaded Discussion Board

For example, the preceding writing shows the teacher’s posted response to a student’s question “Why do you think that Stargirl left? Tell why.” Tyler clearly stated his opinion in line 1 beginning with “I think.” Later in lines 5 and 6 he expressed his
emotions by writing “Bad Leo” in his anger over the character’s actions. This response articulated the teacher’s personal reactions to the events of the book.

Later, as shown in the posting below, Tyler again articulated his personal reactions to the book a second time in response to a student’s question regarding Leo’s decisions about his friendship with Stargirl (lines 1-3). Tyler responded with emotion how he wanted to “shake some sense” (line 5) into one of the main characters and again writes “Bad Leo! Bad!” (line 7). In these instances the teacher articulated for the students his personal reactions to the text they were reading in a way not observed in the face-to-face meetings.

<table>
<thead>
<tr>
<th>Mikela</th>
<th>Why do you think Leo does not try at all to find Stargirl? If he really liked her I think that when she ran away he would go and try to find her. Do you think that Leo really liked Stargirl a lot? Why or why not?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tyler</td>
<td>That's a part of the book where I want to grab Leo by the shoulders, pull him right out of the book and shake some sense into him. He doesn't realize how important Stargirl is to him, doesn't realize the jerk he's been until it's too late. Bad Leo! Bad!</td>
</tr>
</tbody>
</table>

On the on-line threaded discussion board for the Crash group, Tyler wrote five posts that illustrated his personal responses to the text. All of these responses were found on the second Crash board that was created after the students made inappropriate posts on the first board that the teacher retired. On this second board the students initiated conversation through six different questions that they posted. The teacher replied to five of the six questions with his own personal thoughts about the text. Table 4.12 illustrates two of these questions and the teacher’s responses. These responses modeled the style of response that the teacher articulated he wanted the students to write. Each of the
responses included at least three sentences, responded to the text, and incorporated correct punctuation, grammar, and spelling.

<table>
<thead>
<tr>
<th>Line</th>
<th>Question</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>In the book <em>Crash</em> which one of the characters would you want as a friend? And tell me about it.</td>
<td>There are several of the characters I'd like to have as friends. Penn and I have some similar interests and I think we could be friends. We both like to run, too. I think that the Crash at the end of the book would be a good friend, but the Crash at the beginning of the book wouldn't be. He changes a lot throughout the story and turns into a character I like more.</td>
</tr>
<tr>
<td>10</td>
<td>Why do you think Crash made catfish cakes (brownies with white icing) for Abby's birthday?</td>
<td>I think that Crash is beginning to do very un-Crash like things. He's actually beginning to think about other people's feelings. He's beginning to be nice. Hurray!</td>
</tr>
</tbody>
</table>

Table 4.12: Questions from students with the teacher’s responses on the *Crash* threaded discussion board.

In these examples the teacher provided details from the book (lines 2 to 5) and articulated his own personal feelings and reactions to the text (line 7-9 and line 12-13). The teacher modeled in these responses the length and quality that he wanted to see in the students’ writing.

**Summary**

In the on-line threaded discussion environment the teacher illustrated a different approach to the IRE pattern often seen in face-to-face conversations. In this on-line threaded discussion board environment the teacher initiated the topics of conversation with a question only three times throughout the 6 weeks that the students were engaged in
the board. The teacher also limited his virtual presence in this space, responding only 10% of the time to the students’ initiated topics of conversation. Finally, in his responses, the teacher did provide his thoughts and feelings to the text being read across the two contexts seven times.

This study found that the teacher in this classroom used a modified IRE sequence when engaged in conversations with students, both in the face-to-face and on-line environments. The teacher initiated the topics of conversation in the face-to-face environment, while the students initiated the topics of conversation in the on-line environment. The teacher provided responses in both environments, though he provided his personal opinions of the text more frequently in the on-line environment than in the face-to-face environment. Finally, the teacher provided only 12 evaluative statements when meeting with the two groups in the face-to-face environment and provided no evaluative statements when conversing with the students in the on-line environment.

Examining the Students’ Presence

The second research question focused upon examining the ways in which the students engaged in responding in the group discussion environment, in the on-line threaded discussion environment, in the physical computer environment, and across contexts. This question specifically asked:

2. How do the students respond to texts and to each other:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
   c. In the physical computer environment?
d. Across the multiple contexts?

Examining the data collected throughout the study provided illustrations of the ways in which the students’ styles changed depending on the different environments in which they were responding to the texts. This section examines the roles that the students utilized as they responded to the text across contexts and how those contexts influenced each other.

To examine these issues this section begins by examining how the students changed their style according to the environment in which they were responding. In the face-to-face environment they responded to the teacher’s questions, but did not attempt to lead the conversations with questions of their own. However, in the on-line environment the students initiated the conversation by posting questions and responded to each others’ questions regardless of the teacher’s involvement in the discussion. The students’ turns at talk are also examined in this section, illustrating the participation of each student in the face-to-face as well as the on-line environment. This section also details how each student enjoyed providing his or her own responses to the text he or she read regardless of the environment in which he or she was responding. However, the students did articulate that some had a preference for one environment rather than the other.

This section also illustrates and examines the talk that occurred while the students were physically sitting at the computers together. An examination of the nature of the students’ conversations is detailed as well as an examination of the cultural perceptions of this environment and how it impacted the students’ talk.
The Responses of Students in the Face-to-Face Environment

Both groups met together five times during the 6-week book unit. Each of the meetings held were 30 minutes in length. As described in chapter 3, the meeting area consisted of beanbag chairs and a couch so that the group members could comfortably sit together and see each other easily in a circle as they interacted and responded to each other. The Stargirl group consisted of 7 girls and the Crash group consisted of 2 boys and one girl. When asked about their feelings about talking together in the group, every student responded positively stating that they enjoyed talking together about the book and other events. As one student explained,

I like to talk about the book because it is fun to talk with my friends who have read the book so we can talk about the book and say what was really cool and like how we can do better and stuff. I like it.

Student Interview, March 6, 2006

To examine the roles that students held while talking together in the face-to-face environment, an analysis was conducted regarding each student’s participation in the face-to-face context in regard to both the questions students asked and the turns at talk that students had.

Student generated questions.

As previously discussed, this analysis found that the teacher initiated the conversations with questions and asked all of the questions in the 10 sessions with the exception of nine questions that the students asked. Of these nine questions only two referred directly to the text that the students were reading. The other questions were
related to the dynamics and functions of the group setting. Table 4.13 details the students’ questions that were not text based.

<table>
<thead>
<tr>
<th>Date</th>
<th>Student</th>
<th>Group</th>
<th>Question</th>
<th>Context</th>
</tr>
</thead>
<tbody>
<tr>
<td>January 27</td>
<td>Olivia</td>
<td>Stargirl</td>
<td>She probably would have gotten them something. Wait – did you say, whose eggs DID survive?</td>
<td>Asked for clarification about a question that the teacher asked the student.</td>
</tr>
<tr>
<td>January 30</td>
<td>Sophia</td>
<td>Crash</td>
<td>Do you have another packet of Post-It® notes?</td>
<td>Asked for materials to complete a task.</td>
</tr>
<tr>
<td>February 6</td>
<td>Grace</td>
<td>Stargirl</td>
<td>Can’t you just turn your head?</td>
<td>Teased the teacher when he asked the students to look at the clock behind him and tell him the time.</td>
</tr>
<tr>
<td>February 7</td>
<td>Sophia</td>
<td>Crash</td>
<td>Can I read mine?</td>
<td>Asked the teacher for permission to read the question she had written.</td>
</tr>
<tr>
<td>February 7</td>
<td>Kurt</td>
<td>Crash</td>
<td>Can I read my response?</td>
<td>Asked the teacher for permission to read a response he had written</td>
</tr>
<tr>
<td>February 7</td>
<td>Josh</td>
<td>Crash</td>
<td>Can’t I say one more thing?</td>
<td>Asked for the floor back to finish a statement he was making.</td>
</tr>
<tr>
<td>February 7</td>
<td>Sophia</td>
<td>Crash</td>
<td>Can I read my reaction about the mall?</td>
<td>Asked for permission to read a response</td>
</tr>
</tbody>
</table>

Table 4.13: Questions that the students asked in the face-to-face setting that were not text oriented.

The type of questions that the students asked incorporated clarifying a question that was asked of them, for materials desired, to tease the teacher and to ask for permission to speak. These questions were not related to the students’ responses to the text, but rather were conversation related.
Two questions found in the data analysis were in direct reference to discussions regarding the text. Both of these questions occurred during the fifth week of the data collection time period. One of the questions took place in the Crash group and the other occurred in the Stargirl group.

In the Crash group, the students had been discussing their trouble on the first board and the teacher had informed them that he was “shutting down” their previous board and wanted them to start fresh with what they had practiced in the face-to-face setting on how to create text based questions and respond appropriately. Tyler ended his summary by asking, “Are there any questions” and Josh responded with the following question (lines 1-2).

<table>
<thead>
<tr>
<th>Josh</th>
<th>1</th>
<th>A while ago I wondered but I still don’t get it. Sophia posted on the board, bana ba ba ba i’m lovin it I’m lovin it and what did she mean?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia</td>
<td>3</td>
<td>It is JUST an example of protesting. You know how they are protesting against the mall, it is just an example of protesting.</td>
</tr>
<tr>
<td>Josh</td>
<td>5</td>
<td>People protest against McDonalds®? I don’t think people would protest against French fries.</td>
</tr>
</tbody>
</table>

Video Transcription, Crash Group Conversation, February 14

Josh, in asking this question, is referring to a post that Sophia wrote that had an inference to the book in which the main character’s sister protested against a new mall that was being built. Sophia had written a post that began with the music from the current McDonalds® commercials that sings, “bana ba ba ba i’m lovin it” and then encouraged the reader to shop a particular store instead of a different name brand store.

*bana ba ba ba i’m lovin it. Remember don’t shop Wal-Mart®, shop Target®.*

*Crash On-line Threaded Discussion*

192
Josh did not understand the inferential reference that Sophia was making to the book and had been observed to tell Sophia previously that he didn’t think her post made sense. In the group setting, he asked about Sophia’s post. When she tried to explain in lines 3 and 4 that she was only trying to provide an example of protesting, Josh refused to accept her explanation stating that he couldn’t imagine people protesting against McDonalds®.

The other question that was asked in the face-to-face setting was presented in the *Stargirl* group. The students had been talking about the ending of the book and one of the students was making a connection between the beginning of the book and the end. The book had opened with the main character being given a porcupine tie. As the student was trying to explain her connection she became confused and asked a question of the group members to help her remember how *Stargirl* knew Leo liked porcupine ties (lines 1-4).

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Olivia</td>
<td>1</td>
<td>Like at the beginning – remember, - okay I have a question first. Okay – how – <em>Stargirl</em> finds out all these things, like peoples’ birthday’s and stuff by looking in the newspaper where other people don’t look and stuff, but how does she figure out that Leo likes porcupine neckties?</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Grace</td>
<td>5</td>
<td>Because it said it in the newspaper.</td>
</tr>
<tr>
<td>Mikela</td>
<td>7</td>
<td>Because she has all these files and everything where she puts everything</td>
</tr>
<tr>
<td>Olivia</td>
<td>9</td>
<td>Okay she finds out that Leo likes porcupine neckties and gives him one for his birthday and at the end of the book, after she leaves, the process starts all over.</td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
</tr>
<tr>
<td></td>
<td>11</td>
<td></td>
</tr>
</tbody>
</table>

Video Transcription, *Stargirl* Group Conversation, February 15

Two of her group members answered her question, reminding her of the details. Olivia then continued with her response describing how the porcupine event connects the beginning and end of the book.
Though the students asked only nine questions, they did participate in responding to the text. An analysis was conducted to examine the turns of talk that each group member had in responding to the text in both the Crash and Stargirl face-to-face group sessions.

_Stargirl’s turns at talk._

Each of the 7 members in the Stargirl group engaged in the group’s conversation as can be seen in Table 4.14. This table illustrates that though the teacher captured 45% of the turns talking, each of the group members did respond in the face-to-face sessions. Helen had only one turn responding for several reasons. This particular student participated in a pull-out reading program designed to help at-risk readers that coincided with the time in which the Stargirl group met together. As a result, she was gone for three of the five face-to-face sessions and thus did not have the opportunity to participate as frequently as the other members did. Though Helen was present for two of the sessions, she did not read the text and as a consequence came to the group not having read the sections and struggled to participate and contribute to the group’s discussions when meeting face-to-face.

<table>
<thead>
<tr>
<th>Group member</th>
<th>Turns at talk</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Springs</td>
<td>95</td>
<td>45%</td>
</tr>
<tr>
<td>Olivia</td>
<td>36</td>
<td>17%</td>
</tr>
<tr>
<td>Mikela</td>
<td>18</td>
<td>9%</td>
</tr>
<tr>
<td>Iris</td>
<td>18</td>
<td>9%</td>
</tr>
<tr>
<td>Alice</td>
<td>16</td>
<td>8%</td>
</tr>
<tr>
<td>Grace</td>
<td>16</td>
<td>8%</td>
</tr>
<tr>
<td>Lea</td>
<td>10</td>
<td>5%</td>
</tr>
<tr>
<td>Helen</td>
<td>1</td>
<td>0.5%</td>
</tr>
</tbody>
</table>

Table 4.14: Turns at talk for each member of the Stargirl group.
Olivia had twice as many turns at talk while the remaining students (with the exception of Helen for reasons previously defined) shared an almost equal amount of turns. Olivia was observed throughout the data collection time period to be a leader in the classroom. This leadership was also observed in participation and in the ways that she engaged in the group. Olivia always sat in the direct center of the couch, physically placing herself in the center of the conversation. She was observed to be willing to take risks and was not easily embarrassed. For example, during one group conversation the teacher wanted to dramatize a scene from the book in which Stargirl performs like a cheerleader in the middle of the cafeteria unexpectedly. Olivia quickly volunteered and went to the front of the room where the rest of the students were quietly engaged in writing computer postings or working together in groups. Olivia quickly and loudly began cheering and acting in the style of Stargirl’s character without any hesitation.

Though Olivia served as a leader in the group, all of the members participated, as illustrated in Table 4.14, and were observed to always talk respectfully with each other while in group. The students were also observed to support each other’s understandings of the book, scaffolding each other in their comprehension of the book’s events. For example, following Olivia’s reenactment of Stargirl as a cheerleader in the cafeteria, the students had the following conversation.

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>1</th>
<th>Let me ask you a question. Did anyone see Eli’s face when Olivia was doing that? What did his face say?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Grace</td>
<td>3</td>
<td>Oh my gosh – what is she doing?</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>4</td>
<td>So do some of the characters look at Stargirl like that – like oh my gosh what is she doing? I wanted you to see that so you could see that Stargirl sometimes is doing things sometimes that don’t fit in.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>5</th>
<th>6</th>
</tr>
</thead>
</table>

195
<table>
<thead>
<tr>
<th>Mikela</th>
<th>7</th>
<th>But she doesn’t care.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Springs</td>
<td>8, 9</td>
<td>But she doesn’t care – that is an excellent point to make Mikela. So what does that mean – why does that matter?</td>
</tr>
<tr>
<td>Mikela</td>
<td>10</td>
<td>That she is just like what the heck.</td>
</tr>
<tr>
<td>Alice</td>
<td>11</td>
<td>Well if people are making fun of her behind her back, she just says oh well.</td>
</tr>
<tr>
<td>Olivia</td>
<td>12, 13, 14</td>
<td>Even though she does things like play her ukulele and know about everyone’s birthday, you don’t’ know who might appreciate that. And if she stops it, then it might be someone who is disappointed.</td>
</tr>
</tbody>
</table>

**Video Transcription, Stargirl Group Conversation, January 24**

The teacher initiated this conversation with a question in lines 1 and 2, then asked an extending question to help the students see the connection between what Olivia did and the *Stargirl* events. In line 9 he asked the students why it matters that Stargirl does not always fit in. In lines 10 through 14 three students provided responses to the question in similar but different ways. In these three responses the students clarified a major theme from the book that Stargirl does not care what people think about her, she cares about people. The students participated in articulating that Stargirl is who she is and does not care about behaving in the traditional and stereotypical ways induced by high school peer pressure. As Mikela summarized easily, “She doesn’t care” (line 7).

Though Olivia served as the leader in the group, all of the members had a role participating in the conversation. This participation took the form of responding to the teacher’s initiated questions and topics of conversation as the members of the *Stargirl* group did initiate their own topics of conversation in this environment.

*Crash’s turns at talk.*

The *Crash* group was observed to have trouble getting along and acting in an appropriate manner. Kurt had classroom behavioral issues and was participating in an individual behavioral contract with the teacher during the time of the data collection. The
one girl in the group, Sophia, served as a leader but was observed to be unkind in her leadership style. During one observation, the students were working in groups to complete a teacher-directed task. Kurt wandered over to their group and asked if he could join. Sophia quickly rejected him and told him he could not be a part. Upon the teacher’s intervention the following conversation ensued:

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>1</th>
<th>Kurt – can I ask which group you are in?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt</td>
<td>2</td>
<td>I want to be in their group.</td>
</tr>
<tr>
<td>Josh</td>
<td>3</td>
<td>He wants to join our group.</td>
</tr>
<tr>
<td>Sophia</td>
<td>4</td>
<td>But he is not going to.</td>
</tr>
</tbody>
</table>

Video Transcription, Crash Group Conversation, January 30

When the teacher arrived, Kurt informed him that he wanted to be a part of the group (line 2). One of the other group members reinforced Kurt’s desire to join the group (line 3), but Sophia in line 4 quickly and clearly stated that he could not join the group. The teacher, in this circumstance, did not intervene to make Josh and Sophia include Kurt in their group. Instead, Kurt was rejected and sent back to work with the group he had previously chosen.

This example illustrates the group dynamics that were observed when the students in the Crash group came together to discuss their book. Despite their difficulties, the Crash group members did participate in group discussions. Table 4.15 reflects the turns at talk for the Crash’s five meetings together.

