A Formative Experiment to Promote Disciplinary Literacy in Middle-School and Pre-Service Teacher Education through Blogging

Jamie Colwell
Clemson University, jamie.colwell.1@gmail.com

Follow this and additional works at: https://tigerprints.clemson.edu/all_dissertations

Part of the Education Commons

Recommended Citation
Colwell, Jamie, "A Formative Experiment to Promote Disciplinary Literacy in Middle-School and Pre-Service Teacher Education through Blogging" (2012). All Dissertations. 958.
https://tigerprints.clemson.edu/all_dissertations/958

This Dissertation is brought to you for free and open access by the Dissertations at TigerPrints. It has been accepted for inclusion in All Dissertations by an authorized administrator of TigerPrints. For more information, please contact kokeefe@clemson.edu.
A FORMATIVE EXPERIMENT TO PROMOTE DISCIPLINARY LITERACY IN MIDDLE-SCHOOL AND PRE-SERVICE TEACHER EDUCATION THROUGH BLOGGING

A Dissertation
Presented to
the Graduate School of
Clemson University

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy
Curriculum and Instruction, Literacy

by
Jamie R. Colwell
August 2012

Accepted by:
Dr. David Reinking, Committee Chair
Dr. Barbara Bradley
Dr. Cynthia Deaton
Dr. Victoria Gillis
Dr. Robert Green
ABSTRACT

This dissertation describes a formative experiment that investigated how strategy instruction paired with collaborative blogging could promote disciplinary literacy among eighth-grade students in a social studies classroom and among pre-service teachers in a social studies methods course. Qualitative methods were utilized to collect and analyze data in this study. To determine modifications to the intervention, an embedded, single-case study was designed to analyze data iteratively using constant comparative methods. Post-study, qualitative methods were also used to conduct retrospective analysis to connect overall findings to theory. Three modifications were made, in the middle-school setting, to the intervention, which enhanced participants’ progress toward the pedagogical goals of the study. Results indicated middle-school students’ disciplinary-literacy skills and pre-service teachers’ instructional methods improved during the intervention. Findings suggested: (a) In-service and pre-service teachers may struggle with beliefs about disciplinary literacy and technology, but practice and experience may shift those beliefs; (b) writing on a blog may be motivating for adolescents and heighten their awareness of audience; and (c) eighth-grade students are capable of engaging in disciplinary literacy, but explicit strategies may be necessary for their success.
DEDICATION

My grandfather, James Fuller, instilled in me the belief that true success can be found through hard work and dedication, not luck or chance. He was my biggest fan, and this dissertation is dedicated to him and his memory.
ACKNOWLEDGEMENTS

This dissertation was possible because of the time and support provided by multiple people who I wish to thank individually.

To Dr. David Reinking: The past four years studying and working with you have been the most challenging, life-altering, sometimes frustrating, but ultimately rewarding years of my professional life. You provided me with opportunities and experiences I never before dreamed could be possible. Your guidance and mentoring have prepared me for a career and a life in academia, and I am grateful for everything you have taught me. I can undoubtedly say you are the best teacher I have ever had, and I have truly enjoyed being your student. I look forward to calling you my colleague for years to come. Thank you for everything.

To Dr. Barbara Bradley: Your practical, no-nonsense advice in my program and in this dissertation process has been greatly appreciated. Thank you for taking the time to encourage and support me.

To Dr. Cynthia Deaton: I credit you for providing me with the strong education I now have in qualitative research. Thank you for all that you have taught me and prepared me for in the field.

To Dr. Victoria Gillis: You sparked my interest in adolescent literacy many years ago and have continued to fuel my fire and devotion to this area of education and research. I sincerely appreciate all of the guidance, feedback, and time you have given me over the years and during this study, especially. You are a model for what I hope to someday accomplish, and I thank you for all of your efforts in my education.
To Dr. Bob Green: Your guidance, expertise, and willingness to support me as I ventured into social studies have been much appreciated. I thank you for your time spent providing me with resources, ideas, and feedback in my efforts to examine literacy in social studies.

To my parents, Joey and Donna Colwell: I have always known how lucky and blessed I am to have parents such as you. Yet, my work in education has illuminated how fortunate I am to have parents who encourage, support, guide, and push me to work harder and dream bigger. Thank you for supporting me as I followed my own path in life, allowing me to make mistakes and sometimes fail, but always being there to help me determine how I could do better next time and to show me how to laugh through it all. I love you both.

To my grandmother, Rose Fuller: I count myself lucky to have a grandmother like you, and I credit you for my determined spirit. You taught me how to put life into perspective and that there will always be challenges, especially for women, but those challenges just make success even sweeter. I cannot imagine a better lesson.

Finally, to my husband, Bret: As always, I save the best for last. You should know that I am where I am because of you. Your love and support during this dissertation and education process have been amazing, and I am truly thankful. As I have said many times before, words cannot express what your support means to me. You have the incredible ability to temper my competitiveness when it comes to succeeding, and you keep me sane. I envy the balance you create in life and in work, and at the end of the day, I want to be like you.
TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>TITLE PAGE</td>
<td>i</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>ii</td>
</tr>
<tr>
<td>DEDICATION</td>
<td>iii</td>
</tr>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>ix</td>
</tr>
<tr>
<td>LIST OF FIGURES</td>
<td>x</td>
</tr>
<tr>
<td>CHAPTER</td>
<td></td>
</tr>
<tr>
<td>1. INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td>Introduction</td>
<td>1</td>
</tr>
<tr>
<td>Methodological Approach</td>
<td>5</td>
</tr>
<tr>
<td>Key Terms and Concepts</td>
<td>9</td>
</tr>
<tr>
<td>2. REVIEW OF THE LITERATURE</td>
<td>17</td>
</tr>
<tr>
<td>Disciplinary Literacy and Its Role in Teaching History</td>
<td>17</td>
</tr>
<tr>
<td>Justification of Pedagogical Goals</td>
<td>18</td>
</tr>
<tr>
<td>Potential of the Intervention</td>
<td>35</td>
</tr>
<tr>
<td>Summary</td>
<td>44</td>
</tr>
<tr>
<td>3. METHOD</td>
<td>46</td>
</tr>
<tr>
<td>Context and Participants</td>
<td>46</td>
</tr>
<tr>
<td>The Intervention</td>
<td>65</td>
</tr>
<tr>
<td>Data Collection and Analysis</td>
<td>76</td>
</tr>
<tr>
<td>Retrospective Data Analysis</td>
<td>93</td>
</tr>
<tr>
<td>Methodological Rigor</td>
<td>95</td>
</tr>
<tr>
<td>Summary</td>
<td>98</td>
</tr>
<tr>
<td>4. RESULTS</td>
<td>99</td>
</tr>
<tr>
<td>A Preliminary Caveat</td>
<td>100</td>
</tr>
</tbody>
</table>
Table of Contents (Continued)

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Results of Iterative Data Analysis</td>
<td>101</td>
</tr>
<tr>
<td>Summary</td>
<td>176</td>
</tr>
<tr>
<td>5. DISCUSSION</td>
<td>177</td>
</tr>
<tr>
<td>Assertions from Retrospective Analysis</td>
<td>177</td>
</tr>
<tr>
<td>Unanticipated Outcomes of the Intervention</td>
<td>199</td>
</tr>
<tr>
<td>Limitations</td>
<td>205</td>
</tr>
<tr>
<td>Did the Intervention Further the Pedagogical Goals?</td>
<td>207</td>
</tr>
<tr>
<td>Implications for Disciplinary Literacy</td>
<td>209</td>
</tr>
<tr>
<td>Recommendations for Classroom Practice</td>
<td>215</td>
</tr>
<tr>
<td>Future Research</td>
<td>218</td>
</tr>
<tr>
<td>Closing</td>
<td>221</td>
</tr>
<tr>
<td>APPENDICES</td>
<td>222</td>
</tr>
<tr>
<td>Structured Field Notes Guide: Middle School</td>
<td>223</td>
</tr>
<tr>
<td>Southeastern University Blog Project Rubric</td>
<td>224</td>
</tr>
<tr>
<td>Structured Field Notes Guide: University</td>
<td>225</td>
</tr>
<tr>
<td>Graphic Organizer</td>
<td>226</td>
</tr>
<tr>
<td>Note-Making Guide</td>
<td>227</td>
</tr>
<tr>
<td>Discussion Web</td>
<td>228</td>
</tr>
<tr>
<td>My Big Campus Homepage</td>
<td>229</td>
</tr>
<tr>
<td>Sample Text from <em>Voices of South Carolina Slave Children</em></td>
<td>230</td>
</tr>
<tr>
<td>Sample Text from <em>South Carolina Women</em></td>
<td>232</td>
</tr>
<tr>
<td>Pre-Intervention Middle-School SCLA</td>
<td>233</td>
</tr>
<tr>
<td>Pre-Intervention University SCLA</td>
<td>234</td>
</tr>
<tr>
<td>Mid-Intervention Middle-School SCLA</td>
<td>236</td>
</tr>
<tr>
<td>Mid-Intervention University SCLA</td>
<td>238</td>
</tr>
<tr>
<td>Post-Intervention Middle-School SCLA</td>
<td>240</td>
</tr>
<tr>
<td>Post-Intervention University SCLA</td>
<td>242</td>
</tr>
<tr>
<td>SLCA Scoring Guides</td>
<td>243</td>
</tr>
<tr>
<td>Sample Scored SCLA</td>
<td>245</td>
</tr>
<tr>
<td>University Mid-Intervention Reflection Questionnaire</td>
<td>247</td>
</tr>
<tr>
<td>Sample Blog Exchange Excerpts from Talia and Jill</td>
<td>248</td>
</tr>
<tr>
<td>Sample Blog Exchange Excerpts from Jacob and Charles</td>
<td>250</td>
</tr>
<tr>
<td>Representative Open and Axial Coding Sample from Iterative Data Analysis</td>
<td>252</td>
</tr>
<tr>
<td>Representative Summary and Coding from Retrospective Analysis</td>
<td>253</td>
</tr>
<tr>
<td>Table of Contents (Continued)</td>
<td></td>
</tr>
<tr>
<td>--------------------------------</td>
<td></td>
</tr>
<tr>
<td>Page</td>
<td></td>
</tr>
<tr>
<td>Introductory Blog Prompt ................................................................................... 255</td>
<td></td>
</tr>
<tr>
<td>Primary Source Guide ......................................................................................... 256</td>
<td></td>
</tr>
<tr>
<td>Disciplinary Literacy Handout ............................................................................ 257</td>
<td></td>
</tr>
<tr>
<td>Model Blog Activity ........................................................................................... 258</td>
<td></td>
</tr>
<tr>
<td>Reflective Blog Writing Guide ........................................................................... 260</td>
<td></td>
</tr>
<tr>
<td>Sample Primary Sources ..................................................................................... 261</td>
<td></td>
</tr>
<tr>
<td>Frayer Model Example ....................................................................................... 263</td>
<td></td>
</tr>
<tr>
<td>REFERENCES ............................................................................................................ 264</td>
<td></td>
</tr>
</tbody>
</table>
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Reading Schedule</td>
</tr>
<tr>
<td>3.2</td>
<td>Data Collected for Each Setting</td>
</tr>
<tr>
<td>3.3</td>
<td>Data Sources, Procedures, and Purposes</td>
</tr>
</tbody>
</table>
### LIST OF FIGURES

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.1</td>
<td>Structure of Embedded, Single-Case Study Design</td>
<td>89</td>
</tr>
<tr>
<td>3.2</td>
<td>Iterative Process of Analysis to Determine Modifications</td>
<td>90</td>
</tr>
<tr>
<td>3.3</td>
<td>Process of Iterative Data Analysis</td>
<td>81</td>
</tr>
<tr>
<td>4.1</td>
<td>Organization of Results of Iterative Data Analysis</td>
<td>90</td>
</tr>
<tr>
<td>4.2</td>
<td>Sequence of Relevant Factors and Modifications to Blogging</td>
<td>115</td>
</tr>
<tr>
<td>4.3</td>
<td>Modification to Disciplinary-Literacy Instruction</td>
<td>126</td>
</tr>
<tr>
<td>4.4</td>
<td>Modification to Reflective Blog Writing</td>
<td>143</td>
</tr>
</tbody>
</table>
CHAPTER ONE
INTRODUCTION

Researchers interested in how literacy applies to the teaching of history have argued that students must be engaged in processes such as historical inquiry, historical thinking, and critical thinking about history (Afflerbach & VanSledright, 2001; Shanahan & Shanahan, 2008; Stahl, Hynd, Britton, McNish, 1996). In other words, they have argued that students should approach texts like historians who consider how different perspectives shape history (Barton & Levstik, 2004; Wineburg, 1991). Students who successfully participate in historical inquiry or historical thinking learn to gather evidence and to reach conclusions based on that evidence. That ability is not only foundational to the study of history but is also the foundation for democracy and engaged citizenship (Barton & Levstik, 2004; Martin & Wineburg, 2008; VanSledright, 2002a; Wineburg, 1991, 2001). These inquiry-based history practices are commonly grounded in critical analysis of multiple sources of evidence or texts using investigative methods of study (Barton & Levstik, 2004; Holt, 1990; VanSledright, 2002a; 2002b; Wineburg, 1991; 2001). Further, these practices encourage students to become active participants in learning and help them develop analytical reasoning (Stahl & Shanahan, 2004), the ability to ask appropriate questions (Holt, 1990), and engage in critical thinking (Beyer, 1987; 2008; Barton & Levstik, 2004; Levstik & Barton, 2005).

In the field of literacy, the emergence of a viewpoint that has been termed disciplinary literacy (Juel, Hebard, Haubner, & Moran, 2010; Moje, 2008; Shanahan, 2009; Shanahan & Shanahan, 2008; Wilson, 2011) aims to improve content-area learning
through discipline-specific practices, such as historical inquiry and historical thinking. Disciplinary literacy, which is a concept central to this dissertation, is based on the assumption that there are specific skills, strategies and dispositions associated with reading and understanding texts in different disciplines. Thus, integrating disciplinary literacy into history instruction would emphasize the investigation of history texts that entails consideration of different viewpoints in history, and the importance of those processes (Juel et al., 2010; Moje, 2008; Wilson, 2011). Further, students who understand history from various viewpoints would have a foundation for forming opinions and making decisions to exercise informed citizenship (Paxton & Wineburg, 2000; Wineburg, 2001).

This emergence of disciplinary literacy is timely, because the recent Common Core State Standards (CCSS; National Governors Association & Council of Chief State School Officers, 2010) connect literacy standards to each content area. Although reactions to the core standards and the political and educational purposes they may serve have been mixed, in the U.S. 48 states have adopted the CCSS, and many social studies teachers must begin to plan discipline-based literacy instruction in their classrooms. In fact, in social studies standards for grades 6-12, are titled “Literacy in History/Social Studies” and emphasize building literacy skills specific to that content area (National Governors Association & Council of Chief State School Officers, 2010). Further, the CCSS outline that students in grades 6-12 should be able to use Internet technology to create and publish writing in social studies, which also encourages digital literacy (Leu & Kinzer, 2000; Leu, Kinzer, Coiro, & Cammack, 2004). Thus, the shift in social studies
standards and in content-area literacy creates an opportunity to connect explicitly the
goals of these two fields to promote disciplinary and digital literacy in social studies
education.

However, there are challenges to integrating a critical or disciplinary stance into
social studies, particularly in the middle-grades. Research suggests students lack
strategies to support successful reading and consideration of diverse history texts
(Afflerbach & VanSledright, 2001; Hynd, Holschuh, & Hubbard, 2004; Stahl et al.,
1996). Perhaps this problem is due, in part, to many educators’ beliefs that elementary
and middle-grades students are incapable of successfully engaging in inquiry-based
activities in history (Barton & Levstik, 2004). As a result, few or no opportunities are
provided to these students to engage in inquiry (Barton & Levstik, 2004). Additionally,
Lee and Ashby (2000) suggested that when pre- or early-adolescent students are
introduced to bias and encouraged to consider history as opinion, they consider all
sources unreliable and they are unable to draw conclusions. However, other research
indicates that elementary and middle-grades students who received appropriate
instructional support and ongoing practice in analyzing textual sources demonstrated
advanced understanding and success with inquiry-based history activities (Barton, 1997;
Levstik & Smith, 1996; VanSledright, 2002a, 2002b). Further, such structured
instruction utilizing online multimedia and discussion platforms may enhance
disciplinary learning in history (Britt, Perfetti, Van Dyke & Gabrys, 2000; Hicks &
Doolittle, 2008; Hicks, Doolittle, & Ewing, 2004; Saye & Brush, 2002; Witte, 2007).
Thus, a combination of targeted instruction, repeated practice, and online tools and activities may support disciplinary literacy in middle-school social studies education.

Yet, many teachers, particularly in social studies, are reluctant to adopt the perspective of disciplinary literacy and struggle to integrate it into their instruction, because it may require inquiry and approaches that deviate from their usual practice. Instead, they center instruction on learning facts from an authoritative textbook (Barton & Levstik, 2004; Shanahan & Shanahan, 2008). Even experienced teachers struggle to implement and use discipline-specific literacy practices in their classrooms (Shanahan & Shanahan, 2008), suggesting that the preparation of pre-service teachers might be a useful and important point to introduce the concept of disciplinary literacy and to lay the groundwork for activities consistent with that perspective. Arguably, an effective way to address that goal would be through collaboration between literacy researchers, teacher educators in various content areas such as social studies, and practitioners (Draper, Broomhead, Jensen, & Siebert, 2010).

VanSledright (2004), a researcher interested in social studies education, specifically called for connections between social studies researchers and literacy researchers, arguing that both could benefit from each other’s knowledge and methods to address pertinent issues in their respective fields. Articles published during the previous decade have attempted to define literacy in the disciplines or encourage educators to use disciplinary-literacy practices in their curricula by describing the importance of learning literacy through a disciplinary lens (e.g., Draper, 2008; Johnson, Watson, Delahunty, McSwiggen, & Smith, 2011; Moje, 2008; 2010/2011; Wilson, 2011).
That literature is useful and pertinent to understanding principles and foundations of disciplinary literacy, but relatively little research exists that describes disciplinary-literacy practices grounded in authentic practice, particularly in social studies. In brief, much has been written conceptually about disciplinary literacy, but there have been few attempts to investigate empirically how to translate the idea of disciplinary literacy into workable practices that illustrate its power or that accomplish its goals while appealing to teachers and students. The investigation reported in this dissertation addresses that shortcoming.

Specifically, this dissertation reports a formative experiment investigating how an instructional intervention aimed at promoting disciplinary literacy could be implemented in a middle-school history class and simultaneously in a social studies methods class for pre-service teachers. The intervention was in-class disciplinary-literacy instruction partnered with a blogging activity that engaged middle-school students and pre-service teachers in online discussion about history texts to extend practice using disciplinary literacy. The overall aim was toward integrating disciplinary literacy into both settings simultaneously for the potential benefit of practicing teachers, their students, and pre-service teachers.

**Methodological Approach**

A formative experiment was selected as the methodological approach, because it is well suited to the overall aim of this investigation. Specifically, formative experiments investigate how promising interventions can be implemented to achieve valued pedagogical goals that are often problematic or that intend to transform instructional
orientations and practices (Reinking & Bradley, 2008). Formative experiments seek to align theory, research, and practice by designing interventions in authentic contexts. Consistent with those purposes, the formative experiment in this dissertation sought to examine how disciplinary literacy might be integrated into social studies because much has been written about disciplinary literacy, but little research has investigated how it might be incorporated into instruction, particularly in social studies. In addition, research indicates a resistance to instruction grounded in disciplinary literacy among pre-service and in-service teachers in social studies (Barton & Levstik, 2004; Shanahan & Shanahan, 2008) suggesting that research is needed to determine how that resistance might be reduced or circumvented.

A formative experiment is one among several methodological approaches that fall within a more comprehensive category often referred to as design-based research (van den Akker, Gravemeijer, McKenny, & Nieveen, 2006) or design experiments (Brown, 1992). Design-based research, and consequently formative experiments, view education research as analogous to engineering where theories are put into practice, testing and refining those theories systematically through the methodical design of workable solutions to accomplish specific goals (Sloan & Gorard, 2003). Formative experiments have evolved as an alternative to conventional experimental or naturalistic methodological approaches that have not adequately bridged the gap between research and practice. In that regard, formative experiments contend directly with the complex interacting factors that define the reality of teaching, and they mirror effective instruction (Bradley & Reinking, 2011; Reinking & Bradley, 2008).
In a formative experiment, systematic data collection identifies what factors enhance or inhibit the effectiveness of the intervention in achieving the goal and that data guides on-going modifications of the intervention. Although design-based research, including formative experiments, often entails mixed methods, the present study employed a qualitative case-study approach (Yin, 2009) to collect and analyze data iteratively during the intervention. In addition, the data were analyzed more holistically using what Gravemeijer and Cobb (2006) refer to as retrospective analysis.

The present investigation was also guided by Reinking and Bradley (2008) framework of questions for conceptualizing, conducting, and reporting a formative experiment, which follows:

1. What is the pedagogical goal(s) to be investigated and why is that goal(s) important?
2. What intervention has the potential to achieve the pedagogical goal(s) and why?
3. What factors, based on data collection and iterative data analysis, enhance or inhibit the intervention’s effectiveness?
4. How can the intervention be modified in light of these factors?
5. What unanticipated positive or negative outcomes does the intervention produce?
6. Has the instructional environment changed or been transformed as a result of the intervention?