<table>
<thead>
<tr>
<th>Group member</th>
<th>Turns at talk</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mr. Springs</td>
<td>179</td>
<td>56%</td>
</tr>
<tr>
<td>Josh</td>
<td>67</td>
<td>21%</td>
</tr>
<tr>
<td>Sophia</td>
<td>63</td>
<td>20%</td>
</tr>
<tr>
<td>Kurt</td>
<td>10</td>
<td>3%</td>
</tr>
</tbody>
</table>

Table 4.15: Turns at talk for each member of the Crash group.
In a similar pattern to the *Stargirl* group’s turns at talk, the teacher again had the largest turns at talk, taking over 50% of the turns at talk when the group met together. Kurt and Sophia shared nearly equal number of turns at talking. Kurt only engaged in a turn at talk 10 times and four of those responses were challenged by the teacher as inappropriate. For example, during one group conversation the students were wrestling with a thematic change in *Crash*’s behavior. *Crash* had allowed Penn to win a race when he had previously been highly competitive in sports and had been a bully to Penn. The teacher had engaged the students in discussing what they would have done and when all the other students had responded, the teacher purposefully asked Kurt in line 1 if he would let Penn win. Kurt responded that he would not let Penn win because of his religious affiliation (line 4). The teacher instantly challenged Kurt on this response asking him if that was a serious and appropriate response (lines 3-4). Kurt only responded with mumblings under his breath that were inaudible.

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>1</th>
<th>Kurt, would you let Penn win?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt</td>
<td>2</td>
<td>No, because Penn is a Quaker.</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>3</td>
<td>So it is more about religion to you not the person? Is that a serious response or is that a joking response?</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Kurt</td>
<td>5</td>
<td>Mumbles inaudibly</td>
</tr>
</tbody>
</table>

This is an example of Kurt’s responses which were trying to be comical and inappropriate. The teacher challenged the responses that he felt were inappropriate and Kurt, though always physically present in the group conversations, rarely engaged and contributed to the group’s discussion and understanding of the text.
As a result, the remaining two students contributed the majority of the responses in the group’s conversation. Though the students both stated in interviews that they greatly enjoyed the book and enjoyed talking together in group, the teacher struggled to engage them in lengthy conversations throughout their face-to-face time together. The teacher consequently participated with many more turns at talk while working with this group than he had with the Stargirl group. Though both groups met five times for 30 minutes, the teacher engaged in almost twice as many turns when working with the Crash group (179 turns with the Crash group in comparison to the 95 turns with the Stargirl group). The teacher, at times, literally had to remind the Crash group members that they had come together to talk about the book.

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>So, tell me a little about what is going on in the reading.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia</td>
<td>Well, Scooter has arrived to visit.</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>Are you at that part, Josh?</td>
</tr>
<tr>
<td>Josh</td>
<td><em>(Josh has been totally engrossed in thumbing through his book and is reading). What??</em></td>
</tr>
<tr>
<td>Mr. Springs</td>
<td><em>Laughs softly. Josh – we are going to have a conversation now, the four of us are going to talk together. What is going on in the part you are reading?</em></td>
</tr>
</tbody>
</table>

Video Transcription, Crash Group Conversation, February 1

Because of the students’ lack of motivation to engage in conversation in this group, the teacher provided more leadership in asking questions and as a consequence the conversations commonly followed a teacher-student-teacher-student response pattern. The students’ turns of talk in this setting were observed to be brief and lacking description. The teacher was observed to follow the brief responses with more questions, attempting to gather additional response from the student. For example, in the following transcript, the teacher was trying to facilitate the students’ discussion of how the illness of Crash’s grandfather affected his character.
<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Josh</td>
<td>1</td>
<td>Scooter is in the hospital.</td>
</tr>
<tr>
<td>Tyler</td>
<td>2</td>
<td>Okay – so why is he in the hospital? What happened?</td>
</tr>
<tr>
<td>Josh</td>
<td>3</td>
<td>Well Scooter is in the hospital and has had a stroke.</td>
</tr>
<tr>
<td>Tyler</td>
<td>4</td>
<td>How does Crash react to that?</td>
</tr>
<tr>
<td>Josh</td>
<td>5</td>
<td>Speechless . . . .</td>
</tr>
<tr>
<td>Tyler</td>
<td>6</td>
<td>Speechless – why?</td>
</tr>
<tr>
<td>Sophia</td>
<td>7</td>
<td>Well when my uncle died from cancer and um – it shocked me. I was up and couldn’t sleep.</td>
</tr>
<tr>
<td>Tyler</td>
<td>8</td>
<td>So is Crash reacting in a similar way?</td>
</tr>
<tr>
<td>Josh</td>
<td>9</td>
<td>Well he is up and can’t focus.</td>
</tr>
<tr>
<td>Sophia</td>
<td>10</td>
<td>When my uncle died it was in the middle of the night and I laid in my bed crying all night.</td>
</tr>
<tr>
<td>Tyler</td>
<td>11</td>
<td>I can understand that – it is very upsetting. How does Crash react when Scooter has the stroke?</td>
</tr>
<tr>
<td>Sophia</td>
<td>12</td>
<td>Like he died.</td>
</tr>
<tr>
<td>Tyler</td>
<td>13</td>
<td>You guys are avoiding answering my question. How does Crash react?</td>
</tr>
<tr>
<td>Sophia</td>
<td>14</td>
<td>I think he reacts by being down in the book.</td>
</tr>
<tr>
<td>Josh</td>
<td>15</td>
<td>And I know that he doesn’t die because later in the book it says that Scooter comes home.</td>
</tr>
<tr>
<td>Tyler</td>
<td>16</td>
<td>So Josh, how does Crash react?</td>
</tr>
<tr>
<td>Josh</td>
<td>17</td>
<td>He is sad and down in the dumps.</td>
</tr>
<tr>
<td>Tyler</td>
<td>18</td>
<td>Can you give me an example of something he does that shows he is sad and down in the dumps?</td>
</tr>
</tbody>
</table>

Video Transcription, *Crash* Group Conversation, February 1

In response to the teacher’s prompt that asked about the current events in their reading, Josh started the conversation in line 1 by stating that Crash’s grandfather is in the hospital. This particular event in the story affects Crash and changes his desire from being a bully to wanting to be a better person. After visiting his grandfather in the hospital, Crash goes home and meets his friend Mike who has been his partner in many bullying incidents throughout the book. In the story, Crash confronts Mike and refuses to be a bully with him. The two characters fight about Crash’s sudden change of behavior and his refusal to continuing bullying Penn, the character that they had most commonly bullied.
In this conversation Josh initiated the story’s development regarding Scooter’s admittance to the hospital (line 1). The teacher asked the group members questions that attempted to assist the students in responding to these particular events of the reading and to support their understanding of Crash’s change in behavior and how the event of his grandfather’s illness altered the character’s decisions about bullying others. The conversation went back and forth between two of the students and the teacher in a teacher-student-teacher-student pattern. The teacher utilized the students’ words as he asked his question. In line 1 Josh stated that “Scooter is in the hospital.” Tyler used his words in the next question (line 2) asking, “Okay – so why is he in the hospital? What happened?” Later in an attempt to answer Tyler’s question about how Crash reacted, Josh described Crash as “speechless” (line 5). Tyler used his word in the next line (line 6) in his question, “Speechless – why?”

On a different day the Crash group came together to discuss the events of the book with the following conversation taking place. In this interaction the teacher was examining the important events that one of the students has placed on the group’s poster board project that was described at the beginning of this chapter.

<table>
<thead>
<tr>
<th>Tyler</th>
<th>1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>3</td>
</tr>
<tr>
<td>Josh, let’s take a quick look at what you have up here on your posterboard so far. Crash meets Penn; Crash goes to Penn’s house for dinner. Crash meets Mike. Who’s Mike?</td>
<td></td>
</tr>
<tr>
<td>Josh</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>6</td>
</tr>
<tr>
<td>Oh – that’s right. Football game against Hillside East. Why did you put that as an important event?</td>
<td></td>
</tr>
<tr>
<td>Tyler</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>8</td>
</tr>
<tr>
<td></td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>11</td>
</tr>
<tr>
<td>Mumbles</td>
<td></td>
</tr>
<tr>
<td>Is that the game where he got in a lot of trouble with his coach?</td>
<td></td>
</tr>
<tr>
<td>Yeah.</td>
<td></td>
</tr>
<tr>
<td>Why did he get in trouble?</td>
<td></td>
</tr>
<tr>
<td>Because he wouldn’t come off the field.</td>
<td></td>
</tr>
</tbody>
</table>
In this interaction the teacher walked through the events from the book that the students had placed on the poster board. The teacher asked questions about one of the events the student had selected as important that involved a football game in which Crash made 16 touchdowns and refused to listen to his coach’s instructions. Tyler began by asking the student why he chose this event as an important part of the book (line 5-6). The student put his face down and mumbled. The teacher then provided assistance to the student in line 8, stating, “Is that the game where he got in a lot of trouble with his coach?” In line 9 the student replies with only one word, “Yeah.” At this point the teacher probed the student asking, “Why did he get in trouble?” (line 10). The student then provided a detail from the story explaining that he would not come off the field.

When the teacher asked what else Crash did, the student provided no response at all. The teacher then provided a detail through a question by asking, “Was that the game where he was showboating – where he was showing off?” Though the student replied with a short answer (line 15) he illustrated his knowledge of the event by knowing not only that Crash had been showing off making lots of touchdowns, but in knowing exactly how many touchdowns he made.

In the face-to-face setting for the Crash group, the teacher initiated and guided the conversation with questions. The students responded to these questions with short, brief answers in which the teacher responded with additional questions. The students
illustrated their knowledge of the book in their responses, but were observed to need support and guidance from the teacher in continuing their conversation and nurturing their responses.

Summary.

The section detailed the analysis of the students’ interactions for both groups in their face-to-face group conversations. Analysis of the data illustrated that though the teacher did engage in the majority of the turns at talk, all the members contributed to the groups’ conversations. The analysis also revealed that the Stargirl group was highly motivated to engage in discussing the book while the Crash group needed additional leadership from the teacher when they were discussing the book together in the face-to-face environment. This analysis illustrates that in this face-to-face environment it is the teacher who asked the questions and the students who answered those questions. The following section discusses the students’ interactions when responding to each other in the on-line threaded discussion environment.

The Responses of Students in the On-Line Environment

As described in chapter 3, the students participated in an on-line threaded discussion board in which they responded to the book and to each other regarding their thoughts and feelings about their reading of their common text. The data were examined for each group to illustrate the number of times each student posted and to examine which posts were responded to and which were not. An analysis of the Stargirl board is
described as well as both Crash boards to illustrate the roles of the students and the ways in which students engaged and interacted with each other in the on-line environment.

*Stargirl on-line conversations.*

The Stargirl board, which was utilized by the students over a 6-week time period, included a total of 89 responses or posts. All of the “threads” or topics of conversation were initiated by the Stargirl members, with the exception of the first question that the teacher wrote to initiate the threaded discussion board. Only eight responses to those questions were posted by the teacher. The remaining 81 posts were written by the 7 students. All of the students participated in posting in the on-line conversations, though as Table 4.16 illustrates, some posted more frequently than others.

<table>
<thead>
<tr>
<th>Group member</th>
<th># of postings</th>
<th>% of postings</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iris</td>
<td>21</td>
<td>24%</td>
</tr>
<tr>
<td>Grace</td>
<td>13</td>
<td>15%</td>
</tr>
<tr>
<td>Olivia</td>
<td>13</td>
<td>15%</td>
</tr>
<tr>
<td>Lea</td>
<td>12</td>
<td>13%</td>
</tr>
<tr>
<td>Helen</td>
<td>10</td>
<td>11%</td>
</tr>
<tr>
<td>Tyler</td>
<td>9</td>
<td>10%</td>
</tr>
<tr>
<td>Alice</td>
<td>6</td>
<td>7%</td>
</tr>
<tr>
<td>Mikela</td>
<td>5</td>
<td>6%</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>89</strong></td>
<td></td>
</tr>
</tbody>
</table>

Table 4.16: Number of times each member posted on the Stargirl discussion board.

Iris posted the most frequently with 21 of the 89 posts. Helen, who as described earlier was absent for three of the five group’s face-to-face conversations and who responded only one time in the face-to-face context, posted 10 times in the discussion board environment. Though Alice and Mikela participated as much as the other members
in the group environment, they did not post as frequently in the on-line environment.

When asked if she liked the on-line conversation, Alice admitted,

*I was kind of in the middle because sometimes I couldn’t think of what to say and sometimes I made stuff up.*

Student Interview, February 28, 2006

Mikela, who posted the least, also expressed her discontent with the discussion board stating,

*Well I didn’t really like it as much as working on the poster and talking. I didn’t think the discussion boards were that fun – I mean it is something you have to do, but it wasn’t that fun because I don’t know – in my opinion it is kind of boring. Because you don’t get to sit there and actually – like right after they answer you – you can’t just talk.*

Student Interview, March 2, 2006

These two students expressed a lack of interest and enjoyment of the on-line threaded discussion board. This lack of interest is illustrated through their minimal amount of postings to the on-line threaded discussion board. The remaining 5 students expressed in interviews their enjoyment using the on-line threaded discussion board and how they enjoyed writing and responding to each other. This also aligns with their larger amounts of posted responses in this context.

An analysis of the questions posted illustrated that each of the 7 members posted at least one question. Two of the group members posted four questions and two of the group members posted three questions. Though the teacher did not require the group to post questions and provided no direct leadership or guidance to this group on how to craft
a question, the group incorporated questions as part of their response process. All of the questions, with the exception of one, were open-ended questions. During interviews, many of the students commented that they liked posting questions and reading the responses that their group members wrote in response to those questions. As Helen described in her interview,

\[ I \text{ like to make questions of my own. To let me know that people responded and answered my questions.} \]

Student Interview, March 2, 2006

However, as revealed in the data analysis, some questions received more responses than others. Table 4.17 documents each question that the student posted and the number of responses that it received.
<table>
<thead>
<tr>
<th>Creator</th>
<th>Theme of question</th>
<th># of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Olivia</td>
<td>Caring what others think</td>
<td>9</td>
</tr>
<tr>
<td>Lea</td>
<td>Star wishing</td>
<td>7</td>
</tr>
<tr>
<td>Tyler</td>
<td>Being unique</td>
<td>7</td>
</tr>
<tr>
<td>Iris</td>
<td>Liking someone</td>
<td>5</td>
</tr>
<tr>
<td>Grace</td>
<td>Being left out</td>
<td>5</td>
</tr>
<tr>
<td>Olivia</td>
<td>Changing your style</td>
<td>5</td>
</tr>
<tr>
<td>Lea</td>
<td>Weird clothing</td>
<td>4</td>
</tr>
<tr>
<td>Helen</td>
<td>Getting kicked off</td>
<td>4</td>
</tr>
<tr>
<td>Mikela</td>
<td>Why did she leave</td>
<td>4</td>
</tr>
<tr>
<td>Alice</td>
<td>Stargirl in a play</td>
<td>3</td>
</tr>
<tr>
<td>Olivia</td>
<td>Hitting</td>
<td>3</td>
</tr>
<tr>
<td>Lea</td>
<td>Someone you don't like</td>
<td>2</td>
</tr>
<tr>
<td>Helen</td>
<td>Super different</td>
<td>2</td>
</tr>
<tr>
<td>Helen</td>
<td>Why she played the ukulele</td>
<td>2</td>
</tr>
<tr>
<td>Mikela</td>
<td>Good life</td>
<td>2</td>
</tr>
<tr>
<td>Olivia</td>
<td>Vanishing</td>
<td>2</td>
</tr>
<tr>
<td>Iris</td>
<td>Being embarrassed</td>
<td>1</td>
</tr>
<tr>
<td>Iris</td>
<td>Finding Stargirl</td>
<td>1</td>
</tr>
<tr>
<td>Iris</td>
<td>End of book</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 4.17: Number of responses posted to each question for the *Stargirl* discussion board.
As illustrated in this table, different questions received different numbers of responses. However, this analysis illustrates that the amount of responses was dependant upon the engagement of the question rather than the person who wrote the question. All of the members had the opportunity to ask and answer questions as they desired and that interested them and they responded to each other regardless of who initiated the conversation. The last three questions that received only one response were posted in the last week of the book unit during which the students spent the least amount of time at the computers.

Previous to the students beginning to use the on-line threaded discussion environment, the teacher modeled for the students the technical aspects of how to read and write posts on the computer. Tyler demonstrated step-by-step how the students were to navigate to the site, read the responses that were available, and then how to write their own responses. Tyler modeled explicitly how to write a response by walking through the steps himself and posting his own response to his own prompt. When he finished, a student said that she still forgot how to do it and Tyler modeled the process again.

In addition, Tyler was observed during a class meeting to provide instruction on how they were to write in complete sentences with accurate spelling and punctuation. Tyler articulated in this class meeting that he wanted them to incorporate the question into their response and write more than a short one-word or two-word response. When Tyler posted responses he modeled these elements in his own writing. Tyler also encouraged the students to regard this environment as an extension of the face-to-face setting in which they could engage in a back and forth conversation about the text together in a virtual space.
However, an examination of the Stargirl’s conversations found that in only two instances did the responses engage in talk that reflected that of a conversation. The other posts were written in direct response to the question posed in any particular thread and did not build upon each other but only answered the initial question. For example, Table 4.18 illustrates a thread in which 5 of the 7 students responded to a prompt written by a group member. Each of the 5 students responded to the initiated topic of conversation with a response to the question but no additional interaction or conversation transpires.

<table>
<thead>
<tr>
<th>Line</th>
<th>Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Have you ever changed your style and how you act just for someone? I know that</td>
</tr>
<tr>
<td>2</td>
<td>I have not at least I think.</td>
</tr>
<tr>
<td>3</td>
<td>I have once and I am really sorry I did.</td>
</tr>
<tr>
<td>4</td>
<td>Maybe once or twice but then I was in kindergarten then. I remember I</td>
</tr>
<tr>
<td>5</td>
<td>liked this girl but just for 10 seconds until I could be who I wanted to be.</td>
</tr>
<tr>
<td>6</td>
<td>I don’t think I have changed myself before, but I forget a lot of stuff.</td>
</tr>
<tr>
<td>7</td>
<td>No I have never changed my style for someone. I never did because I never</td>
</tr>
<tr>
<td>8</td>
<td>thought it was worth it.</td>
</tr>
<tr>
<td>9</td>
<td>Yes I have changed the way I act but not the way I look. I changed the way</td>
</tr>
<tr>
<td>10</td>
<td>I act for my friends and now I have a new friend, and my old friends still</td>
</tr>
<tr>
<td>11</td>
<td>like me.</td>
</tr>
</tbody>
</table>

Table 4.18: Threaded discussion on Stargirl board.