Each of the questions in this framework will be addressed in subsequent chapters of this dissertation.
To provide practical guidance for integrating disciplinary literacy into the social studies instruction while simultaneously adding to the research base, a formative experiment framework offers a viable methodological approach to develop a workable instructional intervention while testing, refining and developing pedagogical theories useful to practitioners. In the present investigation, a formative experiment investigated how teachers, pre-service teachers, and middle-school students approached, responded to, and utilized disciplinary literacy in social studies while simultaneously determining modifications to the intervention to support and enhance participant learning.

The intervention employed addresses structured approaches to disciplinary-literacy instruction respectively for both populations of participants through online discussion about history texts to promote disciplinary literacy in middle-school and pre-service teacher education. The researcher and a middle-school social studies teacher collaborated to integrate disciplinary-literacy strategies into her existing eighth-grade curriculum to provide students with instruction in disciplinary literacy. These strategies were then incorporated into a social studies methods course to instruct pre-service teachers with disciplinary literacy in history. To extend disciplinary-literacy learning practices, middle-school students and pre-service teachers connected via an online blog platform to critically discuss history texts.

At the center of a formative experiment and unifying the generic questions comprising the aforementioned framework is an explicit pedagogical goal that can be justified as valued, appropriate, and sometimes problematic. The intervention in this
dissertation targeted two populations and thus had two complementary goals that were addressed simultaneously:

**Goal 1:** Improve eighth-grade social studies students’ use of disciplinary literacy in history (i.e., making connections with text, questioning the author/text, and drawing conclusions based on evidence) through discipline-specific strategy instruction and collaborative blog discussions about history texts.

**Goal 2:** Improve pre-service teachers’ use and understanding of instructional techniques beneficial to improving middle-school students’ disciplinary literacy skills through collaborative blog discussions with students about history texts.

Chapter 2 reviews the existing theoretical and empirical literature that justifies these goals as valued, appropriate, and problematic to practice. Chapter 3 describes the methodology of this investigation in light of these complementary goals, and Chapters 4 and 5 present results and interpretations in light of them as well.

**Key Terms and Concepts**

This section defines key terms and concepts that appear repeatedly in this dissertation and that relate to other terms and concepts that will be defined subsequently when they are first used.
**Literacy**

Literacy, especially in the present day, encompasses a myriad of skills ranging from basic decoding of text to the ability to understand and navigate text on the Internet. There is little agreement on the exact traits that being literate entails (Christenbury, Bomer, & Smagorinsky, 2009). This study uses the term literacy to refer to students’ abilities to successfully understand main ideas of text and write to explain or indicate ideas. More specific areas of literacy are described in the following subsections.

**Adolescent Literacy**

Like the term literacy, adolescent literacy is difficult to define and multiple definitions exist, some more concrete than others. For purposes of this dissertation study, adolescent literacy will be defined as adolescents’ abilities to read, comprehend, and engage in writing multiple types of print and non-print texts in the middle and secondary grade levels. This dissertation considers Jetton and Dole’s (2004) description of adolescent literacy illustrating that for adolescents to be literate, they must be able to read and interact with multiple types and formats of texts in different content areas in middle and high school.

**Content-Area Literacy**

Moore, Readence, and Rickelman (1983) recognized that to be successful studying diverse subjects beyond the early grades, readers need to develop and use more advanced strategies to understand and learn in content areas such as literature, mathematics, science, and social studies. Defining and developing those more advanced strategies have grounded the area of content-area literacy, which has been at the forefront
of adolescent literacy instruction and research during the previous four decades. Many adolescents struggle with comprehension when reading texts in diverse content areas and literacy strategies targeting content-area learning may be necessary for students to successfully navigate content-area texts. Recently, however, researchers have begun to argue that general literacy strategies in the content areas may not be the best approach to helping them understand content texts, because each content area has different goals and objectives for learning. Thus, disciplinary literacy has emerged as a new viewpoint from which to reconsider literacy in the content areas.

**Disciplinary Literacy**

Whereas content-area literacy focused on general strategy instruction that could be used across disciplines to aid students in reading content area texts, disciplinary literacy considers practices required to read and study texts in individual disciplines corresponding to the subjects taught in schools. Disciplinary literacy, in that regard is grounded in how experts would approach and use texts in their respective disciplines (Juel et al., 2010; Moje, 2008; 2010/2011; Shanahan, 2009; Shanahan & Shanahan, 2008; Wilson, 2011). Disciplinary literacy seeks to provide students with literacy-infused practices that promote disciplinary learning and with insight into why those practices are important and how they can be utilized in everyday life (Moje, 2008; 2010/2011). Further, in conjunction with studying how to use the practices of a historian, disciplinary literacy includes the study of why these practices are important (Moje, 2008).
Social Studies

Social studies as a school subject includes the sub-disciplines of anthropology, economics, history, geography, political science, and sometimes psychology (Wilson, 2011). Consequently, disciplinary-literacy practices in the field of social studies might legitimately be conceived as specific to each of these respective disciplines. In the formative experiment in this dissertation, history was the sub-discipline of interest. In Chapter 2, references to specific publications cited in the area of social studies will specify to which sub-discipline it refers when applicable.

Disciplinary Literacy in History

Specifically, and for example, a historian uses specific strategies and techniques when studying historical documents, such as studying the source and context of the information or document and corroborating its information with other documents from or written about that event (Wineburg, 1991; 2001), to understand a particular event or era in history. These practices are specific to the field of studying history. In using these strategies, historians consider factors when reading historical texts such as an author’s bias, purpose, and/or perspective; a historian also differentiates between fact, opinion, and reasoned judgment and considers texts in comparison with one another. Because these reading practices are required to understand history from a disciplinary perspective, they constitute literacy in the discipline. Thus, all of these practices are disciplinary-literacy practices that require specific techniques when reading to negotiate meaning in history text. In the field of social studies education, these practices have been termed historical thinking, historical inquiry, and thinking in history.
Practical classroom applications of thinking historically are well described by Holt (1990). However, the process of *historical thinking* primarily refers to Wineburg’s (1991) research describing how historians read and think about history. Wineburg (1991) suggested that historical thinking consists of three heuristics specific to the study of history: (a) sourcing, (b) contextualization, and (c) corroboration. Sourcing refers to the process of determining who wrote the text and when it was written. Contextualization describes determining the context of the writing and circumstances surrounding the production of the texts. Corroboration refers to the process of comparing multiple sources of information about a historical event or time period to form interpretations based on evidence.

*Historical inquiry* is commonly used in history to describe the broad process of investigation of historical texts to form interpretations (Barton & Levstik, 2004). Although sourcing, contextualization, and corroboration may be a part of historical inquiry, these processes do not necessarily have to be used together or exclusively. Historical inquiry is a broad term that describes *doing history* (Levstik & Barton, 2005), or the act of studying historical documents or artifacts from or about the past to interpret history based on evidence.

*Thinking in history* denotes Beyer’s (1987; 2008) thinking strategies in social studies/history to critically evaluate text. Beyer (1987) defines strategies as structured, step-by-step processes that students should follow to draw a conclusion, based on evidence, about a history text. This study will specifically focus on an adaptation of these strategies to scaffold critical thought about history texts. Beyer (2008) utilized a
structured process for teaching students to critically think about and consider history that includes (a) stating the problem, (b) stating the goal to be achieved by a decision, (c) identifying possible choices or alternatives, (d) predicting possible consequences of choosing each alternative, (e) evaluating each consequence to identify its good and bad effects, and (f) expressing the final choice based on the specified goal.

**Texts**

References to history texts in this dissertation may refer to, but are not limited to, photographs, paintings, documents, speeches, songs, poems, written records, or eyewitness accounts. Also, a text may be a primary or secondary source. Primary sources are texts that are firsthand accounts of people, events, or topics written or created during the time under study. For example, a letter written by a soldier in the Confederate Army during the Civil War in America would be considered a primary source. Secondary sources are texts that are secondhand accounts created by a person who was interested in people, events, or topics but who was not present during the time under study. For example, a textbook excerpt about the Civil War would be considered a secondary source. In this formative experiment, although participants were studying and discussing multiple types of texts in their respective classes, participants only discussed print-based primary and secondary sources texts during blog discussions.

**Blogs and Blogging**

When web logs (commonly referred to as blogs) were introduced in the early 1990s, their sole function was to provide information, thoughts, reflections, and sometimes hyperlinks to share with readers (Blood, 2002). However, this sharing of
personal texts with others gradually evolved into a form that allowed readers to comment on each others’ blog postings. Today, personal blogs postings typically invite readers to comment on the postings, encouraging dialogue, thought, or explanation in an open forum made possible by digital technologies on the Internet, thus creating a sense of community through collaborative interactions (Shoffner, 2007). Blogs may also incorporate links to other information at sites on the Internet. For example, blogs may contain links to an author’s webpage, Facebook page, news sources, shopping links, or other online interests. They may be used as a forum for discussion in school subjects or classes, as group support systems (e.g., a support network for people who belong to an identified group, such as military wives), community bulletin boards, as well as personal journals and hyperlinked websites (Risinger, 2006; Shoffner, 2007). The act of writing one’s own blog or posting a response to another person’s blog is referred to as blogging.

**Scaffolding**

Scaffolding refers to three closely related features as explicated by Graves (2004). First, scaffolding entails the use of a scaffold, or a supportive structure or guide to help students accomplish a task. Second, the scaffold must place the learner in the zone of proximal development (Vygotsky, 1978). Vygotsky (1978) defines the zone of proximal development as a range in which students can learn. This range includes, at one end, tasks that students can complete independently, and at the other end are tasks that students cannot complete even with assistance. The zone of proximal development contains tasks between these two zones which students can complete with assistance from some knowledgeable other. Third, over time the teacher must dismantle the scaffold and
students must become responsible for completing tasks on their own. Thus, in this study, scaffolding entails supports to guide students through reading history texts and engaging in disciplinary literacy.
CHAPTER TWO

REVIEW OF THE LITERATURE

This chapter reviews the theoretical and empirical literature addressing the first two questions in Reinking and Bradley’s (2008) framework for conceptualizing, conducting, and reporting a formative experiment:

1. What is the pedagogical goal to be investigated and why is that goal important?
2. What intervention has the potential to achieve the pedagogical goal and why?

The intervention in this formative experiment addressed two complementary goals respective to two populations:

*Goal 1:* Improve eighth-grade social studies students’ use of disciplinary literacy in history (i.e., making connections with text, questioning the author/text, and drawing conclusions based on evidence) through discipline-specific strategy instruction and collaborative blog discussions about history texts.

*Goal 2:* Improve pre-service teachers’ use and understanding of instructional techniques beneficial to improving middle-school students’ disciplinary literacy skills through collaborative blog discussions with students about history texts.