In this thread the students responded to the question regarding if they have ever changed who they are for others (lines 1-2) in reference to the Stargirl text that centers upon whether one should change who they are and how they behave for social acceptance. Five of the students in lines 3-11 responded with their thoughts to the question but none of the responses build upon each other and only respond or “talk” to the initiated prompt.
Two of the threads that occurred on the threaded discussion board incorporated a layered conversation of responses. In one instance the students were discussing if they had ever been left out or kicked off a team. One of the students wrote, “No I have never been kicked off a team before. And I really do not know if I have been ditched before.” One of the students wrote in response to this post, “Well midget I will never ditch you.” In this thread the student did not write back directly to the initiated question, but to the response that someone else wrote to the prompt.

In a second instance, the students did hold a conversation around a prompt that discussed if a person should care what others think of him or her. Table 4.19 illustrates the thread and the layers of response that the girls had with each other through this particular thread of conversation. The question that initiated this thread of discussion (lines 1-2) incorporated the most responses of any of the prompts. This prompt initiated a conversational-like environment such as the teacher was observed to encourage the students to have throughout the data collection time period.
Do you care what other people think about you? If you do, why? If you don't, why?
I know that I don't care I mean maybe sometimes but not really. You really should not care what other people think about you because it does not matter. It doesn’t matter how people look on the outside it matters what they look like on the inside.

I think that you are right midget. It really does not really matter what on the outside it matters what on the inside. Say if you were raggedy clothes but you are an extremely good kid or person. It really wouldn’t matter I think.

Amen sister!

Yes. I do care what people think about me. I have to disagree with you a little bit. I agree that it does not matter what is on the outside but what is on the inside. I really do care what people say about me 'cause sometimes it hurts my feelings.

Why do you care it really does not matter. If it hurts your feelings than you should tell them and maybe they will stop.

Why do you care? You should not care what other people think about you. I mean If people say something that hurts your feelings than you should tell them that it hurt your feelings and then maybe they will apologize and they will stop saying mean things to you. But that is only a maybe.

I do care about what people think about me but I think that nobody should be thinking bad stuff about people because that's rude and you should respect people for who they are.

lilbluedude I think that you are right about people should not say bad things about you.

Thank you for the advice!!!!!!!

I have thought about what people think about me before once. It was last year, in fourth grade, I had to take out the recycle that morning, and it was raining the night before and water got all over my pants. When I got to school almost everybody made fun of me because they thought I peed my pants, and so I felt very embarrassed.
All but one student engaged in responding to this prompt that centered upon a discussion of whether one should care what people think about you. In lines 1 through 4 the student wrote her question and provided her thoughts about the topic writing that “you really should not care what other people think about you because it does not matter.” Iris responded to Olivia in lines 5 through 7 agreeing with what she has written and in line 8 Alice emphasized her agreement in their conversation by writing “Amen sister.” In lines 9 through 12, Lea explained her difference of opinion stating that she does “care what people think about me” (line 9). She wrote that she agrees it shouldn’t matter but in the end it does somewhat to her because “what people say about me ‘cause it hurts my feelings” (lines 11-12). Continuing the conversation, 2 of the students responded telling Lea that she really should not care and should explain that it hurts your feelings and “maybe they will apologize and they will stop saying mean things to you” (lines 17-18).

Through these posts the Stargirl students responded not only to the prompt but to each other. The layered conversation that occurred through this student-initiated question engaged the students in talking and responding with each other’s responses in comparison to posts made only to the initiated question.

Crash’s on-line conversations.

As described in chapter 3, the Crash group had difficulty getting started and posted some responses that were determined by the teacher to be inappropriate. As a result, the teacher retired the first Crash discussion board and opened a new board for the students after he had provided face-to-face direct instruction regarding the nature
of their posted questions and responses. This section delineates the conversations on the two boards that the *Crash* group had as the nature and content of their responses changed.

The first discussion board, which existed for the first 2 weeks of the data collection period, included 20 posts, one of which was the teacher’s. The second *Crash* discussion board, which was utilized for the remaining 4 weeks of the data collection period, included 17 posts, 6 of which were the teacher’s. Table 4.20 documents the analysis of how many times each member posted on the two different boards and the total number of posts.

<table>
<thead>
<tr>
<th>Group member</th>
<th>Discussion board #1</th>
<th>Discussion board #2</th>
<th>Both</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>#</td>
<td>%</td>
<td>#</td>
</tr>
<tr>
<td>Kurt</td>
<td>12</td>
<td>60%</td>
<td>5</td>
</tr>
<tr>
<td>Josh</td>
<td>4</td>
<td>20%</td>
<td>3</td>
</tr>
<tr>
<td>Sophia</td>
<td>3</td>
<td>15%</td>
<td>3</td>
</tr>
<tr>
<td>Tyler</td>
<td>1</td>
<td>5%</td>
<td>6</td>
</tr>
<tr>
<td>Total</td>
<td>20</td>
<td>5%</td>
<td>17</td>
</tr>
</tbody>
</table>

Table 4.20: Number of times each member posted on the *Crash* discussion board.

In the face-to-face environment, Kurt’s responses constituted only 3% of the turns at talk. As Table 4.20 illustrates, Kurt’s responses on the first on-line threaded discussion board resulted in over 60% of the responses posted. However, nine out of 12 of Kurt’s posts were off-topic and inappropriate in nature. For example, one of the students posted a response that had an inference to the book in which the main character’s sister protested against a new mall that was being built. This student wrote a post that began with the music from the current McDonalds® commercials that sang, “*bana ba ba ba i'm lovin it*”
and then encouraged the reader to shop a particular store instead of a different name brand store.

*bana ba ba ba i'm lovin it. Remember don't shop Wal-Mart®, shop Target®.*

*Kurt responded to this post three different times where he wrote:

<table>
<thead>
<tr>
<th>Kurt</th>
<th>Target® is so stupid I hope it goes bankrupt.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt</td>
<td>boooooooolllllllllllllllllllllllllllllllllll you stink</td>
</tr>
<tr>
<td>Kurt</td>
<td>Onkeymaye ooppaye. [Pig Latin for Monkey Poop]</td>
</tr>
</tbody>
</table>

*Nine of the 12 responses that Kurt wrote on the first Crash discussion board were of this nature.*

*On this first board, Josh posted one question and three responses. In the one question that Josh posted he asked the group members if they had ever been a bully and if they regretted it (line 1). The thread of conversation follows:

<table>
<thead>
<tr>
<th>Josh</th>
<th>1 Have you ever been a bully and if so how and do you regret it?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt</td>
<td>2 Yes I have bullied someone.</td>
</tr>
<tr>
<td>Josh</td>
<td>3 Do you regret it?</td>
</tr>
<tr>
<td>Kurt</td>
<td>4 No. I do not regret bullying my sister.</td>
</tr>
</tbody>
</table>

*When Kurt only replied to part of Josh’s question in line 2, Josh posted a follow-up question, restating the second part of his question (line 3). Kurt replied to the second part of the question and the conversation stopped there (line 4). Through his question and follow-up question, Josh appeared interested in continuing the conversation. However, after Kurt answered the second part of Josh’s initial post, the thread ended.*
Sophia posted three different times on the first *Crash* threaded discussion board. All three of her posts initiated new topics. None were in response to others’ postings. Two of the posts were questions with one question relating directly to the book (“Why does the baby on the front cover have a moustache?”) The other question was related to the context of the book and Crash’s name (Have you ever been the new kid and made up another name for yourself just to be cool?). The remaining new thread that Sophia posted was a statement and not a question, as all the other initiated posts were (line 3).

<table>
<thead>
<tr>
<th>Sophia</th>
<th>1</th>
<th>have you ever been the new kid and made up another name for yourself just to be cool?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Sophia</td>
<td>3</td>
<td>bana ba ba ba i'm lovin it. Remember don't shop Wal-Mart® shop Target®.</td>
</tr>
<tr>
<td>Sophia</td>
<td>4</td>
<td>why does the baby at the front cover have a moustache?</td>
</tr>
</tbody>
</table>

*Crash* Threaded Discussion

The second thread that Sophia initiated (line 3) required the students to infer her meaning from their reading of the *Crash* text. However, as can be seen in the responses to Sophia’s post, Kurt misinterpreted her meaning and thought she was going off topic from the book.

<table>
<thead>
<tr>
<th>Sophia</th>
<th>bana ba ba ba I'm lovin it. remember don't shop Wal-Mart® shop Target®</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kurt</td>
<td>Target® is so stupid I hope it goes bankrupt.</td>
</tr>
<tr>
<td>Kurt</td>
<td>Boooooooooooooooooo you stink</td>
</tr>
<tr>
<td>Kurt</td>
<td>Onkeymaye ooppaye. [Pig Latin for Monkey Poop]</td>
</tr>
</tbody>
</table>

*Crash* Threaded Discussion

Though as Sophia later detailed in a group conversation, her response was written to engage the group in discussing the part of the book in which Abby, Crash’s sister, protests a new mall from being built as it will destroy a wildlife habitat that currently exists in the space. As Sophia explained in a follow-up interview:
I liked the conversation but what I didn’t like about it was how people weren’t taking it seriously and I think it kind of started with me but I was taking it seriously, but they thought I wasn’t. The part I was at, it was protesting against a local mall being built and I put an example and then I put like, “Don’t shop Wal-Mart®, shop Target®” or something like that – we don’t need – Target® can do it – or whatever. And they thought I was making a joke out of it and I wasn’t.

Student Interview, March 6, 2006

Though Sophia’s post was written in response to something she had read, the group members were unable to understand her inference. The students misunderstood her purpose, thinking that she was off topic with her response. The students brought the posting to the attention of the teacher, but as the teacher described in an interview,

Now some other students in the class, when I was talking about this yesterday, thought that that was way off topic, and I had to say, well keep reading the book because you’ll find out it’s not.

Teacher Interview, January 25, 2006

The teacher indicated to the students, without directly telling them, that the post is not off topic but has a relationship to the text. However, the students continued to misunderstand the meaning of the response and the connection to the story’s meaning. The post was also discussed in the face-to-face session on two different occurrences when Josh asked for clarification regarding what Sophia meant. In one group conversation, Josh brings up Sophia’s post asking,
Josh, in this conversation, stated his confusion over Sophia’s post (line 1-2), not being able to make the connection between the board posting and the events of the book. Sophia tried to describe her post stating that she was pretending to protest new buildings like Abby, Crash’s sister in the book. The teacher supported her post and the connection to the book by stating, “I made that connection” (line 6).

The next week when the group met to discuss the book, Josh again waited until the end of the conversation to ask his question again. The following conversation ensued:

Josh, in this conversation, stated his confusion over Sophia’s post (line 1-2), not being able to make the connection between the board posting and the events of the book. Sophia tried to describe her post stating that she was pretending to protest new buildings like Abby, Crash’s sister in the book. The teacher supported her post and the connection to the book by stating, “I made that connection” (line 6).

The next week when the group met to discuss the book, Josh again waited until the end of the conversation to ask his question again. The following conversation ensued:

Josh renewed his disbelief in any connection between Sophia’s post and the Crash text (lines 1-2). Sophia again tried to explain that her post was meant as an example of protesting as Abby did in the text (lines 3-4). Again, Josh refused to accept this explanation (lines 5-6). Though the teacher and Sophia had described the connection to the text, the student refused to accept the connection between Sophia’s post and the events of the book. Even through these face-to-face conversations, the students did not
understand her protesting references, and never accepted that the post made sense or related to the text.

Sophia made a third attempt to initiate conversation on the group’s discussion board and the following conversation on the threaded discussion board occurred:

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia</td>
<td>1</td>
<td>Why does the baby at the front cover have a moustache?</td>
</tr>
<tr>
<td>Kurt</td>
<td>2</td>
<td>Read the book.</td>
</tr>
<tr>
<td>Josh</td>
<td>3</td>
<td>Have u Kurt?</td>
</tr>
<tr>
<td>Kurt</td>
<td>4</td>
<td>No</td>
</tr>
<tr>
<td>Josh</td>
<td>5</td>
<td>Then don’t be talking</td>
</tr>
<tr>
<td>Kurt</td>
<td>6</td>
<td>Why?</td>
</tr>
<tr>
<td>Josh</td>
<td>7</td>
<td>cause ur telling me to read the book and you haven't either</td>
</tr>
</tbody>
</table>

Though Sophia began with an engaging question (line 1), the other group members did not stay on the topic of the question, but rather engaged in a back and forth, informal conversation that had no relationship to the content of the book. The students were interacting with each other in a conversational style (lines 3-7), but not in relation to the book which is how the teacher had intended. As he described in an interview about the events:

*On the discussion board, or even when we have our discussion in discussion groups, I might pose a question and the final discussion might end up somewhere else. If we are talking about bullies, we might end up talking about somebody’s cousin because the conversation naturally went there. And even on the discussion boards, I don’t mind when that happens. What I do mind is if it never starts on topic in the first place. Or if it starts on topic and then goes somewhere inappropriate. Like saying you are stupid which showed up on the message board. So this is the sort*
of stuff right here that we talked about at the end of the day yesterday as
not being acceptable

Teacher Interview, January 25, 2006

At this point in time, the teacher stopped this board completely and worked with
the students in their face-to-face discussion groups again to model how their
conversations on the discussion board should work. The teacher had the students each
write a question about the book on a blank piece of paper. The students then passed their
questions around the circle to each other and they each wrote a response to the question
that each group member wrote. When everyone had written a response to each group
member’s question, the original creator of the question wrote responses to what had been
written by each group member as the paper passed around the circle. The students then
shared their question, the group member’s responses, and their responses to the group
member’s responses. At the end of this experience, the following conversation in the
group occurred:

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>1</th>
<th>What does this sound like to you? Does this sound like anything else we have done?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia</td>
<td>2</td>
<td>The discussion board</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>3</td>
<td>Right. You have posted questions and then people have posted responses and then you have responded to that. Because on the discussion board you can do just this. You guys have these terrific questions and terrific responses in your minds. You just have to stay away from the wimp out answers.</td>
</tr>
</tbody>
</table>

Video Transcript, Crash Group Conversation, February 7, 2006

In this conversation Tyler explicitly detailed for the Crash group members that
the activity they had just completed was a model of what he expected when they engaged
in writing and responding to each other in the on-line environment. He encouraged them
by stating “you can do just this” (line 6) and praised them regarding the “terrific
questions and terrific responses” (line 6-7) that they have. He finished by reminding them to “stay away from the wimp out answers” (line 7-8) that had been a problem on the first board.

Tyler then opened a second Crash discussion board and issued to the students the following charge:

*The purpose, I want to state again, the purpose for doing these was to practice writing quality questions that you would post on the discussion board and then to practice posting quality responses and getting good at recognizing the types of responses that aren’t. In about five minutes I am going to have you move to the discussion board and start a new posting keeping in mind that we are looking for quality questions. Hopefully tomorrow you will read those three questions and respond to them. The reason I need you to wait 5 minutes is that I am going to make a brand new discussion board and the reason I am making a new discussion board is that we had a lot of questions and responses that were being posted there that were not quality questions and were not quality responses and I want to get away from that completely. So I want a brand new start for your discussion board.*

**Video Transcription, Crash Group, February 14**

With Tyler’s directions in mind, the students began a second discussion board. An analysis of that board’s posts is documented in Table 4.21. Though this board consisted of only 17 posts (6 of which were the teacher’s responses to the students’ questions) the contents were more specific to the book and did not contain any of the
features that previously had “inappropriate” digressions. Sophia and Kurt each wrote one question and Josh posted two questions. Each group member’s question had a response from the group members, though Kurt’s had the least amount of responses as detailed in Table 4.21. Kurt’s question dealt with bullying which had been a previously posted and discussed question on the first board, which may explain the smaller number of responses to his question.

<table>
<thead>
<tr>
<th>Creator</th>
<th>Theme of question</th>
<th># of responses</th>
</tr>
</thead>
<tbody>
<tr>
<td>Josh</td>
<td>Abby's habitat</td>
<td>7</td>
</tr>
<tr>
<td>Josh</td>
<td>Forgiving Penn</td>
<td>4</td>
</tr>
<tr>
<td>Sophia</td>
<td>Catfish cakes</td>
<td>4</td>
</tr>
<tr>
<td>Kurt</td>
<td>Bullies</td>
<td>2</td>
</tr>
</tbody>
</table>

Table 4.21: Number of responses posted to each question on the second *Crash* threaded discussion board.

Through the second board each of the students posted at least one question and all were responded to by the group members in what was considered by the teacher to be in an appropriate manner. The questions on the second board were open-ended and related directly to the content of the book. This channeled the students’ responses to the content of the book and to what the other group members thought about the content of their book. For example:

<table>
<thead>
<tr>
<th>Josh</th>
<th>1</th>
<th>Why do you think Penn keeps forgiving Crash and doesn't get mad and keep trying to be friends?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Sophia</td>
<td>3</td>
<td>I think he admires him.</td>
</tr>
<tr>
<td>Kurt</td>
<td>4</td>
<td>He is a Quaker and he doesn’t believe in fighting. That's why I think Penn forgives Crash.</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>
That's one of the things I really wondered about in the book. If I had been Penn I would have given up long ago trying to get Crash as a friend. I realize he's a Quaker and isn't going to fight, and wants to help people, but there has to be a limit on the punishment you're willing to take from someone. It did pay off for him in the end, though. Crash is his friend.

In this example, all members of the group participated in providing their response to Josh’s question. Sophia answered in one sentence (line 3) while Josh answered in two sentences (lines 4-5) and incorporated the question into his response. Incorporating the question into the response was observed to be directly taught by the teacher as an important element that he wanted to see in the students’ responses. Finally the teacher in lines 6-10 provided his response modeling a longer response that is three sentences long and detailed his personal response to the reading.

Though Josh and Sophia continued to write and respond in the teacher approved appropriate way that they had on the previous board, Kurt changed his style and writing. On the first board, Kurt posted 12 times (60% of the posts) and 9 of his posts were off-topic and inappropriate in nature as described by the teacher. On the second board Kurt posted five times. All of these posts were considered by the teacher to be appropriate responses. For example, in response to a student posted question that asked, “Why do you think Penn keeps forgiving Crash and doesn’t get mad and keeps trying to be friends?” Kurt responded,

*He is a Quaker and he doesn’t believe in fighting. That’s why I think Penn forgives Crash.*
In this response Kurt provided an answer that aligned with the content of the book and
the question that was asked. He also incorporated the question into the response, a
clearly stated desire of the teacher’s. On the second board, though Kurt wrote seven less
posts, he changed his role from writing and posting inappropriate, humorous comments to
posting responses that incorporated the elements the teacher desired.