Disciplinary literacy, particularly as it is applied to studying history, is a concept common to both goals. Thus, disciplinary literacy, as it has emerged among researchers interested how literacy should be positioned in school subjects, will be discussed first, as will its interpretation in history as a school subject. Then its importance to each
respective goal, as well as problematic aspects of accomplishing them, will be discussed in relation to the existing literature. The chapter concludes with a description of the intervention’s potential to achieve the pedagogical goals.

**Disciplinary Literacy and Its Role in Teaching History**

Disciplinary literacy is a perspective on the role of literacy in teaching school subjects or what is often referred to as content-area literacy. It shifts the focus of literacy in the content areas from providing adolescents with generalizable strategies that can be used across content areas to instructing adolescents to engage in literacy practices specific to each discipline (Juel et al., 2010; Moje, 2008; Shanahan & Shanahan, 2008; Wilson, 2011). This relatively new perspective approaches literacy in the disciplines as the study of practices an expert in the discipline would use to approach text in the discipline (Juel et al., 2010; Moje, 2008; Shanahan & Shanahan, 2008; Wilson, 2011), grounding literacy in the practices of the discipline, as opposed to teaching general strategies that apply to all subjects or disciplines.

Disciplinary literacy emerged, in part, as a response to multiple barriers to integrating content-area reading strategies into content curricula (Draper et al., 2010). Research indicated that general literacy strategies, when taught in isolation from content, do little to increase adolescents’ literacy skills (see Bean, 2000). In addition, many content teachers believed that they were ill-equipped to teach reading or that they had little time to integrate literacy strategies into their already extensive and demanding content (Alvermann & Moore, 1990; O’Brien et al., 1995; Stewart & O’Brien, 1989). Disciplinary literacy, however, encourages the use of reading and writing to enhance or
support existing content, not add to it (Draper et al., 2010; Moje, 2008), thus countering a once popular idea that all content area teachers should become reading teachers. Instead, content area teachers should use reading and writing to support the content they are already teaching and current learning objectives. Thus, from the perspective of disciplinary literacy, literacy should be discussed in conjunction with or as a part of the practices and strategies content area teachers use to teach subject matter. Because the focus of this investigation is on the subject of history, disciplinary literacy will be discussed in this chapter in regard to that discipline with a focus on the practices history experts use and how those practices may be integrated into middle-school history instruction.

To integrate disciplinary literacy into a history class, instruction must focus on investigation and analysis of text (VanSledright, 2002a; 2002b; Wineburg, 1991; 2001) and inquiry-based processes of reading history (Barton & Levstik, 2004). Analyzing text, studying various texts from past events, and considering different perspectives define the practice of a historian (Barton & Levstik, 2004; VanSledright, 2002; Wineburg, 1991; 2001). Thus, the disciplinary purpose of studying history is not to memorize dates in history and learn isolated facts about an event by reading a single comprehensive text; the purpose of studying history is to engage in a process of analytical and critical thought. Specifically, disciplinary-literacy instruction in history requires a focus on the development of reflection and critical thinking skills, which are also skills needed to facilitate historical inquiry (Barton & Levstik, 2004). Thus, applying disciplinary literacy to teaching history requires teaching students to study historical texts like a historian.
using practices such as considering the source of historical texts, author perspective or bias, the context of historical texts, and the corroboration of information in multiple historical texts concerning an event or era to form an interpretation (Beyer, 2008; Barton & Levstik, 2004; Wineburg, 1991; 2001). Disciplinary literacy would also connect these practices to how and why they are useful in students’ everyday life (Moje, 2008; 2010/2011).

**Justification of Pedagogical Goals**

In this section, the literature will be reviewed to justify the importance of the pedagogical goals and to identify likely obstacles to achieving those goals for each population of participants in this study.

**Improving Disciplinary Literacy among Middle-School Students**

Alvermann and Moore (1991) have argued that many adolescent students lack efficient and flexible learning strategies, suggesting that reading instruction is still vital at the middle and secondary levels (Alexander, 2005; Alvermann, 2002; Moje, 2008; Shanahan & Shanahan, 2008). Indeed, Alexander’s (2005) lifespan model of reading supports the need for literacy instruction across an individual’s lifespan by arguing that an individuals’ purposes for reading will change throughout their life to meet changes in self (e.g., interests and profession) and society (e.g., evolving modes of text and communication), emphasizing that reading strategies must adapt and develop to meet these changes. Disciplinary literacy places emphasis on implementing discipline-specific literacy instruction into the content areas based on the study of practices used by experts in the fields of those disciplines (Moje, 2008; Shanahan & Shanahan, 2008), supporting
the idea that different purposes for reading (e.g., reading a work of fiction vs. reading a scientific graph) require different literacy practices. However, obstacles impede students, particularly early adolescents, from engaging in history activities that promote analytical and critical thought.

One such obstacle is history teachers’ perceived pressure to cover content in a textbook to prepare students for standardized testing (Hicks, 2005); another related obstacle concerns students’ reliance on textbook information (Paxton, 1999). If students are to participate in disciplinary-literacy based learning, they must have opportunities to read and analyze primary and secondary sources, and they need instruction in how to consider different primary and secondary sources outside of the textbook. In addition, and possibly a result of teachers’ focusing solely use textbook content, students also tend to rate textbooks as more trustworthy than other academic texts (Rouet, Favart, Britt, & Perfetti, 1997; Stahl & Shanahan, 2004), which may create conflict when students are asked to consider primary and secondary sources beyond their textbooks, which the intervention in this formative experiment asks them to do. Another obstacle, as VanSledright (2002a) described in his study of fifth-grade students engaging in structured practices of historical investigation, is that although students may be capable of engaging in disciplinary practices, they often struggle to make evidenced-based interpretations and sometimes generate their own interpretations based on personal opinions. Although VanSledright (2002a) found that most students enjoyed engaging in investigation of the past using sources other than their textbook and that they exhibited success in engaging in
these practices, some students also considered the process difficult and became reluctant to participate in these activities.

For many young adolescent students, including the middle-school students participating in this study, investigating history or using inquiry-based approaches that entail historical thinking or historical inquiry practices are unfamiliar approaches. According to Wineburg (1991; 2001), students and historians tend to view and approach historical texts differently. As a result of many years participating in a mode of learning in social studies that focuses on facts rather than interpretations, students often view history texts as authoritative repositories of information that contain unquestionable information with no need for analysis (Wineburg, 1991). Historians, however, approach the study of history as an analysis of different perspectives of a specific event or time period and consider how those perspectives shaped accounts of history using multiple sources of evidence (Kelley, 1998).

Yet, most adolescent students are lacking in strategies that evaluate information across textual sources to form overall interpretations and that support reading and consideration of diverse texts (Afflerbach & VanSledright, 2001; Hynd et al., 2004; Stahl et al., 1996, 2006). Studies that have presented students with multiple history texts to consider have found that students struggle with making connections between texts or reading across texts critically to corroborate information (Afflerbach & Vansledright, 2001; Ferretti, MacArthur, & Okolo, 1995; Stahl et al, 1996; Wineburg, 1991). Even students who have developed such reading strategies tend to find information in the texts to support their pre-existing viewpoints about a topic or consider all texts biased and
opinionated (Mosborg, 2002; Stahl & Shanahan, 2004; Lee et al., 2000). Or, they only consider one source of information in their critical analysis, even after being presented with multiple sources (Stahl et al., 1996). Research suggests that it is necessary to explicitly instruct, through structured approaches of study, students how to read and investigate texts, especially in grades preceding high school (Barton, 1996; Nokes, 2008; 2010a; VanSledright, 2002a; 2002b). Although historical inquiry or investigation may enhance students’ abilities to read critically, most students are lacking in skills they need to accommodate historical inquiry, because this practice is not commonly used in social studies classrooms (Barton & Levstik, 2004; Thorton, 2001).

Especially in light of these obstacles, it is important that students be instructed in disciplinary literacy practices. Particularly, teaching students how to consider bias and author representation in history texts is a process that may be beneficial in creating more informed citizens. As Mosborg (2002) argued,

School history is not fundamentally vocational. It is based on the premise that each of the academic disciplines offers unique criteria for examining phenomena, even as they share certain attributes of critical thinking and discourse. . .What is learned by doing history, it is hoped, will transfer: If all goes well, students will be able to recruit and use historical knowledge throughout their political and cultural lives (p. 324).

Mosborg’s position implicitly creates a link between history and literacy through a disciplinary lens. In addition, her explanation of how the study of history may transfer to students’ lives outside of school reflects the value of this mode of instruction, because
social studies, as a content area, should prepare citizens and students to better participate in a democracy (Botstein, 1991; Stahl & Shanahan, 2004), which is also a goal of disciplinary literacy (Moje, 2008; 2010/2011).

Based on the assumption that engaging students in evaluation, interpretation, and critical questioning is more likely to help them think like historians and become critical readers, literacy strategies to scaffold evaluation, interpretation, and critical questioning of texts may be necessary to facilitate disciplinary literacy in history, which is a component of the first goal of this intervention. Lee and Spratley’s (2009) Carnegie report on adolescent literacy highlights the shift from learning to read to reading to learn in adolescent education. The report asserted that guided support in making sense of content text is a key component of successful content-area classrooms. In addition, Conley (2008) noted that despite the many barriers present in strategy instruction in adolescent literacy, adolescent students need strategies to navigate content area texts and to learn how to think about and critically consider multiple texts, which is a useful and often necessary skill in their later education, work, and lives as citizens.

Conley et al. (2008) contended that “very little is known about the teaching or application of comprehension strategies for adolescents in content-area classrooms” (p. 90). What is known about strategy instruction primarily stems from research in the early or elementary grades (see Pressley, 2000; 2006; Pressley & Hilden, 2006). In part, this dearth of knowledge results from a lack of consensus in the field of adolescent literacy about the parameters of comprehension in content areas. Comprehension in adolescent literacy varies between subject areas and depends on the instructional goals set by the
teacher (Conley, 2008). For example, an English teacher may consider comprehension to be the understanding of themes, allusions, and symbolism in classical works of literature. However, a science teacher may consider comprehension to be the understanding of the results of charts, graphs, and formulas to interpret scientific results. In addition, a student may exhibit varying levels of comprehension between these two sets of objectives, making it difficult to determine that student’s overall level of comprehension ability.

Some researchers, such as Schumaker and Dreshler (2006), have attempted to develop and define a set of common cognitive strategies that may be used across content areas to determine comprehension based on a student’s approach to a task and how they plan, execute, and evaluate their performance on that task. However, common cognitive strategies ignore discrepancies in learning objectives of different content areas and teachers’ instructional decisions (Conley, 2008). The goals of this intervention targeted the use of comprehension strategies specific to a discipline-based approach to studying history.