As previously detailed the first Crash discussion board incorporated
conversations, but these conversations were not on the topic of the book the students
were reading and were not in alignment with what the teacher expected of their
responses. On the second Crash threaded discussion board there were four instances in
which a conversation was initiated in response to posted questions.

Kurt attempted twice to engage a conversation through a question. The first
attempt is illustrated in the following conversation:

<table>
<thead>
<tr>
<th>Kurt</th>
<th>1</th>
<th>Have you ever been bullied before? If so what did they do to bully you?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Josh</td>
<td>2</td>
<td>Yes, I have been bullied and how I was being bullied was being punched.</td>
</tr>
<tr>
<td>Kurt</td>
<td>3</td>
<td>Who was punching you?</td>
</tr>
</tbody>
</table>

*Crash Threaded Discussion*

In this example, Kurt posted his initial question regarding the topic of bullying.
Josh provided the only response to Kurt’s question detailing that he had been bullied by
being punched (line 2). Kurt attempted in line 3 to engage Josh in conversation by asking
“Who was punching you?” However, neither Josh nor any other group member
responded to this thread and the conversation stopped.

Kurt tried again to engage a conversation with a question in a second thread. In
response to the question, “In the book Crash, which one of the characters would you
want as a friend and tell me about it” (Crash Threaded Discussion) Sophia wrote:
Well I would pick Jane Forbs. Jane is independent and does not let others such as popular Crash influence her. She enjoys hanging out with Penn even though he is not popular. She does not care that she is the new kid and could be easily influenced by the “in crowd.” I think Jane is her own person.

*Crash* Threaded Discussion

Kurt in response to this question asked, “What do you mean her own person?” Sophia did not answer Kurt’s question and again this thread ended.

In addition, the teacher modeled a conversational style twice in one threaded discussion prompt (see Table 4.22).

<table>
<thead>
<tr>
<th>Josh</th>
<th>1</th>
<th>Why do you think Abby wants to have a wild habitat in their backyard?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Sophia</th>
<th>3</th>
<th>I think she wants to have a wild life habitat in her backyard because her mom is building a mall and the animals need a home.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tyler</th>
<th>5</th>
<th>I agree with that. I think that by making a habitat at her home she feels like she's making up for what her mom is doing by building the mall.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>6</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Josh</th>
<th>7</th>
<th>I think Abby is in love with animals. She is in love with the environment. For instance when Penn and Jane were protesting the new mall and Abby thought it wasn't the best idea either. She thought that if you built a new mall that animals would be kicked out of there homes.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8</td>
<td></td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
</tr>
<tr>
<td></td>
<td>10</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Tyler</th>
<th>11</th>
<th>That’s a real problem with development. Whenever you build on a tract of land, you're destroying some animal's home. Especially if a wetland is being filled in to make way for the construction, they are doing real harm to the environment. Some people think the development and the money it will bring in is more important. Others think that the natural beauty and habitat of the animals is more important. It's hard to find a good balance.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13</td>
<td></td>
</tr>
<tr>
<td></td>
<td>14</td>
<td></td>
</tr>
<tr>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.22: Multi-layered threaded discussion on *Crash* discussion board.
After Sophia provided her thoughts in lines 3-4, Tyler responded to her writing by agreeing with what she had written and providing his own thoughts (lines 5-6). In lines 7-10 Josh articulated his thoughts in relation to the prompt. Tyler in lines 11-16 responded to Josh’s prompt detailing his thoughts regarding the complexity of land development. Though the teacher initiated conversation and modeled responding to others’ responses, the students did not respond back to him or attempt to hold a similar conversation in any of the other threads on this second discussion board.

Summary.

The section detailed the analysis of the students’ interactions for both groups in their on-line threaded discussion conversations. Analysis of the data illustrated that though the teacher did participate in the on-line threaded discussion, the students initiated the topics of conversation and responded to these topics. This analysis illustrates that in this environment the students independently engaged in conversation about the text without the direct leadership of the teacher, though the Crash group needed more support to achieve that outcome. The next section discusses the students’ interactions while physically working at the computers together.

The Responses of Students While in the Physical Computer Environment

An important question that has just begun to be researched relates to what students talk and think about when sitting at the computer. Research from the New Literacy Studies (Gee, 1999, 2000; Knobel & Lankshear, 2002b; Lankshear & Knoble, 2003a; New London Group, 1996; Street, 2003) views reading not as an autonomous
process, but a socially constructed one. The New Literacy studies illustrate that there are multiple places and ways that individuals read and write and that the context of the process is an important element. Though the autonomous models of reading that incorporate a single reader and a single text have dominated research, the New Literacy studies provide a different view in which multiple readers and multiple texts can be involved in a socially constructed reading event.

As students talk and interact together they can activate prior knowledge and understandings as they discuss with each other the kinds of experiences and understandings they have previously had. In this scenario a new “text” is created for the students or “public” classroom. The experiences that are articulated become a socially constructed text that can now be used with the other texts. Leal (1993) states:

When one child expresses his or her personal prior knowledge, the prior knowledge of other participants is activated. These shared thoughts stimulate further ideas from others in the group and the result is a collaborative construction of meaning for all. In essence, shared prior knowledge about a particular topic or text becomes corporate knowledge and part of the discussion group’s textual understanding. (p. 116)

This section examines the ways in which students talked together while physically seated at the computers in the classroom to write their responses to the text in the on-line threaded discussion environment. First the culture of the classroom as observed and as indicated by students is described to illustrate their perceptions of the environment. Then an analysis of the discussions that the students had in the physical computer area are illustrated, organized around four themes of conversation: (1) technical issues that arose
while posting, (2) grammatical or spelling issues, (3) notification that someone had posted or pointing out something that they wanted a classmate to read, and (4) general social conversations.

As described in chapter 3, I had been an observer in this particular classroom in prior years and had observed the previous class of students talking together at the computers before writing their responses. During that time I observed the students talking with each other about the book’s content before individually constructing their responses on the threaded discussion board. In these observations, I watched as the students talked and shared together their opinions and responses to the text they were reading. These conversations created a new text between the participants (Leal, 1993).

Understanding the participants’ cultural perceptions.

The data collected during this research study did not mirror the data collected from previous experiences. Though the teacher was observed to have created a constructivist classroom in which he encouraged and nurtured an environment for the students to talk and work together, the students were observed to work quietly while at the computers. This observation was in direct contrast to the interactions of students in the other classroom experiences. While in the face-to-face setting, where the reading groups physically met together, the students interacted and talked with each other. While working in small groups on their reading posters described earlier in this chapter the students talked and collaboratively determined the elements of their work. In whole group settings the students interacted and talked with each other and the teacher.
However, when creating their written posts on the computer for the on-line threaded discussion board, the students were atypically quiet.

Curious as to why the students did not talk together at the computers, I asked them informally at different times about their social interactions while posting. The students articulated their perceived understandings that they were not to talk about their writing while at the computers or that they did not enjoy talking while they were trying to focus on their writing. As Helen stated in an interview:

| Jackie | 1  
| 2 | Did you ever talk to anyone about what you were going to post before you posted it? |
| Helen | 3  
| 4 | No – because you are not supposed to. You are supposed to put it on there so to see if anyone reads it or like answers it. |

Student Interview, March 2, 2006

Helen articulated in lines 3 and 4 her understanding that she and her classmates were not to talk about the writing they were doing. From Helen’s perspective their responses were to be posted without any discussion to “see if anyone reads it or like answers it.”

Other students responded in a similar way to this question, such as Sophia, who stated simply, “No, we were not allowed to” (Student Interview, March 6, 2006). When asked whether he liked to talk to his group members before he posted, Josh responded:

Well sometimes I did, but that was normally when they asked me something because normally I am a person that talks but when I am on the computer typing on the discussion board I do like to stay to myself and just type.

Student Interview, March 6, 2006
Josh stated in this quote his preference to work alone while he is typing rather than engaging in talk with other group members.

Observations of the students while posting at the computers also documented the students not wanting to share their thoughts verbally and to keep their writing on the computer screen “secret” until their responses were posted. On five different instances I physically observed students trying to cover their postings with their hands or moving their monitors to prevent their classmates sitting near them from reading what they wrote before they posted it. The students wanted to keep their responses a “secret” until they were posted for the other group members to see. As the field notes document,

*Sophia gets annoyed and turns her computer screen away. Turns it back but tries to cover her post with her hand. Continues to try and hide her post from Josh physically with her hand.*

Field Notes, January 24, 2006

On a different day the field notes reflect a similar incident in which Josh covered his screen to hide his work from Iris who is sitting next to him. The students illustrated their desire both verbally and physically to keep their responses secret until they were posted when they were working in the physical computer space.

The students in this study articulated and demonstrated their interest in keeping their responses secret until they were posted. The teacher, however, perceived his instructions to include talking about their reading as they wanted. The teacher described himself as a constructivist teacher who wanted his students to utilize the power of talking to help scaffold their understandings. As detailed in the beginning of this chapter, the teacher built a classroom structured upon collaborative talk and working together. In
classroom observations, he told the students that they were free to talk and work together as long as it was on topic and at a reasonable sound level. As recorded in the field notes, Tyler would stop the students at work when necessary to remind them,

*Quiet conversations are fine. When it gets so loud that we cannot hear each other, then that is a problem.*

Field Notes, January 24, 2006

Though Tyler encouraged his students to work and talk together throughout the day, there was a student held perception that at the computers, they were to be quiet and write without verbally sharing their thoughts.

While the students typically did not talk while at the computers, there were a limited number of times that the data reflected that the students verbally talked about postings with each other. For example, the students had been posting through the on-line discussion to the question posted by Olivia, “*Have you ever changed your style and how you act just for someone? I know that I have not at least I think.*” (Stargirl On-Line Threaded Discussion, Retrieved March 6, 2006). Many of the students had been posting and responding to each other regarding this question. Table 4.23 reflects the writing of the students in the on-line environment.

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Do you care what other people think about you? If you do why? If you don't why?</td>
</tr>
<tr>
<td>2</td>
<td>I know that I don't care I mean maybe sometimes but not really. You really should</td>
</tr>
<tr>
<td>3</td>
<td>not care what other people think about you because it does not matter. It doesn’t</td>
</tr>
<tr>
<td>4</td>
<td>matter how people look on the outside it matters what they look like on the inside.</td>
</tr>
<tr>
<td>5</td>
<td>I think that you are right midget. It really does not really matter what on the</td>
</tr>
<tr>
<td>6</td>
<td>outside it matters what on the inside. Say if you were raggedy clothes but</td>
</tr>
<tr>
<td>7</td>
<td>you are an extremely good kid or person. It really wouldn’t matter I think.</td>
</tr>
<tr>
<td>8</td>
<td>Amen sister!</td>
</tr>
</tbody>
</table>

Table 4.23: Verbal connection made through the *Stargirl* discussion board.
After reading the response posted in lines 5-7, Alice verbally called out, “Amen, sister.” When the other group members who were seated next to her, looked at her inquisitively, she responded, “I liked what she said and she spoke the truth” (Field Notes, February 1, 2006). Alice then continued by posting her verbal response as a written response on the board (line 8), literally writing, “Amen sister.”

The data documented minimal conversations between the students during the time in which they worked on the computers. These conversations are still important to examine for two reasons. First, though the conversations did not encompass the academic content related to the textual readings the students were experiencing, they were still social interactions that provided knowledge and understandings between the students. The students verbalized their thoughts and prior knowledge. Second, as discussed in chapter 3, analyzing data that do not fit preconceived notions provides the opportunity for negative case analysis to be identified and discussed. Though the content of the talk was not as expected, the experience contributes to the literature in relation to what the students in this experience did talk about when physically at the computers in the classroom. The 54 documented conversations that occurred while the students were physically located at the computers, posting their written responses centered on four topics: (1) technical issues that arose while posting, (2) grammatical or spelling issues, (3) notification that someone had posted or pointing out something that they wanted a classmate to read, and (4) general social conversations.
Technical issues that arose while posting.

Particularly in the beginning, when students were still remembering how to post their responses and “refresh” their screen to see the new postings, they would appeal to each other for clarification regarding technical issues. For example, the students were observed in six instances to ask someone close by how to refresh their screen or to inquire why they did not see a particular post that someone had written. In these six instances, a student provided the answer and then returned to his or her post on the computer. Field notes and observations illustrated these happenings such as the following example:

*I watch Olivia finish her work. She tells Lea that she replied to her post.

Olivia then gets up to be done and then starts talking to Lea, telling her to read her response. However, the girls are now looking at the threaded discussion together. I realize that they are trying to figure out some logistics on why Olivia’s post did not show up.*

Field Notes, February 1, 2006

In this example, the student had forgotten to refresh her screen. Because of this technicality she could not see any new responses that had been posted.

On a different day, one student could not get the space bar to work on the computer she was using and she appealed to the others for help. The field notes documented her request for help. The student seated next to her was able to fix the space bar after which the student went back to work.

These technical issues were always small and solved quickly. The students in these situations used their prior knowledge of technical issues that had
occurred and through their talk together were able to remedy the issues without any additional expertise or intervention from the teacher.

_Grammatical or spelling issues._

On nine different occasions the students would comment to one another about spelling or grammatical issues they found in each other’s post or appeal for help in spelling a word needed for their post. Observations document the students teasing each other about spelling and grammatical mistakes 10 times during the 6-week period. In addition, the students asked five times for help from a nearby classmate when trying to spell particular words while writing their responses. On one particular day, the field notes reflected a great deal of conversation regarding the group members’ spelling and grammatical mistakes.

_Iris comes over to check in and Alice chastises her about a spelling mistake that she made. Olivia asks what a word is and Iris tells her (it has been misspelled). Olivia is back pointing at Alice’s computer. They argue over how to spell a word. Tell Iris again that she has spelled a word wrong. Olivia is still chit chatting with Alice about the misspellings. . . .

Lea asks for spelling help from me. Lea looks over at what Olivia is doing. Lea tugs on Olivia’s shirt. Reads her the prompt that asks if you have ever changed your style and Olivia’s response to it. Comments that she thinks that there should be a comma after Stargirl in Olivia’s response._

Field Notes, February 1, 2006
In conversations that did take place in the physical environment of the computer setting, the students called to attention each other’s spelling and grammar mistakes and appealed for help from each other and from myself when composing their responses, not wanting to make subsequent errors. The students utilized each other’s prior knowledge and understandings of spelling and grammatical rules in the writings that they posted.

*Notification that someone had posted or pointing out something to be read.*

Eight times during the 6 weeks of observation the students were observed to engage in conversation when they had posted something new that they wanted someone else to read. The students also pointed out posts to each other that they felt were interesting or funny. For example, the teacher posted the following response:

*That's a part of the book where I want to grab Leo by the shoulders, pull him right out of the book and shake some sense into him. He doesn't realize how important Stargirl is to him, doesn't realize the jerk he's been until it's too late. Bad Leo! Bad!*

*Stargirl Threaded Discussion*

When the students began work that day on reading responses and writing their own responses, 3 were observed to physically laugh at the teacher’s post and pointed it out to others near them. The students briefly engaged in laughing together and sharing that they thought it was funny, but then returned to their work.

There was one time when the *Stargirl* group talked about something that should *not* be read. At one point during the student’s reading of the *Stargirl* text, a group
member posted a question that “gave away” an element of the story. The student, knowing one of the group members had not yet read to this part of the story, became upset with her as this particular group member tried to read over her shoulder. The owner of the question verbally and emphatically told her as she covered the screen with her hand,

\[\text{Don't read it! Seriously . . . it will give the whole ending away.}\]

Field Notes, February 7, 2006

Her fellow group member agreed after they had talked together at the computers not to read the post until she has read to the appropriate section. To warn anyone else that had not finished reading the book, the writer of the post titled her thread, “If you have finished the book you can read but if you haven’t, don’t” (Stargirl Threaded Discussion, February 7, 2006).

Social conversations.

The data documented 15 instances in which the students discussed general student topics while sitting at the computers. For example, the time of the day in which they posted on the computers also coincided with the time in which many of the students ate a snack. While the students were writing posts, they would share their snacks with each other and talk about the various events of the day. Observations also found that the students would walk to each other and “check in” on what they were doing. Kurt, the student on a behavioral contract, was observed six different times wandering from computer to computer talking with fellow group members about recess and other items that were unrelated to the text or the postings that were being written.
Summary.

In this particular classroom the students articulated their understandings that they were not to talk at the computer or their preference that they did not want to talk at the computer. Though the students did not engage in conversation directly about the text they were reading, they did talk at the computers. Throughout the 6 weeks of data collection, conversations were observed to take place in four themes: (1) technical issues that arose while posting, (2) grammatical or spelling issues, (3) notification that someone had posted or pointing out something that they wanted a classmate to read, and (4) general social conversations.

Relationships Across Multiple Contexts

As chapter 2 discussed, autonomous models of reading that incorporate a single reader and a single text have dominated research. However, research from the New Literacy Studies (Gee, 1999, 2000; Knobel & Lankshear, 2002; Lankshear & Knoble, 2003a; New London Group, 1996; Street, 2003) views reading not as a socially inherent practice. The New Literacy studies illustrate that there are multiple places and ways that individuals read and write and that the context of the process is an important element. As described in chapter 3, the students in this study were engaged in reading and responding to their common piece of children’s literature in multiple contexts. The students responded to the text personally as they read silently; they responded to the text in the physical face-to-face environment as they verbally talked together; and they responded to the text virtually as they discussed the text in the on-line threaded discussion.
environment. These multiple contexts provided multiple spaces for the students to respond and provided the opportunity for one to influence the other.

An analysis was conducted to examine the relationships that developed between these multiple contexts. Each context was examined for any influence of one upon another, both in relation to each other and in relation to the time it took place. This examination was conducted based upon the theory that multiple “texts” were utilized in the students’ work in the classroom. The texts in this analysis included not only the books the students were reading or other books that they had read in the past, but other texts such as the students’ reading packets that they worked in, the posters that they were creating, and the conversations that they had with each other. To focus this analysis, texts were limited to the students’ and the teacher’s face-to-face conversations, their on-line conversations, and the printed texts that they were reading. Relationships that developed between these texts were examined, coded, and analyzed to illustrate the occurrences and the nature of their occurrences.