In literacy, strategy instruction may be empowering or motivating and it may be linked to self-efficacy (Guthrie & Wigfield, 2000). Guthrie, Wigfield, and Perencevich (2004) explored the relationship between reading strategy instruction, conceptual knowledge in science, and support for student motivation through an instructional program called Concept-Oriented Reading Instruction that promoted reading engagement and the development of adolescents’ intrinsic motivation to read. They considered reading engagement to be critical to promoting life-long learners, and strategy instruction was an important element in supporting adolescents’ reading engagement. In addition,
explicit strategy instruction focused on comprehending informational text (Dole, Duffy, Roehler, & Pearson, 1991; Roehler & Duffy, 1984), which may increase students’ self-efficacy in reading. Explicit strategies provide a structured and systematic way for students to approach and engage in reading, targeting the development of reading skills. After students develop skills, they may more easily navigate and understand informational texts, which may encourage students to continue reading (Dole et al., 1991). VanSledright (2002a; 2002b) and Barton (1997) noted in their respective studies of fifth-grade students engaging in investigative acts of studying history, that even though students sometimes became discouraged when reading primary sources, the use of structured strategies to help them understand texts and engage in investigation seemed to encourage them to persevere.

In history, both explicit strategies (i.e., strategies that are named, discussed, and practiced) and implicit strategies (i.e., strategies that are not named or discussed, but that are practiced with teacher guidance) may be useful in guiding disciplinary literacy practices (Nokes, 2010a; Vacca, 2002). However, research suggests that explicit strategy instruction in historical thinking or historical inquiry may lead to increased use of practices similar to those of a historian (Britt & Aglinskas, 2002; Damico, Baildon, Exter, & Guo, 2009; Ferretti et al., 1995; Nokes et al., 2007; VanSledright, 2002). For example, Damico et al. (2009) found that ninth-grade students enrolled in Asian Studies-focused social studies were more successful in considering authorship when teachers made clear connections between metacognitive reading skills and practices that are specific to reading history. The strategy instruction addressed in the pedagogical goal set for the
middle-school setting in this study also aimed to help students improve their disciplinary literacy skills using structured approaches to considering history texts. Although strategy instruction is not clearly defined in adolescent literacy, research suggests the promise of providing adolescents with strategies to develop disciplinary-literacy skills specifically in history.

**Improving Disciplinary Literacy among Pre-Service Teachers**

Literature on disciplinary literacy in teacher education is limited, in part because disciplinary literacy is a new perspective. However, the existing literature on content-area literacy may inform integrating disciplinary literacy into teacher education. For example, research suggests a resistance to content-area literacy instruction among middle school and secondary teachers (Moje, 2008; O’Brien & Stewart, 1990; O’Brien, Stewart, & Moje, 1995; Ratekin, Simpson, Alvermann, & Dishner, 1985). Even when content literacy researchers and educators provide useful instructional strategies in teacher education and professional development, many teachers are not willing to devote time to implement content literacy strategies into their curricula (Greenleaf, Schoenbach, Cziko, & Mueller, 2001; Hall, 2005; O’Brien et al., 1995), suggesting that further action is necessary to prepare pre-service teachers and teachers to use content-area literacy as an integral part of instruction, which is a focus of this study.

One of the significant obstacles facing content-area literacy instruction is the years of preparation a middle-school or secondary teacher undergoes to become an educator in a specific content discipline. That preparation fosters specific pedagogical beliefs toward teaching content (O’Brien & Stewart, 1990). Unlike early childhood or
elementary teacher training, secondary education teacher preparation focuses on specific subject matter, which often leads teachers to believe that literacy plays little or no role in content learning. Thus, content teachers may not accept that literacy is component of content instruction (Donahue, 2000; O’Brien et al., 1995).

As a result, many pre-service teachers believe that literacy instruction is not their responsibility (Donahue, 2000; O’Brien & Stewart, 1990). However, first-hand experience working with adolescents in a particular content area may provide necessary content-literacy training for pre-service teachers to understand the benefit of literacy in the content areas (Groenke, 2008; Memory, 1983; O’Brien et al., 1995; Witte, 2007), and the second pedagogical goal of this formative experiment sought to provide such experience. Such experience is also important because some pre-service teachers believe that they do not know how and they do not need to know how to teach content-area literacy (Hall, 2005; O’Brien & Stewart, 1990). For example, Donahue (2000) qualitatively evaluated pre-service science teachers’ beliefs about content-area literacy and found that many of the pre-service teachers chose to enter the science education profession because the emphasis on reading and writing was low, and literacy instruction would not have to be a concern in their future teaching. However, Hall’s (2005) review of literature on content-area literacy suggested that a shift occurs in content area teachers’ beliefs about literacy when they begin their careers as teachers. In fact, research has indicated that in-service teachers, most likely based on their experiences in the classroom, consider themselves ill-prepared to teach content-area reading but that they believe reading instruction was important (Bintz, 1997; Yore, 1991). This shift implies that
giving pre-service teachers authentic experiences with students contending with texts in history might influence future history teachers’ perceptions early, allowing them to be more receptive to the orientation of disciplinary literacy as they begin their teaching careers. That assumption is central to the rational for the second goal of this study.

Scharlach’s (2008) qualitative study of pre-service teachers’ beliefs about content-area reading suggests that perceptions of ability to successfully implement content reading strategies into the classroom is an important factor in developing positive attitudes about content-area literacy and the willingness to teach those strategies. She concluded that pre-service teachers who lacked confidence in their ability to teach reading strategies were less likely to use them in their future classrooms. Therefore, it may be necessary to provide pre-service teachers with an effective content literacy education that includes practice in engaging, implementing, and reflecting on literacy strategies in the content areas to shape appropriate beliefs about content area literacy (Donahue, 2000; Fleming et al., 2007; Ratekin et al., 1985; Stewart & O’Brien, 1989). In support of stronger pre-service content-area literacy education, Theriot and Tice (2009) claimed that content teachers with a solid educational foundation of content-area literacy may occasionally teach literacy strategies to benefit students even if incorporating a strategy contradicts their pedagogical beliefs. These findings suggest the benefits of providing secondary pre-service teachers with preparation and practice using literacy-based strategies in a teacher education, which is an aim of the second pedagogical goal of this study.
However, if teachers do not believe that reading instruction is their responsibility, they will likely omit it from their curriculum (Draper, 2002; Siebert & Draper, 2008; Ratekin et al., 1985). In addition, and related to goals of disciplinary literacy, research suggests specific strategies for each discipline must be taught in content-area literacy courses for pre-service teachers to take responsibility for teaching literacy within the content areas (Anders, 2008; Moje & Sutherland, 2003). If pre-service teachers are not taught how to use literacy strategies specific to their content areas of instruction, they may assume the strategies are of little value or irrelevant (Draper, 2002; 2008; Siebert & Draper, 2008; Ratekin et al., 1985), or they may believe that content strategies do not align with their curricular goals (Conley, 2008). These assumptions may perpetuate teachers’ beliefs that they are not responsible for content literacy instruction (Stewart & O’Brien, 1989; Scharlach, 2008). Therefore, it may be logical to provide pre-service teachers with literacy strategies specific to their content area and practice using those strategies in their content area, such as is the case in the intervention investigated in this study. Providing pre-service teachers with disciplinary-literacy strategies in a social studies methods course may make content-area reading more palatable to them by shifting the emphasis for the general strategies associated with content-area literacy to more discipline-specific strategies.

Many content-literacy researchers have stressed the importance of conceptualizing content-area reading as an integral part of the curriculum (Alvermann & Moore, 1991; Anders, 2008; Ratekin et al., 1985), and disciplinary literacy may be a more feasible approach to this integration (Draper et al., 2010). However, Moje (2008)
cautioned that whereas the shift to disciplinary literacy may be a step in the right
direction to integrating literacy into the content areas, challenges still exist and that
teachers may feel unprepared to take on the instructional tasks assigned by disciplinary
literacy. Attempting to create positive teacher attitudes toward literacy in the content
areas is not enough; teachers must be shown and taught how to implement content-area
literacy strategies given the existing school structure, including limited class time (Hall,
2005). Along with specific strategies for integrating content literacy into instruction, Hall
(2005) and Draper et al. (2010) argued that teachers should be taught the value of content
literacy by learning how it can become a seamless and supportive element of content-area
instruction.

However, for teachers to integrate disciplinary literacy into history curricula, a
shift in common approaches to teaching history instruction is necessary. Nonetheless,
this shift may better support goals of citizenship that underlie the purpose of social
studies instruction (Mosborg, 2002). Additionally, a shift in teacher beliefs is necessary
to convince teachers that disciplinary literacy may be a useful part of history instruction
(Shanahan & Shanahan, 2008). That shift is challenging and will take concentrated
efforts to convince pre-service and in-service teachers to refocus instructional methods
with which social studies teachers and students have grown accustomed (Moje, 2008;
Nokes, 2010b). The intervention investigated in this study addresses that challenge by
seeking to incorporate disciplinary literacy into a social studies methods course to help
pre-service teachers better understand how literacy may be a part of history instruction.
Disciplinary literacy in history is grounded in practices of inquiry and analysis of texts, requiring teachers to engage students in assessment of evidence, rather than teaching factual information students need to know for a test (Juel et al., 2010; Moje, 2008; Nokes et al., 2007; Shanahan & Shanahan, 2008; Wilson, 2011). Wilson (2011) explained that an understanding of the literacy framework specific to history, which entails investigative acts of study, may lead to more responsive literacy instruction and help students better understand content matter. Therefore, beyond responding to calls from educational researchers and revised state and national standards of learning, as discussed in Chapter 1, the importance of disciplinary literacy and the implications and obstacles of preparing pre-service social studies teachers to incorporate history instruction using a disciplinary lens must be addressed.

Pre-service teachers may be reluctant to embrace disciplinary literacy, in part, because they believe social studies should be taught through what has been referred to as cultural transmission mode (Stanley & Nelson, 1994) towards preparing students for an end-of-year assessment (Gerwin & Visone, 2006; Hicks, 2005), often based on duplicating the instructional approaches they experienced in secondary education (Chiodo & Brown, 2007). For example, Chiodo & Brown (2007) utilized a mixed methods approach to understand pre-service teachers’ professional beliefs as they began a social studies education program. They found that pre-service teachers entered the program with strong beliefs about social studies instruction, usually based on their experiences in high school, but those beliefs may be positively altered if an instructor of a teaching methods course can help pre-service teachers reflect on their beliefs and tie
those beliefs to theory or field experiences. If pre-service teachers, such as the ones in this study, are given the opportunity to learn about disciplinary literacy through their methods courses, and provided practice using disciplinary literacy, as in the intervention investigated in this study, they may thoughtfully consider disciplinary literacy in light of their existing beliefs.

Indeed, pre-service teachers, including those in social studies, tend to enter teacher education with established beliefs about instruction (Chiodo & Brown, 2007; Hall, 2005; Lortie, 2002), which may inhibit them from engaging their students in disciplinary literacy. Perhaps, as research suggests, pre-service teachers have not been given sufficient experience using discipline-specific literacy instruction outside of their coursework before entering the classroom (Anders, 2008). Although explicit strategy instruction may be beneficial for students, many pre-service teachers struggle with contextualizing when and under what conditions it might be appropriate to use specific strategies (Alger, 2009; Reinking, Mealey, & Ridgeway, 1993), suggesting further practice in implementing strategies. They may also need specific activities or instructional frameworks, such as the blogging intervention in this study, that could encourage and anchor instruction consistent with the concept of disciplinary literacy.

Lotter, Singer, and Godley (2009) found that when pre-service science teachers were given opportunities to practice using inquiry-based strategies in low-risk settings during pre-service teacher coursework, their understanding and enactment using these strategies improved. Providing pre-service teachers with the opportunity to engage in critical discussion via blogging about history texts with middle-school students may
encourage them to employ disciplinary literacy instruction in their future history classrooms, because they are offered opportunities to practice strategies in a low-risk environment. Lee (2005) argued that teachers must be able to explicitly scaffold the metacognitive strategies required for students to engage in historical inquiry, and the opportunity for practice, facilitated through collaborative blogging, addressed in this goal may help pre-service teachers learn how to scaffold middle-school students’ engagement.

Certainly, blogging may facilitate online learning for pre-service teachers and middle-school students, which may address how to incorporate disciplinary-literacy practice in pre-service teacher education. Yet, as research has suggested, incorporating blogging into pre-service teacher education entails challenges (Boiling, 2008; Hungerford-Kresser, Wiggins, & Amaro-Jiménez, 2011). For example, although adolescent students typically respond positively to using blogs as a part of their content-area classroom activities (Shoffner, 2007; Witte, 2007), pre-service teachers may resist blog activities or projects if they believe the objectives of those activities may be met through other face-to-face instructional activities, such as in-class discussion (Hungerford-Kresser et al., 2011). Hungerford-Kresser et al.’s (2011) findings indicated that pre-service teachers viewed blogging as an add-on to instruction, because they believed the face-to-face discussion would have been equally effective as blogging. Pre-service teachers may find technology useful in the classroom when it enhances, not replaces, more established classroom practices such as discussion.
Potential of the Intervention

In this section, literature will be reviewed to establish that the intervention has potential to improve the understanding and use of disciplinary literacy.

Strategy Instruction to Facilitate Disciplinary Literacy in History

A historian’s practices in studying history usually entail a critical analysis of multiple sources of evidence or texts using specific heuristics. Wineberg (1991), whose work has been widely cited, has classified the main categories of these heuristics as follows: sourcing, contextualization, and corroboration, which were defined with more detail in Chapter 1. However, researchers have often found that advanced high-school and college students struggle with these heuristics (Stahl et al., 1996; Nokes et al., 2007; Wineburg, 1991), suggesting that adolescents will have difficulty with these heuristics and that explicit instruction and practice in investigative and evaluative strategies in history may be beneficial to them later (Levstik & Barton, 2005). Further, even when upper-grade students were successful in engaging in historical thinking practices, those practices were anchored by specific strategies (Brush & Saye, 2002; Hynd et al., 2004). Thus, strategy instruction may be essential when developing adolescents’ critical understandings of historical texts. Therefore, strategy instruction was one essential element of the intervention investigated in this study, enhancing the intervention’s potential to achieve the pedagogical goals.

Levstik and Barton (2005) suggested inquiry-based strategies that are less complex, but build on, historical thinking practices to acclimate students to investigating history texts instead of reading those texts to summarize information. This approach to
strategy instruction was used in the intervention investigated here by selecting literacy and social studies strategies that helped middle-school students comprehend primary and secondary sources by considering the purpose of the source, who wrote it, personal and textual connections, and evaluating the source using these considerations. The strategies employed were grounded in research including Questioning the Author (see Beck, McKeown, Sandora, Kucan, & Worth, 1996; Beck & McKeown, 2001; 2002; McKeown & Beck, 1993) and thinking strategies for social studies (Beyer, 1987; 2008).

Encouraging literacy learning in the content areas through appropriate content and literacy strategies is a current goal among those who advocate for adolescent literacy such as Heller and Greenleaf (2007). These advocates promote strategy instruction as a pathway for literacy reform in middle and high schools, further supporting the potential of this intervention.

Yet, research suggests that many teachers are not familiar or comfortable with modeling disciplinary-literacy strategies or practices to students and rely primarily on textbooks to convey information that they often have students memorize (Barton & Levstick, 2004; Shanahan & Shanahan, 2008). Even experienced social studies teachers have not engaged students in questioning texts and engaging in critical reading and thinking in history (Saye & Brush, 2002). One reason may be that many social studies teachers struggle with understanding and analyzing history (Lucey, Hatch, & Ginnangelo, 2010; Lucey, Hawkins, & Ginnangelo, 2009), which further complicates the integration of disciplinary literacy into the classroom. Lucey et al., 2010 collected online survey data, including responses to open-ended prompts, from 91 participants, and found that
pre-service teachers struggled to articulate content knowledge and interpret history, suggesting barriers to incorporating disciplinary practices in grades earlier than high school. The intervention investigated in this study provided pre-service teachers with structured strategies to consider and practice, which may increase their comfort with disciplinary literacy instruction and discipline-based practices.

Further, there is a lack of empirical research investigating how disciplinary literacy instruction, grounded in explicit strategies, might be achieved in the various subject areas, including social studies and history. This lack of research might be explained, in part, by the tendency in content-area literacy courses to generalize reading strategies across content areas (Draper et al., 2010). In addition, instruction in these reading strategies remains largely isolated to coursework specific to content-area literacy, disconnecting literacy as a fluid and integral part of methods courses that pre-service teachers may perceive as more relevant to their future instruction. Perhaps, too, because of these tendencies, many content area pre-service teachers, particularly those in the social studies, are not convinced that literacy could or should be a part of their content area’s curriculum, particularly in fields such as history (Alexander, 2000; VanSledright, 2004). Disciplinary literacy researchers support providing discipline-based literacy instruction for pre-service teachers to consider through their methods courses (Moje, 2008; Nokes, 2010b; Shanahan & Shanahan, 2008). Yet, few researchers and educators are practicing this approach. The present study integrated disciplinary literacy into a social studies methods course through the intervention, allowing pre-service teachers to consider how literacy may be incorporated into their future instruction.
Nokes’ (2010b) study supports having pre-service social studies teacher consider how literacy may be a part of their future history instruction, which was also supported by the intervention, because it described a pre-service teacher education program that is making strides in bridging the gap between literacy and content areas. In that program, content-literacy specialists worked with methods instructors to integrate literacy strategies specific to disciplines into content methods courses instead of offering content-area literacy courses through the department of education. Nokes (2010b) conducted research in the history methods course of this pre-service teacher education program. He collaborated with the history methods instructor to integrate content-literacy strategies into the coursework. His results indicated that the pre-service teachers finished the course with positive attitudes toward reading and seemed to internalize important literacy strategies specific to social studies. However, a limitation of his study was that data could only describe the pre-service teachers’ knowledge, skills, and dispositions needed to include literacy in their future classrooms (Nokes, 2010). How they would actually use or consider literacy strategies when working with students could not be determined in his study. Thus to further address such issues, the present intervention utilized strategy instruction and technology simultaneously to provide pre-service teachers with instruction and practice using disciplinary-literacy strategies by blogging about history texts with middle-school students, allowing pre-service teachers to use and consider literacy strategies when working with students. Results of this study, therefore, may be indicative of pre-service teachers’ authentic knowledge, skills, and dispositions outside of
the context of the university classroom and address practical components of integrating disciplinary literacy into pre-service teacher coursework.

**Blogging to Extend Practice with Disciplinary Literacy in History**

Research suggests that incorporating computer-mediate communication into classroom instruction encourages the development of digital literacy skills (Leu & Kinzer, 2000; Leu, et al., 2004) and can provide socially meaningful experiences for students (Groenke, 2008; Rhodes & Robnolt, 2009). The use of blogging and computers in this study may also provide an additional understanding of the digital literacy skills, or literacy skills specific to reading and writing online (Leu et al., 2004) and that may support necessary to critical online discussion in history. Particularly, middle-school students’ online writing skills were targeted in the intervention, because the blogging activity required that they participate in written online, instead of verbal, discussion.

Although, development of digital literacy skills, such as reading and writing on and navigating a blog site, was not an intentional goal of the intervention, it is pertinent that blogging may simultaneously address this contemporary goal of literacy instruction. Blogging has also been found to support critical and reflective thinking (Black, 2005; McDuffie & Slavit, 2003; Shoffner, 2007), which aligns with the components of disciplinary literacy in history. Disciplinary literacy in history requires students to consider multiple features of history texts including the author, the author’s source of information, bias, and connections between texts, and de la Paz (2005) found that writing procedures to promote seventh-grade students’ engagement in historical thinking promoted accurate and persuasive understandings about history.
Blogging requires limited technological knowledge (Martindale & Wiley, 2005) and offers practical affordances in education for students because many blog sites are free and are easy to construct and navigate. In general, online discussion allows for knowledge construction in which users compare and contrast their own knowledge with others’ ideas and comments and posing questions using the comment feature in blogs (Shoffner, 2005, 2007; Weiler, 2003). Such active reflection has potential for engaged participation that may generate new knowledge (Maloney, 2007). In addition, blogging requires extended critical thinking beyond the walls of the classroom (Black, 2005; McDuffie & Slavit, 2003) again supporting critical reflection and construction of new knowledge. Constructive feedback from blog readers may be motivating (Lenhart, Arefeh, Smith & McGill, 2008) and instructional (Sweeny, 2010) for students as they consider and respond to other readers’ comments in light of their own responses.

Because adolescents, such as those targeted in this study, may become discouraged when first engaging in disciplinary practices of history (Barton & Levstik, 2004; VanSledright, 2002a; 2002b), the use of a personal blog may be a motivating activity that encourages students to persevere if they become discouraged. Thus, blogging was selected as the central activity for the intervention, because it may facilitate and sustain reflective thinking and collaborative discussion about history texts and may provide a stimulating online learning platform where participants could engage with disciplinary literacy in history.

Also, as McGrail and Davis (2011) suggested, blog writing provides an authentic audience for students as they wrote responses to text and may thus be appealing to
students who struggle with writing. The informality of writing for blogs may also assuage pressures faced when using formal writing conventions. Because writing can be an intimidating task for many middle-school students, blogging may allow students to focus on the content of their posts, not the formal mechanics of writing (McGrail & Davis, 2011). In addition, because collaborative blogging mimics conversation (Shoffner, 2005), pre-service teachers may be able to practice using instructional techniques in disciplinary literacy in a way that resembles working one-on-one with a student, even though the pre-service teachers were not in the classroom with the middle-school students. This aspect of the intervention provided a method for using the components of disciplinary literacy in history without adding additional field-based experience hours or contending with the curricular and practical demands of field-based experiences in social studies with a mentor teacher (see Koeppen, 1996; 1998).