The results of this analysis are discussed in three sections. The first section illustrates the style of questions that the students initially used in the on-line environment and how that style changed for both groups after the teacher had a face-to-face intervention with the Crash group. Second, connections that developed between the students’ responses and the text in each of the two contexts are examined. Finally, the connections that the students made from the group conversations to their on-line responses and work are explored.
Connections to the style of questions.

All of the 29 students’ questions on the Stargirl and Crash on-line discussion boards had either direct or indirect connections to the physical text the students were reading. Directly connected questions explicitly referred to an event in the book. Examples of these questions included:

*What would you have done if you were Stargirl and Hillary hit you? I want to know. Tell me and why would you do what you did?*

Stargirl Discussion Board

*Do you think that Archie died and Senior Senuco? Also do you think the end of the book is really sad or happy? Do you think Stargirl will ever come back to Mica high or anything else?*

Stargirl Discussion Board

*Why do you think Abby wants to have a wild habitat in their backyard??*

Crash Discussion Board

These questions were categorized as direct connection questions as they related specifically to the characters and events in the book. These questions had a direct connection to the specific reading of the students and the events in their text. There were 12 questions that the students posted that were categorized and coded as having a direct connection. The teacher posted one question on the Crash discussion board that was coded as a direct connection question.
The teacher wrote two questions that were categorized as indirectly connected to the text. Both of these questions were posted as the opening question in each of the threaded discussion boards. The teacher wrote the following questions:

*Think about what makes you unique. We know everybody has different names, fingerprints, family, etc. What else makes you uniquely you? Tell us about what makes you special.*

Teacher Posted Question on the *Stargirl* Board, January 22, 2006

*You have recently completed the D.A.R.E. Program. Part of the program was teaching about positive ways to make decisions and how to avoid peer pressure. Based on what you learned in D.A.R.E., what do you think is the best way to handle a situation where someone is bullying you?*

Teacher Posted Question on the *Crash* Board, January 22, 2006

These quotes opened each of the on-line threaded discussion boards and were the first model that the students had when beginning their interactions together in this virtual environment.

The students posted 17 questions that had an indirect connection to the text that they were reading. These questions were related to the events of the story or the development of the characters, but did not specifically mention the text events or the character that was inferred. Examples of these questions are included in Table 4.24.
<table>
<thead>
<tr>
<th>Question</th>
<th>Indirect connection</th>
</tr>
</thead>
<tbody>
<tr>
<td>Have you ever been a bully if so how and do you regret it?</td>
<td>This question references the <em>Crash</em> text in which the main character is a bully but through character developments comes to regret his choices.</td>
</tr>
<tr>
<td>Have you ever worn something strange to school? If so what did you wear and why? How did people react and how did it make you feel?</td>
<td>This question references the <em>Stargirl</em> text as the main character, Stargirl, wears a variety of strange and unique costumes to school such as a buckskin and a flapper dress.</td>
</tr>
<tr>
<td>Have you ever changed your style and how you act just for someone?</td>
<td>This question references the <em>Stargirl</em> text as Stargirl changes herself into “Susan” to become accepted by the boy she likes and the other high school students.</td>
</tr>
</tbody>
</table>

Table 4.24: Indirect questions posted on the threaded discussion boards.

In the *Crash* environment all but one of the indirectly connected questions were found in the first discussion board before the teacher “retired” it and started a new board. On the *Stargirl* board all of the indirectly connected questions were posted during the first 2 weeks. Analysis of the questions illustrated that after February 7, the day in which the teacher held the face-to-face session with the *Crash* group regarding their postings, all of the questions that the students wrote were in direct connection to the text they were reading.

As previously detailed, the teacher stopped the first *Crash* threaded discussion board due to postings that the teacher found inappropriate and unrelated to the text in any way. The teacher met with the *Crash* group in the face-to-face environment and modeled for them, through a direct instruction lesson, how he wanted them to write appropriate questions and answers in the on-line environment. Tyler told the students:
Now what I want you to do now, I want you to skip a line after your name and I want you to write what you think would be an interesting question. I would like you to write an interesting question, something that you have been wondering about as you read the book. Now if nothing jumps to your mind, take a minute to think about it. What is happening in the book that made you wonder, what character have you been thinking about, what event made you ask a question as you read? Take a minute right now.

Make sure you have a capital letter at the beginning and a question mark at the end. I am going to give you a couple of minutes, so it can be a long one if you want. It doesn’t have to be a short one. So take a minute right now and be very silent.

Video Transcription, Crash Group, February 7

Tyler told the students to write questions that illustrated what they had been thinking or wondering about while reading the text. Analysis of the questions that the students composed during this face-to-face session found that all of the questions created by the students were in direct connection to the text. Following this direct instruction experience with the teacher the Crash students posted all direct connection questions on the second Crash board with the exception of one. This one question on the second board was posted by Kurt who struggled to get along with the teacher and the other students. Kurt posted the first question on the second board which asked “Have you ever been bullied before? If so what did they do to bully you?” This question was in a similar theme to the question the teacher posted on the first board that asked what is the best way
to handle a bully and a question that a student posted that asked “Have you ever been a bully? If so how and do you regret it?”

The remaining five questions posted on Crash’s second board were in direct connection to the text. The students posted questions such as “In the book Crash which one of the characters would you want as a friend? Tell me about it.” and “How do you feel about Crash’s grandpa being in the hospital?” These remaining questions were in direct relation to the content of the book.

Previous to the point in time in which the teacher met with the Crash group to redirect their writing of questions and posts, the Stargirl group members had been posting indirect questions to their board that related to the themes of the book. However their questions did not specifically reference the text. However, examining the dates of the posts on the Stargirl board revealed that the nature of their questions changed on the same day that the teacher met with the Crash group.

Observation notes of that day illustrate that while the Crash group was engaged in a face-to-face meeting with the teacher the Stargirl students were working on the computers that were physically six feet from the group meeting area. While the Crash group members were given direct instruction from the teacher on how to write and respond “appropriately” on the threaded discussion board, the Stargirl students were physically writing and responding on the computers.
<table>
<thead>
<tr>
<th>Date</th>
<th>Post</th>
</tr>
</thead>
<tbody>
<tr>
<td>February 7, 2006</td>
<td>What would you have done if you were Stargirl and Hillary hit you? I want to know. Tell me and why would you do what you did.</td>
</tr>
<tr>
<td>February 8, 2006</td>
<td>Have you ever liked someone like Stargirl and Leo? If you have, have you been afraid to tell them or someone else?</td>
</tr>
</tbody>
</table>

Table 4.25: Examples of questions that directly relate to the *Stargirl* text posted on the discussion board.

From that day forward the *Stargirl* group members posted questions that were in direct connection to the *Stargirl* text and no longer posted any questions that only indirectly related to the text. See Table 4.25 for examples of direct text related questions that the students posted on their board after observing the *Crash* group’s face-to-face meeting.

*On-line connections made to the text.*

Just as the students wrote questions that directly and indirectly referred to the text, the students also wrote responses that directly and indirectly referred to the text. As previously discussed, the first 10 questions on the *Stargirl* board indirectly referred to the text. In response to these 10 questions the students wrote responses that answered the questions without directly referencing the text. For example, Olivia posted the question, “Have you ever changed your style and how you act just for someone? I know that I have not at least I think.” This question indirectly referred to a central theme from the book in which Stargirl must decide whether she will change how she acts and looks to be accepted by her high school peers. The students wrote the following responses:
<table>
<thead>
<tr>
<th>Helen</th>
<th>1</th>
<th>I have once and I am really sorry I did</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iris</td>
<td>2</td>
<td>Maybe once or twice but then I was in kindergarten then. I remember I liked this girl but just for 10 seconds tell I could be who I wanted to be.</td>
</tr>
<tr>
<td>Alice</td>
<td>4</td>
<td>I don't think I have changed myself before, but I forget a lot of stuff.</td>
</tr>
<tr>
<td>Lea</td>
<td>5</td>
<td>No I have never changed my style for someone. I never did because I never thought it was worth it.</td>
</tr>
<tr>
<td>Grace</td>
<td>7</td>
<td>Yes I have changed the way I act but not the way I look. I changed the way I act for my friends and now I have a new friend, and my old friends still like me.</td>
</tr>
</tbody>
</table>

In the responses to the first 10 questions there was one exception to this pattern. In response to the question, “Have you ever been like super different before?” Grace wrote the following response:

```
Yeah I guess so but not too different. When everyone is little they are different and they don't care if they show it but when you’re older you don't show as many differences because you want to be cool. Even I sometimes do something that isn't me just to be cool. When I do I make sure that my friends still like me for who they are. In Stargirl Kevin doesn't ignore Leo because he's his best friend. Best friends don't just go and stab you in the back!
```

Though the question does not make a direct connection to the text, Grace connected her personal feelings and the events of the text that she was reading in her response to the question. In lines 1-3 she directly responded to the question asked. In lines 3-5 she related her own experiences and life to the question. Finally in lines 5-7 she related the text and its events to the question being asked. Though the question indirectly referred to the text and the “super different” nature of the main character, Grace
specifically used the events of the text in her response. She articulated in her response her understanding of the question and the relationships to the printed text they were reading.

After February 7 the students in the Stargirl group wrote eight questions that directly referenced the text they were reading. In response to these questions the students wrote answers that articulated their personal response to the question and in nine responses they directly referenced the events of the book. For example Table 4.26 illustrates the responses to the question “Why do you think that Stargirl left? Tell why.”

<table>
<thead>
<tr>
<th>Iris</th>
<th>1</th>
<th>I think that Stargirl left because Leo and all the other kids like Hilary Kimball and all the other kids at Mica high always made fun of Stargirl. For odd reasons like what she wore and other weird reasons. I think she just had enough of every one at mica high just pushed her to her limit.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td></td>
<td>3</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Lea</td>
<td>5</td>
<td>I think she left because she was a Starperson. Archie said that Stargirl was wisely named Stargirl. I think that she really was a star and that she lived in the sky. I think it was time for her to go home.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td></td>
</tr>
<tr>
<td></td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Tyler</td>
<td>8</td>
<td>I think she left because she found she couldn't fit in with anyone. I think if just one person (Leo) had accepted her for who she was, she would have stayed. She wouldn't have cared what anyone else thought. She would have put up with it all, if Leo had been nicer to her. Bad Leo! (I'm still mad at him and it's been a year since I read the book!)</td>
</tr>
<tr>
<td></td>
<td>9</td>
<td></td>
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<td></td>
<td>10</td>
<td></td>
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<td></td>
<td>11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Grace</td>
<td>13</td>
<td>I think that Stargirl left because she felt that she wasn't needed anymore, like what she said to Leo was...&quot;When Peter gets this in a few years he will really appreciate it. It is probably one of my favorite things to do, make people happy.&quot; So I sort of think that when she came to Mica Area High School she had a reason to cheer everyone up, just like Peter. That reason was maybe she thought that the school students were too gloomy and they need to be cheered up. Then at the Ocotillo Ball, she had completed her &quot;mission.&quot; When <em>everyone</em> joined in on the Bunny Hop, that was her signal.</td>
</tr>
<tr>
<td></td>
<td>14</td>
<td></td>
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<tr>
<td></td>
<td>15</td>
<td></td>
</tr>
<tr>
<td></td>
<td>16</td>
<td></td>
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<td>17</td>
<td></td>
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<td></td>
<td>19</td>
<td></td>
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<td></td>
<td>20</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21</td>
<td></td>
</tr>
</tbody>
</table>

Table 4.26: Examples of responses made that were directly related to the Stargirl text.
The first three responses to this question articulated what the students thought with specific references to the text that supported their opinions. In lines 1 through 4 Iris stated her opinion that Stargirl left because she had been “made fun of” (line 1) and “pushed to her limit” (line 4). Lea utilized in her response a detail from the text in which one of the minor characters “said that Stargirl was wisely named Stargirl” (line 5-6). This element provided evidence to Lea’s opinion regarding her feelings that Stargirl was a star and lived in the sky.

In the final response to this question Grace provided her opinion and directly referenced the text with a quote that she found in the book. Grace opened by stating her opinion (lines 13-14) and then built in her quote writing, “like what she said to Leo was ‘when Peter gets this in a few years he will really appreciate it. It is probably one of my favorite things to do make people happy.’” (lines 14-16). Grace then continued in her responses articulating why she had chosen that quote and why she thought that Stargirl left.

Though the Crash group members wrote questions that indirectly referenced the text, the responses that they wrote on the first board did not directly or indirectly refer to the book. The responses were short and determined by the teacher to be inappropriate. The following transcript illustrates a question and the responses from the first Crash threaded discussion board.

<table>
<thead>
<tr>
<th>Sophia</th>
<th>1</th>
<th>Why does the baby at the front cover have a moustache?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Josh</td>
<td>2</td>
<td>I don’t know.</td>
</tr>
<tr>
<td>Kurt</td>
<td>3</td>
<td>Read the book.</td>
</tr>
<tr>
<td>Josh</td>
<td>4</td>
<td>Have u?</td>
</tr>
<tr>
<td>Kurt</td>
<td>5</td>
<td>No.</td>
</tr>
<tr>
<td>Josh</td>
<td>6</td>
<td>Then don’t be talking.</td>
</tr>
</tbody>
</table>
Though Sophia engaged the conversation with a question that directly referred to the text (line 1), the group members responded off topic to the text. Josh stated in line 2 that he doesn’t know the answer and Kurt wrote that he should “read the book” (line 3). Josh asked Kurt if he has read the book (line 4) and Kurt replied that he has not. Josh then wrote that Kurt should “not be talking” (line 6) and Kurt continued the conversation asking “why” (line 7). Josh wrote the last prompt telling Kurt he should not be telling others to read the book when he has not read it himself. Though the students were writing to each other, they were not writing with a direct or indirect relationship to the book.

On one occasion a student posted an indirect connection to the text as a new thread in the form of a statement rather than a question. Sophia wrote the following post in response to her reading on the Crash on-line threaded discussion board:

*bana ba ba ba i’m loven it. Remember don’t shop Wal-Mart®, shop Target®.*

Sophia’s post was written in connection to the events of the book in which Crash’s sister is protesting the development of a new mall in an animal habitat environment. Sophia opened the post with the current theme music from McDonald’s® and then asked the reader to shop one chain of retail over the others. The other group members did not understand her references. The students only responded to this post with off topic answers. The following lines document their responses to Sophia’s post.
Crash Threaded Discussion

The students misunderstood her purpose, thinking that she was off topic with her response. The students talked with the teacher about the posting, but as the teacher described in an interview,

*Now some other students in the class, when I was talking about this yesterday, thought that that was way off topic, and I had to say, well keep reading the book because you’ll find out it’s not.*

Teacher Interview, January 25, 2006

The teacher directly talked to the students, without directly telling them, that the post is not off topic but has a relationship to the text. However, the students continued to misunderstand the meaning of the response and the connection to the story’s meaning. Later in a group conversation, Josh brought up Sophia’s post asking,

<table>
<thead>
<tr>
<th>Josh</th>
<th>1</th>
<th>When Sophia wrote the bana ba ba ba i’m lovin it – I don’t really see how that fits in.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Sophia</td>
<td>3</td>
<td>Well they are building a new building, and they are protesting it and I was trying to show about how you might protest new buildings like Crash’s sister</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>6</td>
<td>I made that connection</td>
</tr>
</tbody>
</table>

Video Transcription, Crash Group, Conversation February 7

Josh in this conversation renewed his confusion over Sophia’s post in lines 1-2, not being able to make the connection between the board posting and the events of the book. Sophia tried to explain her connection in lines 3 through 5 and the teacher
validated her explanation and the connection to the book stating “I made that connection” (line 6).

The next week when the group met to discuss the book, Josh waited until the end of the conversation to ask his question again. The following conversation ensued:

<table>
<thead>
<tr>
<th>Josh</th>
<th></th>
<th>A while ago I asked this question but I still don’t get it. Sophia posted on the board, bana ba ba ba i’m lovin it and...</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sophia</td>
<td>3</td>
<td>It is JUST an example of protesting. You know how they are protesting against the mall, it is just an example of protesting.</td>
</tr>
<tr>
<td>Josh</td>
<td>5</td>
<td>People protest against McDonalds®? I don’t think people would protest against French fries.</td>
</tr>
</tbody>
</table>

In lines 1 and 2 Josh renewed his confusion over Sophia’s post. Sophia again explained her intent emphasizing that it was “just” in relation to the protesting that Abby was leading (lines 3-4). Josh refused to accept her explanation in lines 5-6. Though the teacher and Sophia had described the connection to the text, the student refused to accept the relationship between Sophia’s post and the events of the book.

After the students had the conversation that included name calling (stupid) and the use of Pig Latin, the teacher determined their work to be inappropriate as it did not relate to the text and stopped the students from any additional posting to the on-line threaded discussion board. The teacher then held a direct face-to-face “intervention” with the students in which he modeled step-by-step the process and nature of the questions and responses that he wanted to see. On the second board that the teacher opened, the Crash students wrote six questions, five of which were in direct connection to the text. From the responses that the students wrote on this second discussion board, six responses were analyzed to have a direct connection to the text. The following conversation illustrates
the direct connections that the students made to the text in answering the question, “Why do you think Abby wants to have a wild habitat in their backyard?”

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Josh</td>
<td>1</td>
<td>I think she wants to have a wild life habitat in her backyard because her mom is building a mall and the animals need a home.</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Kurt</td>
<td>3</td>
<td>because Penn was voting for the mall not 2 be built and Abby listened 2 him and he turned into a nature freak I think</td>
</tr>
<tr>
<td></td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Sophia</td>
<td>5</td>
<td>I think Abby is in love with animals. She is in love with the environment.</td>
</tr>
<tr>
<td></td>
<td>6</td>
<td>For instance when Penn and Jane were protesting the new mall and Abby thought it wasn’t the best idea either. She thought that if you built a new mall that animals would be kicked out of their homes.</td>
</tr>
</tbody>
</table>
text in the face-to-face conversations. These conversations were detailed in the preceding section.

A third connection and conversation that took place in relation to the on-line threaded discussion board took place in the first face-to-face meeting for the Stargirl group. In this session the group members were engaged in a conversation about Stargirl and whether they would describe her as “crazy” or “different.” After much discussion, the students determined that neither word fit her appropriately. When challenged by the teacher to find a better word that described Stargirl, the following conversation ensued:

<table>
<thead>
<tr>
<th>Mr. Springs</th>
<th>1</th>
<th>Okay well what is another word we might use for someone who is different but not crazy?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Alice</td>
<td>2</td>
<td>Unique.</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>4</td>
<td>Okay unique – would that fit her better?</td>
</tr>
<tr>
<td>Olivia</td>
<td>5</td>
<td>Yes.</td>
</tr>
<tr>
<td>Alice</td>
<td>6</td>
<td>Yes.</td>
</tr>
<tr>
<td>Grace</td>
<td>7</td>
<td>You used that word.</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>8</td>
<td>I did? Where did I use that word?</td>
</tr>
<tr>
<td>Grace</td>
<td>9</td>
<td>On the postings.</td>
</tr>
<tr>
<td>Mr. Springs</td>
<td>10</td>
<td>Hmmm . . . what do you know. . . strange (laughs).</td>
</tr>
</tbody>
</table>

In this conversation the teacher challenged them to find a better word to describe the main character (lines 1-2). Alice proposed the word unique and Olivia and Alice agreed (lines 3-6). Grace vocalized her remembrance that Mr. Springs used that word in the postings (lines 7-9). The student recognized and connected the word from the first posting on the on-line threaded discussion in which the teacher asked,
Think about what makes you unique. We know everybody has different names, fingerprints, family, etc. What else makes you uniquely you? Tell us about what makes you special.

Stargirl Threaded Discussion

The teacher’s question posted on the threaded discussion board did not directly relate to the topic of conversation they were having in the face-to-face session. However, one of the students connected her reading from the threaded discussion board and applied it to the context of the face-to-face conversation that was taking place.

Summary

The students in this classroom responded to the text they were reading in multiple contexts. In the face-to-face context they responded to the teacher and the questions that he posed to them. They also made three connections in the face-to-face context to the on-line threaded discussions that they were reading and writing. However, the students’ written responses in the on-line environment did not indicate any direct or indirect connection to the face-to-face conversations that they had as a group.

Summary

This chapter articulated the data analysis and consequential findings for this study. The first research question focused on examining the ways in which the teacher facilitated the students’ responses to texts in the two environments. Data analysis focused upon this question revealed that the teacher utilized roles flexibly in response to the needs of the two different groups and in response to the environment in which the
students and teacher were responding. In the group discussion environment the teacher asked the majority of questions, posing 96% of the questions. The teacher asked predominantly probing and engaging questions when working with the students in the face-to-face group discussion environment. However, in the on-line threaded discussion environment, the teacher asked only 3% of the questions that were posed.

In both environments, the teacher changed the nature of the questions posed based upon the individual needs of the two groups. When talking with the Crash group, the teacher utilized probing, engaging and managing questions to encourage the students’ responses and to manage the group’s conversation. When meeting with the Stargirl group, the teacher used engaging, probing, and extending questions. The teacher frequently engaged in patterns of discussion in the group conversation environment in which he initiated the conversation and the students responded to his initiation. However, notably absent in these conversations was the use of evaluative statements.

The second research question analyzed how the students responded to texts and each other in the group and on-line threaded discussion environments, as well as in the physical computer environment and across the contexts. A notable finding included the students’ ownership of the questions and answers in the on-line discussion space. In this environment they led the conversation, posing questions and responding to each other without teacher intervention. Students posted over 96% of the questions in the on-line threaded discussion environment, the majority of which were engaging and extending questions that nurtured the conversation. All of the students individually participated in both environments. However, the data illustrated that some students enjoyed the threaded discussion environment more than other students. All students engaged at turns at talk in
both environments, though the students only took significant responsibility for posing questions in the on-line environment.

Although it was anticipated that the students would physically talk with each other at the computers while composing their on-line threaded discussion responses, little talk took place in this environment. Students articulated their perceived understandings that they were not to talk at the computers though the teacher fostered a constructivist classroom environment in which students were encouraged to talk and work together. Connections across contexts were identified between the students’ verbal conversations, the text, and their written conversations in the on-line environment. In chapter 5 these findings will be discussed including potential implications and suggestions for learning and teaching contexts.
CHAPTER 5

DISCUSSION AND RECOMMENDATIONS

This chapter consists of three sections. In the first section, a summary of the research study and the significant findings are presented. In the second section, I discuss the major findings and implications that emerged from the data analysis process. The last section discusses the limitations of this study and the possibilities for further research.

Introduction

The summary of findings presented in this chapter is the result of a qualitative study located in a fifth-grade classroom in which the students’ responses to literature were observed in both face-to-face group conversations and in an on-line threaded discussion environment. The study took place in a classroom in which the teacher and students utilized technology for authentic purposes and in an environment that incorporated the authentic reading of literature. The classroom teacher had 15 years of teaching experience and proficiently integrated authentic uses of technology and literature into the curriculum. Two groups of students (for a total of 10 students) provided the focus of the study as they were observed in both the on-line and face-to-face reading group environments.
This research study focused on two research questions. They were as follows:

1. In what ways does the teacher facilitate student responses:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?

2. How do the students respond to texts and to each other:
   a. In the group environment discussions of books?
   b. In the on-line environment discussions of books?
   c. In the physical computer environment?
   d. Across the multiple contexts?

Data collection took place over a 6-week period of time in which the students were engaged in reading a book written by Jerry Spinelli. One group of students read *Crash* (1996) and the other group read *Stargirl* (2000). The students’ responses were gathered through the use of videotaping and audiotaping and were transcribed by the researcher. In addition, field notes and interviews were collected and transcribed by the researcher. Other data included the collection of documents created by the teacher and students; in particular the written responses of the students on the on-line threaded discussion board.

The first research question focused on examining the ways in which the teacher facilitated the students’ responses to texts in the two environments. Data analysis focused upon this question revealed that the teacher utilized roles flexibly in response to the needs of the two different groups and in response to the environment in which the students and teacher were responding. In the group discussion environment the teacher
asked the majority of questions, posing 96% of the questions. The teacher asked predominantly probing and engaging questions when working with the students in the face-to-face group discussion environment. However, in the on-line threaded discussion environment, the teacher asked only 3% of the questions that were posed.

In both environments, the teacher changed the nature of the questions posed based upon the individual needs of the two groups. When talking with the Crash group, the teacher utilized probing, engaging and managing questions to encourage the students’ responses and to manage the group’s conversation. When meeting with the Stargirl group, the teacher used engaging, probing, and extending questions. The teacher frequently engaged in patterns of discussion in the group conversation environment in which he initiated the conversation and the students responded to his initiation. However, notably absent in these conversations was the use of evaluative statements.

The second research question analyzed how the students responded to texts and each other in the group and on-line threaded discussion environments, as well as in the physical computer environment and across the contexts. A notable finding included the students’ ownership of the questions and answers in the on-line discussion space. In this environment they led the conversation, posing questions and responding to each other without teacher intervention. Students posted over 96% of the questions in the on-line threaded discussion environment, the majority of which were engaging and extending questions that nurtured the conversation. All of the students individually participated in both environments. However, the data illustrated that some students enjoyed the threaded discussion environment more than other students. All students engaged at turns at talk in
both environments, though the students only took significant responsibility for posing questions in the on-line environment.

Although it was anticipated that the students would physically talk with each other at the computers while composing their on-line threaded discussion responses, little talk took place in this environment. Students articulated their perceived understandings that they were not to talk at the computers though the teacher fostered a constructivist classroom environment in which students were encouraged to talk and work together. Connections across contexts were identified between the students’ verbal conversations, the text, and their written conversations in the on-line environment.

This study, focusing on two groups of students in the two contexts of face-to-face interaction and technology-based interaction, provided for several important findings to emerge that are significant and contribute to the literature. First, the flexibility of the teacher’s presence was critical in the success of the different environments as the teacher adjusted his style and his contribution across the contexts as needed. These teaching adjustments scaffolded the students’ learning according to the need of the group and the environment in which they were working. Second, the teacher’s alternative use of the IRE sequence nurtured student conversations without evaluating their responses. Third, the on-line threaded discussion environment created a Thirdspace for students to write and respond with each other. This space empowered the students to take ownership of the response process. Fourth, the on-line threaded discussion board provided more than “just another writing tool” or another “technology toy.” Instead, it provided the opportunity for the students to read, write, and respond to each other in a way that supported their understandings and allocated a place for them to create an enriched text of
their responses and understandings. These four themes are each fully discussed in the following section.

Discussion of the Findings

The Important Presence of the Teacher Across Contexts

Through examining the teacher’s presence in the two contexts I found that the teacher adjusted his style and his contributions based upon the context and the needs of the group. These teaching adjustments scaffolded the students’ learning according to the need of the group and the environment in which they were working. In this manner the teacher could provide more or less support as the group needed.

This finding confirms previous research that emphasizes the important role a teacher plays in nurturing student response (Almasi, 1995, 1996; Alvermann, Dillon, & O’Brien, 1987; Gavelek & Raphael, 1996). It also further illustrates the work of Vygotsky (1986) as the teacher scaffolded student understanding and provided instruction within their zone of proximal development.

The face-to-face environment.

For example, in the face-to-face discussion environment, Tyler adapted his presence based upon the needs of the group discussion. In the Stargirl group the students were highly engaged in the book and in talking with each other. As the teacher and the students described, the group worked well together and required less intervention from the teacher. Though the teacher did ask the majority of the questions in this context, the students owned the conversation and provided the content of the discussion. As the teacher stated, “they can get their own conversation going and oftentimes in discussions with Stargirl I do as much responding to them I think as they do to me” (Teacher
Interview, February 21, 2006). This finding is in accordance to Almasi’s work (1995) that illustrated the importance of conversations that incorporated more peer discussion but that also benefited from the teacher’s participation that supported a higher level discussion.

In the Crash group discussions, the teacher had to take a more direct leadership style to support the students’ needs. The students were often not as engaged in talking with each other and only replied with plot retellings to the teacher’s engaging questions. The teacher often began with open ended statements such as “Tell me something that is interesting you in your reading,” opening the conversation to the students and trying to only guide and participate in the conversation. Spradley (1979) referred to this type of question that the teacher utilized as a “grand tour” question. This type of question opens the conversation broadly without any preconceived direction from the teacher (Hanssen, 1998; Peterson & Eeds, 1990). This broadly opened beginning was consistent with the manner in which he began the Stargirl conversations. However, the students in the Crash group would frequently resist engaging in rich conversations, and the teacher would adjust his style to provide more leadership and direction for this group. Again, these findings support Vygotsky’s (1978) work in which the teacher adapted to support the group members within their zone of proximal development.

These findings significantly contribute to the literature as they illustrate the constantly fluctuating presence that the teacher provided when nurturing the responses of students. In this study, the teacher illustrated how to adjust the layers of support according to the needs of the students. These changing levels of support provided an
opportunity for the students to learn within their zone of proximal development (Vygotsky, 1978).

The on-line environment.

In the on-line threaded discussion conversations, the teacher provided each group during class the same introduction and modeling before they began posting. This direct modeling provided everyone a common context for the operational procedures of the threaded discussion board and the teacher’s expectations for appropriate use. This process followed the recommendation of Maloch (2004) who encourages teachers to provide experiences and instruction prior to implementing literature discussion groups. The teacher then expected the students to read and respond to each other independently in this environment. In an interview, the teacher stated, “On the discussion board I pushed them to be independent from the very beginning” (Teacher Interview, March 2, 2006).

Though the teacher encouraged this independence from the very beginning for both groups, chapter 4 details the problems that the Crash group faced in posting questions and responses that were of a “chat room nature” and determined inappropriate by the teacher and the students alike. In response to these struggles, the teacher stopped the Crash board, and provided intervention in the form of direct leadership and modeling with the Crash group. He had them restart their entire discussion board and provided more direct supervision on the board. He again adjusted his style according to this group’s needs.

These findings add to the literature and can support teachers who are considering utilizing a threaded discussion board for book discussions. The findings from this study are consistent with the Althaus (1997) study which found that teachers take a less
dominate role in a computer mediated environment. The teacher in this study contributed only an average of 10% of the posts on the boards. This was in direct contrast to the significantly higher turns of talk that the teacher spoke in the face-to-face space. This quieter presence in the on-line threaded discussion environment provided the students an opportunity to lead the discussion and hold responsibility for the conversation without expecting or needing intervention from the teacher. This further illustrates for teachers the flexible role that teachers must take when utilizing different spaces, such as face-to-face and on-line environments, based upon the needs of the individual students and the group dynamics.

*Providing scaffolding across contexts.*

As Freedman (1993) has written, “the teacher’s talk is an essential element in fostering learning in the classroom community. Children do indeed take their learning cues from the adults around them” (p. 222). The teacher, in this study, provided that essential teacher talk through the contexts in ways that adjusted according to the students’ needs. As Freedman (1993) writes, we “need people around us who can guide us, who will listen to us and point us in the right direction” (pp. 222-223). Tyler provided these roles flexibly and according to the need in each context and each group of participants.

This study illustrates Tyler’s role as what Barnes (1992) refers to as an Interpretation teacher. Barnes describes the Interpretation teacher as:

The Interpretation teacher 1) believes knowledge to exist in the knower’s ability to organize thought and action, 2) values the learner’s commitment to interpreting reality, so that criteria arise as much from the learner as from the teacher, 3) perceives the teacher’s task to be the setting up of a
dialogue in which the learner can reshape his knowledge through interaction with others, 4) perceives the learner as already possessing systematic and relevant knowledge and the means of reshaping that knowledge. (p. 144)

Through his flexible roles, Tyler illustrated his belief in the students’ ability to organize their thoughts and actions, he encouraged their interpretations, and he continually provided contexts (both face-to-face and in the on-line threaded discussion) for the students to shape their knowledge together. Tyler knew that he needed to value student interpretations and to provide opportunities for students to share their emerging understandings with each other in reflexive and supportive environments (Brevig, 2006; Dugan, 1997; Evans, 2002; Peterson & Eeds, 1990; Rosenblatt, 1982). Students benefit from having some freedom to engage and explore their own topics of conversation but, “they also profit from teacher guidance. . . Teachers thus play a significant role in guiding students toward higher level discussions as they engage in modeling behavior, providing frameworks for approaching texts, and posing interpretive questions” (Gambrell, 1996, p. 34).

Peterson and Eeds (1990) also articulate the importance of the role of teacher in providing flexible participation in the reader-response process stating, “children learn to make meaning from texts by practicing this action alongside makers of meaning who are more experienced than they are” (p. 18). Tyler provided this experience and created the successful environment that the students needed throughout the varying contexts and group dynamics (Gavelek & Raphael, 1996).
The findings from this study reinforce previous studies and contribute to the body of research that articulates the important role of the teacher in nurturing conversations (Almasi, 1996; Gambrell, 1996; Langer 1990a; Lehman & Scharer, 1996; Peterson & Eeds, 1990; Scharer & Peters, 1996) regardless of the two different contexts (face-to-face and on-line) in which it takes place. Tyler kept a presence, both physically and virtually, in both environments but adjusted his participation based upon the needs of the students. In this way, Tyler further illustrates Vygotsky’s (1978) work regarding teachers supporting students in their zone of proximal development, giving support and independence as needed. By scaffolding the students, Tyler responded to the students as their needs emerged (Maloch, 2004; Williams & Murphy, 2002).

Though much of the research documents the importance of students having the opportunity to discuss and explore their responses to literature (Almasi, 1996; Alvermann, 1999; Cazden, 2001; Gambrell, 1996), and the importance of the teacher in nurturing those conversations (Galda & Beach, 2001; Gavelek & Raphael, 1996; Wells, 1999), little research has been conducted that illustrates the role of the teacher in an on-line environment and the ways in which he or she can provide support in this technological environment for students as they articulate and build common understandings together. This study provides an important contribution to the literature and a model for teachers who desire to incorporate technology tools in facilitating reader response and to understanding the roles they may play in this environment.

These findings have important implications for teachers as they prepare to implement literature discussion groups or as they reflect upon their presence in book discussions. I found that the teacher must navigate a careful presence when participating
in student literature discussions regardless of their context. Almasi (1995) details the importance of peer-led discussions that provide students the opportunity for leading their own conversations and to freely share their responses to texts without the intervention of teachers. However, Gavelek and Raphael (1996) advocate for teacher leadership in student discussions to enhance and scaffold the students’ conversations.

Data analysis illustrated a teacher who created a careful balance between these two positions. In the face-to-face context the teacher invited the students to open the conversation with questions they had or topics of interest they wanted to discuss (Hanssen, 1998; Peterson & Eeds, 1990; Spradley, 1979). Then depending upon the particular needs of the students in each context the teacher adjusted his level of participation and support based upon the needs of the students.

*Modifying the Initiate, Respond, Evaluate (IRE) pattern.*

The teacher utilized a modified version of the Initiate, Respond, Evaluate pattern commonly used in teacher led conversations. Previous research from Cazden (2001), Mehan (1979), and Newkirk and McLure (1992) has illustrated teachers commonly initiating the topics of conversations. Students in this pattern try to respond with the answer desired by the teacher, and the teacher then provides an evaluative statement indicating whether or not the student responded with the ‘correct’ answer. In this study, however, the teacher often asked the students to initiate the conversation and then asked additional questions after their response rather than providing an evaluative statement. The absent evaluative statements to the IRE pattern encouraged the students to respond with their own voice in the discussion and minimized the interpretive authority of the teacher. This study makes a significant contribution to the literature by illustrating a
modified IRE pattern used by the teacher throughout the face-to-face conversations that nurtured rather than marginalized student response.

Teachers who are interested in utilizing multiple contexts for nurturing student response can use this study as one model. Few studies have been conducted that examine middle school teachers incorporating both a face-to-face and on-line space for students to articulate their responses to their sharing literature readings. The model provided in this study illustrates the ways in which such multiple spaces can be created and the manner in which the teacher can fluctuate his or her presence to support student learning and response in these multiple spaces.

**Student Involvement Across Contexts**

The data illustrate that the students were engaged in the reader response process differently across the contexts and across the two groups. While in the face-to-face group conversations, the teacher posed the questions and the students responded to those questions. However, in the on-line environment, the student-generated questions led this virtual conversation and encouraged responses from their group members. Across the two groups, the *Stargirl* group was observed to easily and eagerly engage in responding the text they were reading, while the *Crash* group was often unprepared and less eager to discuss their reading.