Wilson (2003) also suggested that teacher educators preparing their students to become social studies teachers should provide experiences that allow them to observe and participate in using Web 2.0 tools to shape positive perceptions of using these tools in curricular planning. In her study, steps are being taken toward providing those experiences by offering opportunities for pre-service teachers to use Web 2.0 tools to plan curriculum through teacher education coursework. Bolick, Berson, Friedman, and Porfeli’s (2007) national survey revealed that social studies teacher educators’ attitudes during the previous decade have shifted in favor of integrating technology into pre-service teacher education, and social studies professors’ integration and modeling of digital technologies for students in their methods courses have also increased.
Additionally, professors indicated that modeling the use of digital technologies is important in social studies teacher education (Bolick et al., 2007). Nevertheless, these perceptions and modeling of technologies tended to favor teacher-centered digital technologies, such as interactive whiteboards and teacher access of information from the Internet. Yet, the perceptions of teacher educators in the area of social studies have expressed more positive views of student-centered digital technologies (e.g., threaded discussion platforms) (Bolick et al., 2007).

Research also suggests that pre-service social studies teachers’ instructional practices are influenced by their professors’ practices. Several scholars have argued that social studies educators should strive to integrate technology into pre-service teacher education if instructional change is going to occur in social studies classrooms (Mason, Berson, Diem, Hicks, Lee, & Dralle (2000). To be consistent with more recent methods of accessing and discussing social studies topics, professors may help pre-service teachers make connections between theory, content, and pedagogy (Doolittle, 2001; Lee, 2008). These connections have also been supported by Mishra and Koehler’s (2006) model referred to as Technological Pedagogical Content Knowledge (TPCK), which encourages the infusion of technology as a part of teacher content knowledge to create seamless connections and synergistic relationships between technology and content area learning. The present study addressed those findings because it sought to infuse collaborative blog discussion as an integral part of disciplinary-literacy learning in pre-service social studies teacher education.
However, Kist (2008) found that pre-service teachers were wary of using blog sites or social networking sites in their personal lives as well as with their future students, because personal information may be shared online and they believe their jobs may be threatened as a result of parent concerns. Yet, such sites offer potential learning benefits through practices such as writing, discussion, and idea sharing, and are relevant in students’ lives (Kist, 2008). Practical applications such as using offline, or closed networks, which are sites that may not be accessed by anyone who is not invited to participate in the network, may reduce these concerns about safety and inappropriate access (Kist, 2008; Risinger, 2006). Consequently, the present intervention utilized an offline, closed-network blogging tool.

Researchers and teacher educators have offered substantial support for integrating digital or Internet technologies into the K-12 social studies classroom (Bull, Hammond, Ferster, 2008; de la Paz, 2005; Martin & Wineburg, 2008; Wright & Wilson, 2009). They have argued that these technologies may extend opportunities for navigating historical sources found on the Internet, evaluating text, and using Web 2.0 tools to enhance critical thinking about history. However, less attention has been given in social studies to the role computer-mediated communication may play in enhancing discussion or student collaboration when students engage in these practices. The modes by which adolescents engage in communication have rapidly started to shift from face-to-face communication to digital communication including, but not limited to, texting, blogging, social networking, and online messaging (Lenhart, Smith, Macgill, 2008). These changing practices must be considered in the content areas to align instruction in school
with the literate experiences students are engaged in outside of school with the added potential benefit of making content learning more relevant and applicable to students’ lives (Alvermann, 2002; 2008).

One caveat, addressed by the present study, is that preparation for integrating digital technologies into the social studies classroom, as Wright and Wilson (2009) argued, must begin at the pre-service teacher level. Traditionally, pre-service social studies teachers prefer to utilize teaching methods that are familiar from their experiences as students in elementary and secondary school (Fragnoli, 2005). However, their perceptions of teaching methods they have not experienced may be transformed through practice and experience with these methods in their teacher education classes (Doppen, 2007; Fragnoli, 2005). That assumption was an important aspect of the rationale for the intervention in this study as it pertained to the goal for pre-service social studies teachers.

**Summary**

This chapter reviewed the literature pertaining to disciplinary literacy in general and to learning and teaching history in middle-school and pre-service teacher education in particular. That literature supports the value and importance of the pedagogical goals of the present study. It also points to a general absence of instructional interventions that instantiate the concept of disciplinary literacy in authentic educational contexts and the specific benefits that might accrue to developing such interventions in history instruction within social studies. Finally, the literature reviewed identifies potential challenges, obstacles, and benefits to developing disciplinary literacy in history and to implementing
blogging as an intervention to promote disciplinary literacy among middle-school students and pre-service teachers.
CHAPTER THREE

METHOD

This chapter describes the methods used in this investigation. Specifically, following Reinking and Bradley (2008), it describes (a) the context and participants, including how the research sites were selected and participants recruited; (b) how the intervention was developed and implemented; and (c) how data were collected and analyzed to establish a baseline for determining progress toward the pedagogical goals and to address the questions guiding this investigation as outlined in Chapter 1. This chapter concludes with an explanation of the steps taken to insure that the methods of this formative experiment were rigorous and steps taken to increase its validity and rigor.

Context and Participants

This section explains how the middle-school and university contexts of this study were selected and how the middle-school teacher and university instructor were recruited and oriented to the project. Although an online blog space may also be considered a separate context and setting, in this study, the blog space was considered a tool to extend learning in the two contexts was not considered a separate setting. This section also reports data collected specifically to characterize and understand the middle-school and university contexts into which the intervention was introduced.

The Middle-School Context and Participants

Selection of school and recruitment of teacher. Reinking & Bradley (2008) suggest that initial investigations of an intervention using a formative experiment should not typically be conducted in ideal settings where success for the intervention
investigated is almost assured, nor should it be conducted in a setting so challenging that failure is likely. Thus, a middle-school with average to above-average student ability levels in core subject areas was sought for the present investigation. Townley Middle School (a pseudonym; subsequently Townley) fit these criteria. Townley was in a district designated as Title I, meaning that at least 40 percent of students attending schools in that district were from low-income families, and schools were provided government funding to be used for programs and resources to improve academic achievement in that district. Schools receiving Title-I funds are required to meet Adequate Yearly Progress (AYP) based on standardized test scores. Schools that do not meet AYP for two consecutive years risk government-mandated organizational restructuring and losing funding. Because it did not accept Title-I funds, Townley was not subject to these consequences, even if scores declined in a particular year. Thus, teachers at Townley were likely to have been more amenable to implementing new instructional methods than teachers in other schools in the district.

The selection of Townley as the site of this investigation began when I contacted Dr. Potts, a former colleague, (this and all subsequent names introduced are pseudonyms), who was a district curriculum coordinator and who had professional connections with several middle-schools in an area within approximately 50 miles from my residence to accommodate reasonable access. I contacted Dr. Potts in March of the school year prior to conducting this investigation. After discussing my criteria for a middle school to participate in this study, Dr. Potts suggested Townley because it fit my criteria and because she thought the assistant principal, Dr. Banks, would be interested in
this study. Dr. Potts contacted Dr. Banks in March, 2011 and gave her my contact information. A week later, Dr. Banks contacted me via email expressing interest in involving Townley in this study.

Dr. Banks also provided contact information for Ms. Wells, a social studies teacher at Townley, because she had expressed preliminary interest in participating. She recommended Ms. Wells because the administration viewed her as a capable and flexible social studies teacher, eager to try new learning activities in her classroom. I contacted Ms. Wells via email in April to schedule an initial meeting with her at Townley to discuss the intervention and project. I framed this meeting as an opportunity for us to discuss my dissertation study and to determine her interest in participating. Dr. Banks also attended that meeting to discuss logistical issues such as obtaining the principal’s signature for site permission, school procedures related to research and Institutional Review Board (IRB) procedures and requirements, including parental permission for students to participate, and creating class schedules for the following year.

During this meeting, I learned that Ms. Wells currently taught seventh- and eighth-grade history and that she had taught middle-school social studies for 13 years, all at Townley. Ms. Wells earned a bachelor’s degree in Secondary Social Studies Education and a master’s degree in Administration, but after completing her administration degree she decided to remain in the classroom because, as she revealed in a subsequent interview, she “loved teaching history and working with students” (Informal interview, 4/12). I introduced to her my proposed dissertation study, the concept of disciplinary literacy, and its potential contributions to teaching social studies. She
indicated interest in incorporating disciplinary literacy and technology into her history curriculum and viewed the proposed intervention as a feasible and engaging way to do so. However, before confirming Ms. Well’s participation in the project, we discussed our respective understandings of disciplinary literacy in teaching history to middle-school students to ascertain if we had reasonable agreement between our views in relation to the essential elements of the intervention.

Specifically, I began our discussion about the intervention by outlining principles of disciplinary literacy in history (e.g., using investigative and inquiry-based techniques to study history texts and making text-to-life applications), and I noted her reactions. I concluded that she agreed with the underlying assumptions of disciplinary literacy, although she seemed to prefer the term critical thinking to describe investigative processes of studying history, such as evaluating sources based on author perspective and corroborating information from multiple sources. For example, she noted, “I had difficulty integrating critical thinking into my classroom in the past, but I believe that critical thinking is really the point of studying history and want to learn more about activities focused on critical thinking to integrate into my history curriculum” (Informal interview, 4/12/11). She also indicated the revised South Carolina state standards for social studies, to be implemented the following academic year, required more instruction based in critical thinking. Indeed, she was eager to learn new ways to implement this type of instruction into her history curricula. On the basis of this initial meeting, we agreed to work together on this project.
**Initial planning.** During the meeting with Ms. Wells in April, we began initial planning of the intervention and how to integrate it into her curriculum. We focused on the following topics: (a) whether seventh or eighth grade would be more appropriate to focus on for this study; (b) non-negotiable, essential elements of the intervention that must be accommodated to carry out the intervention; (c) how we would collaborate to integrate disciplinary literacy into her classroom; (d) how often I would visit the class for observations and my role during those visits; and (e) Ms. Wells’ role in the research.

Ms. Wells and I decided that the project would involve one section of an eighth-grade South Carolina History class. One reason we selected eighth grade was that it would provide the pre-service teachers in secondary social studies education to work with students on the verge of entering high school where disciplinary literacy would conceivably be even more important in the study of history. That decision also led to discussion about blogging, one of the essential elements of the intervention. Because we originally planned for the blogging component of the intervention to be completed as an assignment outside of school, Ms. Wells wanted to use a class in which the students enrolled were likely to have access to the Internet outside of school. Dr. Banks agreed to help her determine which class might be most feasible to use, based on students’ access to the Internet and computers outside of school, to use after class assignments were made at the end of summer. Thus, both Dr. Banks and Ms. Wells were confident that the blog project would be manageable logistically.