*Using multiple spaces.*

The findings from this study align with other studies that document how the conventions of school often directly impact the nature of students’ responses (Marshall, 2000). Students who are familiar with school culture may respond in ways that they know meet the expectations for the rules and regulations that form the procedures of the
school culture (Almasi, 1995; Bloome & Green, 1992; Bloome, Puro, & Theodorou, 1989). Though the Stargirl group members were more engaged in their face-to-face conversations than the Crash members, both groups accepted the teacher’s role in creating the questions. Though the teacher began the conversations asking the students what they wanted to discuss, the conversation quickly fell into a pattern in which the teacher initiated and led the conversation with teacher-generated questions to which the students responded. This finding supports the work of Alvermann, Dillon, and O’Brien (1987) in which they found that when teachers take on too much leadership, the students relinquish their responsibility for taking an active role and expect the teacher to lead the discussion.

In contrast, however, in the on-line threaded discussion environment the students seized ownership of the discussion. They composed and posted the questions and responded to each other throughout the study. Though the Crash group had difficulty writing “appropriately” according to the expectations of the teacher, they did engage in writing and responding to each other in their own style of ownership.

This finding may be a result of the new space or “Thirdspace” (Lefebvre, 1991; Soja, 1996) that was created outside of the traditional school structure. In the traditional school “space” of the face-to-face environment, the students were accustomed and expecting the teacher’s leadership. Previous years of experience indoctrinated the students in the procedural knowledge that teachers ask and students answer questions. The traditional question and response pattern between teacher and students dominated the face-to-face context in which the teacher and students discussed their responses to the text.
In this classroom, the Thirdspace between the on-line environment and the face-to-face environment created an opportunity for the students to respond. This finding aligns with what Sheehy (2004) refers to as spatial practice. Spatial practice incorporates the creation of relationship “between people, people and things, and people and practice” (p. 95). The students wrote and responded to each other in the space that developed outside of the traditional school setting. Through the social production of their writing they responded to the text and to each other. This space was also influenced by the purposeful, limited involvement of the teacher, which provided the opportunity for the students to lead the conversation by generating questions and responses to each other. The non-traditional classroom setting created through the socially constructed “Thirdspace” provided an untraditional school context for students to respond and learn with each other. This finding builds on Soja’s (2004) premise that space is made and remade through the people, thoughts, materials and other particulars that are present at a particular given time. The students in this experience created their own space through the participants’ thoughts and responses as they wrote and responded to the text and each other (Kress & Van Leeuwen, 2001).

*Changing ownership.*

As discussed in chapter 2, Almasi (1996) writes that students take upon new roles when provided the opportunity to respond and participate in discussions. These roles include those of “inquisitor, facilitator, and evaluator, as well as the more familiar role of respondent” (p. 7). As evidenced in the data from this study, the students in both groups engaged in these roles when given the authority in the on-line threaded discussion environment. The students easily engaged in the familiar role of responder as they read
and reacted in writing to each other’s posts. In addition, they held the role of inquisitor when they asked questions that supported their interpretations and understandings of the text. The students also took on the role of facilitator when they asked for clarification of their writings and prompted each other to provide more details. Finally, they took the role of evaluator when they notified each other of grammatical and spelling mistakes. They also refused at one point in the study to answer a question posted by a group member that was answered in the book. Instead, they informed the owner of the question that she needed to read the text to find the appropriate answer.

These findings articulate the students’ ownership of their responses to the literature. Individually and together as a group, though in varying degrees, they engaged in an active role in the meaning making process (Almasi, 1996). Though the teacher held the predominante responsibility for asking the questions when together in group conversations, the students articulated their understandings of the text in both environments. The teacher, as described earlier, “pushed” them to be independent online and in most situations the students accepted that independence seriously, creating meaningful responses to their reading and to each other in an authoritative way (Peterson & Eeds, 1990). In this environment, students can excel when provided the support that is within their zone of proximal development (Vygotsky, 1978). The students, through the scaffolding support of the teacher, responded individually and collectively and according to their abilities.

Through the reader response process the students shared in the responsibility for understanding, articulating their own voice and deepening their own understandings (Cox, 1997). Cazden (2001) writes that by talking through the computer (utilizing e-mail
and threaded discussion boards for example) students provided longer, deeper answers to questions, the teacher becomes almost absent in the discussion, and the students receive more feedback from their peers. The findings from this study support Cazden’s work. The students predominately articulated thoughtful responses to the questions they themselves wrote through the on-line discussion board. With the exception of the trouble the Crash group had in the beginning, they wrote responses that either directly or indirectly discussed and enhanced their understandings of the text. The teacher provided them the opportunity to hold those conversations independently and took a strikingly smaller presence in this technological environment. Finally, the students provided feedback to each other both through the computer in the responses that they wrote to each other and verbally when they had a question or a concern regarding what was posted. These findings support and further Cazden’s (2001) descriptions of how students can talk together while working at computers and how students can talk through computer mediated communication devices to share their responses to texts.

Though the students took substantial ownership of the question and response process in the on-line environment, the data documented that they did not position themselves as the creator of the questions in the group discussion environment. The teacher in this environment took the primary responsibility for posing the questions and the students were not observed to challenge that authority. This finding contributes to the research that articulates that students learn to depend upon the teacher for the information and for leadership and in this context tend to respond with procedural knowledge (Alvermann, Dillon, & O’Brien, 1987; Freedman, 1993; Maloch, 2002). To change this
perception, the teacher frequently must “re-teach” the students not to depend upon the teacher’s leadership in the discussion environment.

As Alvermann et al. (1987) articulate “one of the simplest things teachers can do to limit the amount of teacher talk during a discussion is to stop asking questions” (p. 11). Though the teacher did not stop asking questions in the group discussion environment during the time of this study, this opportunity may have opened up a space for the students to step up and pose questions, similar to the way in which they posed questions in the on-line threaded discussion environment. This study illustrates for others the often automatic nature of teachers to take the leadership in asking questions and the importance of trying to change this inclination to provide students this leadership opportunity.

Encouraging collaboration.

It is also important to note that though I had hoped to document the ways in which the students co-constructed their responses together, there was no evidence of this process taking place during the time of the data collection. The teacher encouraged them (on multiple occasions as detailed in chapter 4) to respond to each other in a conversational style when responding through the on-line threaded discussion board. However, the students struggled to move beyond posting questions and directly answering the questions. This has important implications for teachers who are interested in creating a similar structure in their reader response process or who are interested in utilizing technology to enrich students’ co-construction of understandings. It may be necessary for more direct instruction and teacher support to be integrated into the process to scaffold students in working together and to break traditional boundaries that working together is not permitted. Future research should be conducted to examine whether the
lack of collaboration between the students was a result of the age level, particular group of students, or other factors.

Technology’s Contribution to the Reader Response Process

This study illustrated that the use of the on-line threaded discussion board can provide a different space for the students to pose questions and respond to texts together. Many classrooms hold powerful and meaningful face-to-face discussions in which students respond to the literature they are reading, scaffolding and supporting their individual and group understandings. However, this study examined and contributed findings relative to an additional element, the on-line threaded discussion board, for nurturing and supporting students’ reader responses. This environment provided an additional context in which the students could read, write, and respond to each other. As Flood and Lapp (1997) advocate, we need to incorporate the communicative arts, including computer technology, into our ideas of reader response. Standards from the National Council of Teachers of English (NCTE) and from the International Reading Association (IRA) document the importance of utilizing technology in the language arts. State standards are now also incorporating the utilization of technology throughout the curriculum. However, few studies exist that examine and report ways in which computer technology is being utilized and integrated into the reader response process. This study makes a significant contribution to the literature by exploring one such way technology was utilized to facilitate reader response in a middle school classroom.
Multiple perspectives regarding working on-line.

As described in chapter 4, the students all willingly participated in reading and writing responses to each other. However the levels of participation varied as some students enjoyed participating more than others. Previous research such as that of Larson and Keiper (2002), has advocated for the use of the on-line environment as (1) it provides time for students to respond, (2) it supports students who are shy to respond without the pressure of the group environment, and (3) it gives all students the opportunity to respond.

However, contradictory to this research from Larson and Keiper (2002), several of the students in this study did not find these factors to be advantageous in their use of the on-line environment. Rather than feeling the on-line environment provided ample time, several of the participants felt pressure to complete the writings in order to move on to other work that was required. Though Larson and Keiper write that the on-line board relieves the pressure of responding in the group environment, several mentioned hesitation at publishing writings that potentially the “whole world” could see. They instead felt more comfortable responding to the texts in their small group face-to-face environment located within the walls of their familiar classroom. While Larson and Keiper write that everyone can respond in the on-line environment (rather than being limited to the amount of time in a face-to-face session) not all students chose to respond in writing every time. Others stated that they felt more comfortable talking rather than trying to put their responses in writing.

The utilization of on-line threaded discussions and computer-mediated communication services are continuing to grow. It is important for those using these
environments to be aware of the advantages and disadvantages that are associated with threaded discussions and computer-mediated communication services. Though some studies (Harasim, 1990; Larson & Keiper, 2002) advocate the advantages of these technology environments, this study illustrates that not all students agree that the factors inherent to a threaded discussion or computer-mediated environment are advantageous.

From a contrasting perspective, other students articulated their appreciation for the on-line threaded discussion board. These students described their enjoyment in posting a question and had great interest in seeing what others wrote back. Some of the students enjoyed writing from home and school and appreciated having a place to articulate their thoughts immediately rather than having to wait until the next time their group met together in a face-to-face environment to discuss the book. All of the students responded positively when asked if they would recommend using a threaded discussion board in other fifth grade classrooms.

It is important for teachers to remember the individuality of students’ interest for working in a computer-mediated environment and that each individual participates differently in this space depending on his or her level of motivation and interest. This individuality was clearly illustrated through these 10 participating students as many articulated different advantages and disadvantages to participating on the threaded discussion board. However, all of the students responded positively to enjoying the time in which they talked together in the group context. This study contributes to the research illustrating that different students perceive the on-line environment differently (Beeghly, 2005; Harasim, 1990; Larson, 2002; Staarman, 2003). Further research is necessary to explore these differences and the resulting learning and teaching implications.
It is also important to note that the students shared in interviews their perception that discussing the text in the on-line environment was an opportunity, and not an assignment. Though the teacher provided computer time each day for the students to read and respond with each other, he never assigned a number of posts that the students needed to write or an amount of time they needed to spend engaged responding on the board. The teacher articulated his desire for the students to spend whatever time they wanted reading and writing in this space. The students were observed to be motivated to use this space for responding with each other. However, in the last 2 weeks of the data collection the students dramatically reduced the time they spent on-line reading the posts and responding to each other. This may have been a result of many factors. First, the teacher had assigned a culminating project that required a great deal of the students’ language arts time, and as a consequence they had a reduced amount of time for computer work. In addition, the students may have become tired of reading and responding in this environment. Future research should be conducted to examine the interest and engagement of students in this environment over time.

This study confirms the work of Althaus (1997), Cazden (2001), Larson and Keiper (2002), and Warschauer (1999) illustrating that the electronic format can reduce the teacher’s authoritative presence and opens the possibility for students to employ leadership during the discussion that ensues. In this study, the students in their on-line environment (with some intervention for the one group) developed their own conversations independent of the teacher’s involvement. They took the authority for the creation of questions and for responding to each other’s questions. This is an important
finding for teachers who seek to encourage their students to engage in peer-led discussions and reduce their own presence in literature discussions.

This study sought to contribute to a growing body of research that has illustrated that a computer-mediated environment can strengthen a face-to-face community such as a classroom (Bakardjieva & Feenberg, 2002; Beeghly, 2005; Patterson, 2006) and provide for the opportunity of conversations at the computer to scaffold the participants’ responses (Staarman, 2003). However, as limited face-to-face conversations occurred at the computers during this study, these findings were not illustrated. Further research should continue to examine whether face-to-face conversations are strengthened by the use of computer-mediated environments such as the threaded discussion board.

Though there are those who do not advocate the utilization of technology in classrooms (Postman, 1992), Reinking (1997) writes:

> Reading and writing electronically add entirely new dimensions to literate activity and we should bother because we recognize the need to initiate children systematically into the emerging world of digital communication with some sense of anticipation about what the world might be like as they move toward adulthood. (p. 639)

*Creating new spaces.*

This study illustrated that the use of the technological-based threaded discussion board made an additional environment or Thirdspace available in which the students could individually construct their personal responses to the text they were reading. These findings are consistent with the work of Beeghly (2005), Larson (2002), McKeon (1999),
and Staarman (2003) who also illustrated the positive impact of an additional technology based environment in the reader response process.

This study indicates, however, that the students did not consistently make connections across the different spaces. Though the students did make three connections in the face-to-face environment to the on-line environment, the students did not make any connections in the on-line space to the face-to-face space. None of the topics that the students initiated and responded to in the on-line environment was directly discussed in the face-to-face environment. Future research should replicate and examine if this finding is consistent in additional studies. Teachers who consider using multiple spaces for nurturing reader response should be aware of this finding and consider the option of supporting students in making connections through the discussions across contexts.

*Implications for Teaching and Learning*

This study indicates that incorporating technology into the reader response process can have benefits for students and teachers. Using both contexts provides teachers with an additional space to gain insight into students’ thoughts and responses complementary to the traditional group conversation format. Creating a “Thirdspace” outside of the traditional school spaces with a limited teacher presence creates an opportunity for students’ to have leadership in the reader response process. Though some students may resist writing their responses, others may flourish in the on-line threaded discussion environment in which they can think and respond without the pressure of being ‘on the spot’ in front of their peers or in a limited amount of time. The board also provides an environment in which everyone is given an opportunity to respond as much as they choose.
With these advantages and possibilities in mind, the findings of this study highlight some suggestions for those who choose to implement an on-line threaded discussion board in their classroom and curriculum. The implications and recommendations are for anyone such as classroom teachers, administrators, and pre-service educators who might want to implement an on-line threaded discussion into their teaching and learning environment to nurture the responses of readings to common texts. Though each of these situations may require adjustments for the context, many of the findings from this study are relevant for multiple parties.

_Implications regarding the teacher._

The teacher in this study provided direct instruction and modeling regarding the technological process of using the threaded discussion board for the students before anyone began. This descriptive instruction provided the technical knowledge for the students that they needed to read and respond on the threaded discussion board independently without intervention from the teacher. The teacher had also worked to foster a community in which the students assisted each other when in need of help. The few technological based problems that did develop for individual students were easily answered by students that sat near them.

This is highly relevant for those who are interested in integrating an on-line threaded discussion board. Because Tyler spent the time in the beginning to build a strong foundational understanding of how the technology elements worked, he had few technology problems to deal with throughout the time the threaded discussion board was used. Tyler also spent several class periods modeling for the students his expectations for appropriate, on-task responses to the book. He encouraged them through his modeling...
and direct instruction to have conversations in the on-line space similar to the conversations they had in the face-to-face space. This finding follows the writing of Maloch (2004) who emphasizes the important role that teachers play in preparing students prior to the implementation of literature discussion groups. However, this study contributes to the research in a new way, as Tyler not only prepared his students for how to participate in literature discussion groups, but also demonstrated how to use the specific technology provided to them. This study contributes one model for others to use in building the foundation for using the threaded discussion board and how to work with students when they have difficulty.

It is also important for teachers to note that Tyler carefully negotiated the amount of time the students needed on the computers each day. The classroom schedule provided 30 minutes of time for each student to have access to a computer and to read and respond as desired on the threaded discussion board. If a student finished early and did not need the entire 30 minutes he or she was encouraged to move to other work. If a student desired additional time, this was also accommodated. Tyler provided this schedule to provide students the time they wanted for writing and responding, but kept it flexible so that students did not go “off task” after they were finished. These findings can support others who look for a model structure that they can adjust and implement as they create their own possibilities in their individual teaching and learning situations. Little research exists that documents middle school students using an on-line threaded discussion board to enhance their classroom readings. The research provided here can provide an example for others to use.
Little research exists that examines the presence a teacher should take when participating in an on-line environment with students. Staarman (2003), Wolsey (2004), Williams and Murphy (2002), and McKeon (1999) all examine the impact of computer-mediated communications in classrooms, but none specifically look at the role that the teacher played in the process. Beeghly (2005) reports briefly her participation in working with graduate students as they participate together in a threaded discussion experience responding to a common piece of literature that the class read. In her study she describes her work in setting the foundation for her students in how to use the technologies. Beeghly also describes the frequency and purpose for her few interactions on the threaded discussion board. Both posts that she made were in response to a direct request from the students for her to contribute her thoughts to the conversation.

I found that Tyler also limited his participation through the on-line threaded discussion board, providing the appropriate scaffolding that each group and situation needed (Vygotsky, 1978; Rogoff, 1990). In this context, Tyler’s presence became almost absent at times allowing the students’ voices to lead (Cazden, 2001). Through the few questions and responses that Tyler did post, he provided a model for the students to use in the creation of their own questions and responses. He also clearly illustrated his interest in reading what they were writing. However, Tyler was careful to not overstep his authority, providing responses to some of the questions posted but not overwhelming the threaded discussion with the authority of his “teacher voice” (McMahon, 1996; Peterson & Eeds, 1990; Raban, 2001).

Examining the ways in which the teacher guided the students’ responses in both the on-line and face-to-face group contexts as this study did provides an important model
for teachers and researchers interested in the utilization of technology in the reader response process. Others who are looking to develop a similar environment can utilize the example described here in making their own personal choices regarding how they might scaffold student understanding throughout their involvement in both contexts.

Implications regarding the classroom environment.

This study illustrated a classroom environment that the teacher purposefully created to encourage the students to talk together to nurture and enhance their responses and understandings. Tyler physically placed the computers next to each other for two purposes. First and foremost, Tyler wanted to encourage the students to talk with each other so that the students could work together collaboratively, supporting each other’s thoughts as they wrote. Tyler also encouraged the students to help each other when they needed technical assistance. This constructivist environment provided the students the opportunity to talk and support each other as they worked. This finding is important for those interested in replicating such an environment and who want to encourage students to talk and co-construct their responses.

However, the students did not take advantage of talking with each other and collaboratively co-constructing their responses. Instead they held the perception that they were not to talk about their responses with each other and instead kept them secret until they were posted. Previous school experiences in which the students were not permitted to talk together when working at the computers may have influenced their choices and perceptions of the teacher’s expectations. Teachers who would like to nurture the sharing and co-construction of student responses should be aware of this finding and consider its implication for their own teaching. Additional direct instruction and modeling may be
necessary to encourage students to talk and work together when physically seated at the computers.

Implications regarding students.

Few studies currently exist that illustrate the ways in which students work collaboratively together at the computers. Tyler’s students did not verbally talk with each other as much as anticipated, nor did they discuss their thoughts about the text before they wrote and posted their responses. They did converse socially and help each other when they had a technical question. As detailed in chapter 4, the Crash group required intervention when they began to post inappropriately on the board. Though the majority of inappropriate posts came from one student in this group, all of the students in both groups commented on the problem in their conversations with me. The problem appeared to impact them significantly, and may have contributed to their articulated feelings that they were not supposed to talk and work together while at the computers.

This unexpected development in the study is significant for others who look to utilize the on-line threaded discussion board to nurture reader response and to encourage students to work collaboratively. Staarman (2003) illustrated in her work the power of students working together in pairs to write their responses on the computer. Staarman’s study found that “the children who worked in dyads contributed more to the computer-mediated discussion and their contributions were of a more collaborative nature than the contributions from children working individually” (p. 79). This study, however, did not replicate those findings. A line of research is necessary to examine which environments contribute most efficiently to the development of students collaboratively working together to co-construct their understandings.
As Beach and Anson (2004) write, “in writing and responding to each other, students are creating social relationships through their writing” (p. 252). These social relationships that develop in the on-line threaded discussion environment hold a great deal of promise in supporting and scaffolding students’ understandings of their readings and of each other’s thoughts. This section’s description of the implications for teaching and learning can support classroom teachers, preservice educators, policy leaders, and others as they create a similar environment or look to support others as they create a similar environment that nurtures and facilitates students’ responses to their readings.

Limitations of the Study

This study examined the development of students’ responses to literature through two different contexts, that of an on-line threaded discussion board and through the face-to-face group discussions that took place in the classroom. The study also examined the ways in which the teacher facilitated the development of student responses. Although every effort was made to design and implement a strong qualitative study, limitations remain unavoidable.

The classroom in this study was selected on purpose (Patton, 1990) for several reasons. First, I had a prior relationship with the teacher having worked with him previously. As I knew the teacher and his constructivist-based classroom, I purposively selected him for this research study as he had a rich background in utilizing technology in his classroom and in integrating literature discussion groups in his curriculum. In addition, the teacher had been using an on-line threaded discussion board for students to express their responses to reading for over a year. As a result, this classroom and the
classroom teacher provided the critical elements that I was looking to study. However, the experience of the teacher and the constructivist environment provided a specific context in which this study took place. This study did not examine the process in additional environments.

This study kept a focus on two groups of students encompassing a total of 10 students. All of the students were from one fifth grade class. The students consisted of 8 girls and 2 boys. One of the two groups consisted of all girls with the other group being made up of 2 boys and 1 girl. The 10 students were predominately Caucasian and only one participated in a reading intervention program. None of the 10 students received special education services and all came from lower middle class to upper middle class family backgrounds. Future studies need to examine additional groups of students in different contexts to add to the knowledge base presented in this study as this study.

The data collection period for this study focused on one complete cycle of literature discussion groups in which the students were reading realistic fiction books by Jerry Spinelli. Though this choice focused my analysis on one unit of study, it also did not incorporate the study of other authors and other genres of literature. In addition, the two groups read two different books by Jerry Spinelli. This was a limitation as comparisons across the two groups were challenging.

Finally, my presence was limited to the time during the day in which the language arts time periods occurred. As I did not spend the entire day with the students, additional conversations that were related to the reader responses of the texts and their co-construction of understandings could have taken place during other parts of the day, such as lunch and recess, that were not observed.
This research study holds limitations in the same way that other descriptive research studies are limited as it details the experience of 10 fifth-grade students and their one teacher in one specific classroom context. As a result, I have attempted to provide a “thick description” (Lincoln & Guba, 1985, p. 316) of the classroom for the reader to determine its applicability and the degree to which it can be generalized.

Recommendations for Future Research

With these limitations in mind, there are many possible recommendations and directions for further research. Though as Brevig (2006) explains, no literature discussion can ever be replicated as new participants and new contexts will change the responses of the participants, replication of this study in different environments would provide additional understandings of the central concepts explored in this study.

Conducting a similar study in additional classrooms that provide a constructivist environment with the use of literature groups across the on-line threaded discussion and group conversation environments would provide new and further insights into the ways that students collaboratively support each other’s understandings in the different contexts. As was previously articulated in this chapter, the students in this study did not consider it “appropriate” to socially talk about their responses to the reading when physically seated at the computers writing their on-line responses. Replication of this study in this classroom and other middle school classrooms could provide additional insight into this finding and examine why it takes place with some students and not others. These additional studies could examine the questions of not only what do students talk about while working at the computer, but what conditions foster or inhibit these conversations.
Replicating this study at different grade levels could also provide insight into the question of developmental levels. Examining the different ages of students may provide insight into the abilities of students to socially co-construct their knowledge more readily at certain developmental stages than others. In this way, future studies could examine the question regarding what, if any, developmental level is needed for students to respond successfully to texts across multiple contexts.

The teacher in this study was highly proficient at using technology and had a Master in Instructional Technology degree. It is the belief of this researcher that it is important to examine classrooms with teachers at different levels of technological proficiency and comfort. Examining teachers at different levels of proficiency and comfort with technology could add relevant information to the literature and explore questions regarding whether there is a need for a teacher to have a particular level of experience and comfort with technology when integrating an on-line threaded discussion board successfully in nurturing the responses of readers.

This study also illustrated the important nature of the teacher adjusting his role in relation to the needs of the students. This teacher clearly articulated his constructivist beliefs both verbally and through his classroom teachings. Additional studies need to take place in constructivist and non-constructivist classrooms to examine the importance of this environment on the responses of students across the two contexts and in their socially supported co-constructions of understanding and knowledge. Through these studies, additional questions such as what environments encourage readers’ responses across contexts could be explored.
Only 10 students who were fairly homogeneous in their ability levels, cultures, and socioeconomic standings participated in this research. Additional research should take place to explore the variability that may exist across students of different abilities, cultures, and backgrounds. In a related nature, this study only included an examination of books that were from the realistic fiction genre. Additional studies of literature discussion groups engaged in talk about different genres in the two different contexts could ask questions regarding the nature of the reader responses across environments and ask if there is an influence on the co-construction of knowledge through the type of genre being read and shared by the students.

As Larson and Keiper (2002) write, “examples of students engaging in threaded electronic discussions are hard to find in schools” (p. 45). It is the belief of this researcher that this is due to multiple factors. First, though computer hardware has become plentiful in school classrooms, professional development for teachers has not. Teachers need support in their own learning process to become more proficient and comfortable with technology. In addition, they need examples and descriptions, such as those provided in this study, to facilitate their own thinking and planning on how they could utilize technology to support and enrich their students’ understandings. When teachers commit to using technology, such as the on-line threaded discussion board described in this study, they need support in managing and implementing the technology. It would be additionally beneficial for teachers to find a colleague to support and collaborate with throughout the process. It is the hope of this researcher that both the utilization of computer-mediated communication environments and the research into their potential will continue to grow and mutually support each other.
Summary

As this study has shown, literacy is intertwined with technology usage that impacts the ways we read, learn, and communicate in today’s society. Computer mediated technologies, such as an on-line threaded discussion, are one example of a technology application that can be utilized to enhance a reader’s response to texts and to encourage participants to collaborate and socially co-construct their understandings. While the teacher was an important member of the conversations, his fluctuating presence based upon the needs of the group encouraged student ownership and leadership of the discussion and the responses to literature. The utilization of technology applications in this classroom created a new ThirdSpace outside of the traditional classroom environment that encouraged and nurtured student leadership in the reader response process. This study makes a unique and significant contribution to the reader response literature as it examined the integration of technology in enhancing the response of readers and described the ways in which a teacher facilitated those responses across contexts.
APPENDIX A

COMPUTER SCREEN SHOTS OF THE ON-LINE THREADED DISCUSSION BOARD
Website where students went to select their threaded discussion board.

*Crash* Discussion Board illustrating the “threads” of conversation.
APPENDIX B

PRINCIPAL REQUEST FOR PERMISSION LETTER
Dear Ms. [Principal of Elementary School],

As we discussed recently, I am interested in working with Mr. Tyler Springs and his students for the purpose of completing research for my dissertation at The Ohio State University. As you know I am in the process of completing my degree focusing in reading, children’s literature, technology, and research.

Having observed in Mr. Spring’s room previously, I have become fascinated by the ways in which Mr. Spring encourages students to think and respond to the books they read. As you may know, Mr. Spring utilizes a threaded discussion to nurture students’ understandings of their readings and to allow students to write and talk with each other at any convenient time, at both home and school. My research will focus on the ways in which students build their understandings of the readings together through talking both face-to-face and in the on-line environment.

Specifically I will try to address research questions that will look at how students talk about texts. I will try to examine what features of the books enter into their conversations and how individual responses affect students’ interactions. I will also be examining the similarities and differences of students’ talk about books in their face-to-face conversation with each other and with their teacher. Finally, I will try to determine what the most prominent elements are in a face-to-face and on-line discussion of books.

My data collection will include conversations with the participating students and teacher, observations, and document analysis. Student participation will be voluntary and a consent letter will be signed by both the students and the parents before the data collection process begins.

I am looking forward to working with the students and staff at your school once again and hope that you will consent to my working in the building.

Sincerely,

Jackie Marshall Arnold          Dr. Patricia Scharer
(co-investigator)               (principal investigator)
APPENDIX C

SCHEMATIC MAP OF THE CLASSROOM
APPENDIX D

PARENT AND STUDENT LETTERS OF CONSENT
The Ohio State University Parental Permission
For Child’s Participation in Research

Study Title: Examining the Experience of Reader-Response in an On-Line Environment: A Study of a Middle-School Classroom
Researcher: Dr. Patricia Scharer
Sponsor: The Ohio State University

This is a parental permission form for research participation. It contains important information about this study and what to expect if you permit your child to participate.

Your child’s participation is voluntary.

Please consider the information carefully. Feel free to discuss the study with your friends and family and to ask questions before making your decision whether or not to permit your child to participate. If you permit your child to participate, you will be asked to sign this form and will receive a copy of the form.

Purpose:

This study looks to examine the ways that the fifth grade students use on-line threaded discussions and face-to-face class discussions to help comprehend their readings. The study will attempt to describe and detail the ways in which the students work together to support each other. Eight to ten students (in two groups) will be taking part in this study.

Procedures/Tasks:

If your child takes part in the study, he or she will be observed during the language arts part of the day. The observations will serve the purpose of capturing the events that take place while the students work that support each other’s understanding of the text they are reading both in the on-line threaded discussion and face-to-face discussions that happen in the classroom. These observations will also be videotaped for the purpose of recording the classroom events and capturing students’ thoughts while working.
Your child may also be asked to have a small conversation with the researcher to further clarify different items produced in the classroom. Your child's written work during their language arts time will also be collected to document the ways in which students learn and work together.

**Duration:**

The study will take place over the time in which the students read a book together in their book club groups, an approximate four-week time period.

Your child may leave the study at any time. If you or your child decides to stop participation in the study, there will be no penalty and neither you nor your child will lose any benefits to which you are otherwise entitled. Your decision will not affect your future relationship with The Ohio State University.

**Risks and Benefits:**

There are no risks, side effects, or discomforts in any way that are expected to result from this study.

This study hopes to further teachers’ understandings of how to support student conversations to deepen and enrich their understandings. By participating in this study, your child will be contributing to an advanced body of knowledge that may help many teachers and students.

**Confidentiality:**

Efforts will be made to keep your child’s study-related information confidential. However, there may be circumstances where this information must be released. For example, personal information regarding your child’s participation in this study may be disclosed if required by state law. Also, your child’s records may be reviewed by the following groups (as applicable to the research):

- Office for Human Research Protections or other federal, state, or international regulatory agencies;
- The Ohio State University Institutional Review Board or Office of Responsible Research Practices;
- The sponsor, if any, or agency (including the Food and Drug Administration for FDA-regulated research) supporting the study.

**Incentives:**

Students will not be paid to participate in this study.
**Participant Rights:**

You or your child may refuse to participate in this study without penalty or loss of benefits to which you are otherwise entitled. If you or your child is a student or employee at Ohio State, your decision will not affect your grades or employment status.

If you and your child choose to participate in the study, you may discontinue participation at any time without penalty or loss of benefits. By signing this form, you do not give up any personal legal rights your child may have as a participant in this study.

An Institutional Review Board responsible for human subjects research at The Ohio State University reviewed this research project and found it to be acceptable, according to applicable state and federal regulations and University policies designed to protect the rights and welfare of participants in research.

**Contacts and Questions:**

For questions, concerns, or complaints about the study you may contact **Dr. Patricia Scharer at (614) 292-2480 or Jackie Marshall Arnold at (937) 559-5270.**

For questions about your child’s rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

If your child is injured as a result of participating in this study or for questions about a study-related injury, you may contact **Dr. Patricia Scharer at (614) 292-2480.**
Signing the parental permission form

I have read (or someone has read to me) this form and I am aware that I am being asked to provide permission for my child to participate in a research study. I have had the opportunity to ask questions and have had them answered to my satisfaction. I voluntarily agree to permit my child to participate in this study.

I am not giving up any legal rights by signing this form. I will be given a copy of this form.

Printed name of subject

Printed name of person authorized to provide permission for subject

Signature of person authorized to provide permission for subject

Relationship to the subject

Date and time

AM/PM

Investigator/Research Staff

I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A copy of this form has been given to the participant or his/her representative.

Printed name of person obtaining consent

Signature of person obtaining consent

Date and time

AM/PM
The Ohio State University Assent to Participate in Research

Study Title: Examining the Experience of Reader-Response in an On-Line Environment: A Study of a Middle-School Classroom

Researcher: Dr. Patricia Scharer Co-Researcher – Jackie Arnold

Sponsor: The Ohio State University

- You are being asked to be in a research study. Studies are done to find better ways to treat people or to understand things better.
- This form will tell you about the study to help you decide whether or not you want to participate.
- You should ask any questions you have before making up your mind. You can think about it and discuss it with your family or friends before you decide.
- It is okay to say “No” if you don’t want to be in the study. If you say “Yes” you can change your mind and quit being in the study at any time without getting in trouble.
- If you decide you want to be in the study, an adult (usually a parent) will also need to give permission for you to be in the study.

1. What is this study about?

This study looks to examine the ways that you use the on-line threaded discussion board and the ways you interact in class discussions to help comprehend your readings. The study will attempt to describe and detail the ways in which you work with your classmates together to support each other.

2. What will I need to do if I am in this study?

As a participant in this study you will only need to continue working as you normally do. Occasional conversations will take place to ask you for clarification and understanding of things that you produce in your classroom.

3. How long will I be in the study?
The study will take place over the time in which you read a book together in your book club groups, an approximate four-week time period.

4. Can I stop being in the study?
You may stop being in the study at any time.

5. What bad things might happen to me if I am in the study?
There are no anticipated bad things that could happen to you in the study.

6. What good things might happen to me if I am in the study?
This study hopes to help teachers’ growing understandings of how to support student conversations and reading comprehension. By participating in this study, you will be contributing to an advanced body of knowledge that may help many teachers and students.

7. Will I be given anything for being in this study?
All students in the class, whether or not you choose to participate in the study, will be given a chapter book to thank you for having me in your classroom.

8. Who can I talk to about the study?
For questions about the study you may contact Dr. Patricia Scharer at (614) 292-2480 or Jackie Marshall Arnold at (937) 559-5270.

To discuss other study-related questions with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.
8. Signing the consent form

I have read (or someone has read to me) this form. I have had a chance to ask questions about things I don’t understand. I want to be in this research study and understand what will happen to me.

_____________________________  ________________________________
Signature or printed name of subject                          Date

Investigator/Research Staff

I have explained the research to the participant or his/her representative before requesting the signature(s) above. There are no blanks in this document. A signed copy of this form has been given to the participant or his/her representative.

_____________________________  ________________________________  ________________________________
Printed name of person obtaining assent                          Signature of person obtaining assent                          AM/PM

                                        ________________________________  ________________________________
                                        Date and time                                      Date and time

This form must be accompanied by an IRB approved parental permission form signed by a parent/guardian.
## Lit. Circle Assignments

Name ___________________ Book___________________ Book # ______

<table>
<thead>
<tr>
<th>Group</th>
<th>Due Date</th>
<th>Assign.</th>
<th>Book</th>
<th>Pates to be read</th>
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<td>ALL</td>
<td>Mon. Jan 23</td>
<td>Before Reading</td>
<td>All Groups</td>
<td>Non</td>
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<td>p. 1 - 37</td>
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<td>5</td>
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<td>p. 129 - 162</td>
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</table>
APPENDIX F

THEMATIC TYPES OF QUESTIONS ASKED TO STUDENTS IN INTERVIEWS
1) Tell me about the book you read and if you liked it or not.

2) Did you like working on the discussion board? What did you like or not like?

3) Did you ever post responses at home? Why or why not?

4) Did you like sitting near someone when you were working on the on-line threaded discussion board? Why or why not?

5) Was it important for you to have the teacher involved in the on-line threaded discussion board?

6) Was it important to you to have the teacher involved in the group discussion time?

7) What did you like or not like about the reading packet?

8) What did you like or not like about working on the poster with your group?

9) If another fifth grade teacher came to you and asked your opinion about whether or not they should use an on-line threaded discussion board in their classroom, what would you say?
LIST OF REFERENCES


Bruce, B. (1997a). Current issues and future directions. In J. Flood, S. B. Heath, & D. Lapp (Eds.), *Handbook of research on teaching literacy through the communicative and visual arts* (pp. 875-884). New York: Macmillan Library Reference USA.


Gilles, C. (1998). Collaborative literacy strategies: "We don't need a circle to have a group." In K. G. Short & K. M. Pierce (Eds.), *Talking about books: Literature discussion groups in K-8 classrooms* (pp. 55-68). Portsmouth, NH: Heinemann.


QSR International. (2002). NUDIST N6 (Non-numerical Unstructured Data Indexing Searching & Theorizing) qualitative data analysis program (Version 6) [Computer software]. Victoria, Australia: QSR International Pty Ltd.