We then discussed how we would instantiate and support disciplinary literacy in conjunction with the blogging activity. We decided that, based on the South Carolina
State Standards and the Common Core State Standards, which, according to Ms. Wells and Dr. Banks, had begun to influence the district’s stance on history instruction, we would promote disciplinary literacy by (a) making connections between texts and personal experience; (b) questioning the author and/or text; and (c) critically evaluating text based on evidence. Specific activities would include instruction based on Questioning the Author (QtA; see Beck & McKeown, 2001; Beck, McKeown et al., 1997; McKeown et al., 1993) and thinking in history strategies (Beyer, 2008).

We also discussed what texts participants would read and critically discuss during the blog project to supplement the usual readings Ms. Wells assigned, such as the history textbook, and to practice the aspects of disciplinary literacy as we had defined them. Because disciplinary literacy in history encourages students to think critically about historical events by reading various texts and sources, I suggested that we use supplementary texts that would present different points of view from those presented in the South Carolina history textbook for the class. Ms. Wells agreed, and we decided that we would search independently for primary and secondary sources that would represent minority voices or viewpoints in South Carolina history but that would follow the established topics in Ms. Wells’ eighth-grade curriculum. We would then evaluate these sources together prior to the start of school to determine which we would use as a stimulus for blogging. We also decided to hold at least one meeting the week before the new school year began to determine specific disciplinary literacy strategies and decide how to integrate these strategies into her instruction. During that meeting we would also discuss the supplementary texts that all participants would read and respond to in their
blog postings. We agreed to have brief planning meetings every other week throughout the intervention.

Further, we agreed that I would visit the class every day the week before the intervention to collect video data, structured field notes, and interview data with Ms. Wells to understand and characterize the environment. Thereafter, I would visit the class twice a week throughout the intervention to collect data including observing Ms. Wells implementing disciplinary literacy strategies and instruction in her classroom, video recordings, field notes, and interview data. Ms. Wells decided that she would lead all instruction and that my role would primarily be that of an observer or participant-observer. For example, I would observe while she was teaching, but I would walk around during small-group activities during the intervention to interact with students and gain student insights or opinions about the disciplinary literacy activities they would participate in during class. Ms. Wells and I would discuss, at the end of each week, which days during the following week would be most suitable for the intervention and for me to visit.

In formative experiments, researchers and teachers frequently negotiate roles during research with researchers offering teachers opportunities to participate in data collection and analysis and to assist in writing results, collaborating on presentations or papers, and so forth (Cole & Knowles, 1993). Ms. Wells and I discussed her role in this project, and she indicated that she did not wish to participate in the research other than in her role as a collaborating teacher. Thus, she was considered a participant. We did agree, however, that I would regularly share with her my thoughts and conclusions drawn
from my observational data and to discuss with her possible modifications to the intervention based on my data. Those discussions would typically be weekly.

**Understanding and characterizing the context.** As noted in the previous section, I visited Townley once in the spring before the formative experiment began in her class so that I could discuss the site with Dr. Banks and collect district demographic data. During the following August, in the third week of the school year, I visited Ms. Wells’ classroom every day for a week to understand and characterize the context in which the intervention would be implemented. Two video cameras, one in the front and one in the back of the classroom, recorded the entire class period each day I visited that week. I also recorded structured field notes guided by questions that focused observations on the relationships between instructors and students, interactions between students, the instructional and social climate of the classrooms, routines of the classroom, and instructor approaches toward social studies instruction (see Appendix A for guide). I considered these visits to Ms. Wells’ classroom to constitute direct observations, aimed at generating a thick description of the site (Creswell, 2007). During these observational visits I did not initiate interaction with the students. Ms. Wells explained to students that I was working with her to connect them to university students to blog about history texts, and I was observing her teaching methods so that I could help train the university students to become social studies teachers. A summary of the context follows based on my interviews during the spring and my visits in the following August.

Townley is a public middle-school (grades 6-8) located in a rural school district in South Carolina that serves approximately 5,600 students and employs approximately 900
teaching staff. Approximately 380 students attend Townley. It is one of four middle schools in the district, and, like all of the elementary and middle schools in the district, it offers traditional and Montessori educational programs. It has a diverse population of students in regard to academic achievement, socio-economic background, and race and ethnicity. Based on the state’s 2010 Annual Yearly Progress report card for the previous year, 72.8% of the students met or exceeded the 2010 Palmetto Assessment of State Standards in social studies. The district’s 2010 Free/Reduced Lunch Report classified 55% of Townley students at a poverty level with 206 of the 380 students enrolled receiving free or reduced lunch. The student population is Caucasian (59%), African American (37%), and Hispanic (4%). During my initial interview with Dr. Banks, she indicated that parental involvement in the school is low, and it is a “struggle to entice parents to volunteer during school hours or to participate in open house or parent nights at the school” (Interview, 4/19). She believed this lack of involvement was most likely a result of parents’ lack of ability to take time off from their jobs. The majority of the county’s population would be considered lower to lower-middle working class.

The school was built in 1955. Although the facilities have undergone minor renovations periodically, the school building has remained largely unchanged since it was built. For example, the original building was not designed to have air-conditioning, so all rooms had windows along the top of the wall facing the hallway and windows to the outside of the building for cross ventilation. Many of the interior windows were warped and unrepaired so that they did not close, which increased noise from the hallways in classrooms. However, the eighth-grade students in Ms. Wells’ class seemed accustomed
to that noise, even though it was sometimes difficult to hear what Ms. Wells was saying from the back of the room.

After receiving her class assignments for the 2011-2012 school year, Ms. Wells decided to have her fourth-period class participate in the intervention. She selected that class because it was smaller than her other classes, having 25 students as opposed to her other classes which had as many as 38 students. She believed, and I concurred, that it might be unreasonably difficult to coordinate a blog project with such large classes, and because it would have been ill-matched to the number of university students. All of the students in the selected class returned IRB-approved permission forms to participate.

The class consisted of 13 girls and 12 boys. Seven students were African American, 13 students were Caucasian, and five students were Hispanic. No student was classified as having a physical or learning disability. Ms. Wells had taught all but five of the students in the class the previous year in seventh-grade social studies. Ms. Wells indicated that her fourth-period class consisted of diverse student achievement levels in social studies based on in-class activities and scores on unit tests. Ms. Wells also informed me that in her school district eighth grade was typically when investigative activities using primary and secondary sources were integrated most prominently into the curriculum to prepare students for high school social studies.

Ms. Wells’ classroom was small, and might have comfortably accommodated 20 desks. However, the classroom had 38 desks in the room to accommodate her largest class. Therefore, for the sake of space, desks were placed in long rows spaced closely together. Ms. Wells sometimes appeared frustrated by this arrangement, but always
approached the situation in a jovial manner determined to make the best of the situation. In fact, Dr. Banks recommended Ms. Wells to participate in this experiment because she was “an established history teacher who was flexible and great to work with regardless of any obstacles she might face” (Interview, 4/19).

In the classroom, I observed and recorded Ms. Wells established routines. Each day, students began class by writing a journal entry from a prompt displayed on the classroom interactive whiteboard. The prompt changed daily. One day it might be a personal question such as “If you were a young Native American who came in contact with European settlers, would you help them out during their early period of settlement when they needed such assistance or let them suffer for trespassing on your homeland?” Students were requested to explain their response. Another day she might request a summary of what had been taught such as “Write in 5 sentences what you have learned in social studies this week.” Students’ journal entries were stored, along with all other completed assignments, in each student’s folder kept in a plastic crate at the back of the classroom. Ms. Wells used these folders as portfolios of students’ work to evaluate their progress during each nine-week grading period. Class time was then divided into teacher-directed or student-directed activities such as note-taking from PowerPoint slides, individual work on workbook activities or a project, and summary activities, such as question and short answer and fill-in-the-blank worksheets designed to help students learn information from notes they took from slides.

During students’ independent work, Ms. Wells walked around the classroom helping students and providing direction when asked. Students seemed to be comfortable
talking to Ms. Wells and asking questions. Even during teacher-centered activities involving note-taking, students were encouraged to ask questions about the notes and to offer personal connections, if they so chose. Students also seemed respectful toward Ms. Wells and followed classroom rules such as not talking to one another when she was teaching and talking quietly when doing work with a partner. Also, most students were observed working as assigned, and they seemed to be attending to the tasks at hand despite the noise outside of the classroom. Small-group work was not observed during these initial observations, and Ms. Wells volunteered that that she had trouble with group work because of the size of the classroom and the number of desks in the classroom. Also, Ms. Wells indicated that students often veered off-topic or task when participating in small-group work. However, her main concern with group work seemed to stem from logistical issues of having students move desks in the limited classroom space. Nevertheless, Ms. Wells encouraged students to work together in pairs for some activities, indicating she was not opposed to small-group work. Finally, although Ms. Wells indicated in the initial meeting and the summer planning meetings that she encouraged inquiry-based learning in her history classroom, I did not observe any such activities during my daily observations before the intervention was implemented.

The University Context and Participants

Selection of university and recruitment of instructor. Southeastern University (SU) was selected for this study because of its convenient access and because of its large program for preparing pre-service teachers, including students preparing to become social studies teachers. This study targeted integrating disciplinary literacy into a social studies
methods course, and Dr. Nelson was recruited because he was the instructor for all social studies methods courses at SU. We had our first meeting in August 2011, two weeks before the experiment began. During that meeting, I learned that Dr. Nelson held a Ph.D. in Social Studies Education and was a former high school social studies teacher. After completing his Ph.D., he began a career at a local Native American museum and cultural center.

Dr. Nelson was an adjunct professor, and was enthusiastic to have the opportunity to teach the social studies methods courses at SU. He was temporarily replacing a tenure-track faculty member who had originally agreed to participate in the study, but who left SU for another position at the end of the previous academic year. Dr. Nelson was hired shortly before the start date of the academic year, so our first meeting was the only planning meeting held before my study began. Similar to my initial meeting with Ms. Wells to discuss her participation, in this first meeting with Dr. Nelson, I discussed the concept of disciplinary-literacy toward gauging his interest in integrating disciplinary literacy into his course. Although he was unfamiliar with the term disciplinary literacy, he was committed to integrating inquiry-based teaching methods into his curriculum and saw the intervention as a “fascinating way to combine coursework and practice using inquiry-based instructional methods” (Interview, 8/16). This commitment aligned with my understanding of disciplinary literacy and the perspectives and emphases that this approach would imply for instruction in his social studies methods classes. Based on our discussion, Dr. Nelson and I agreed that he would participate in the project.
**Initial planning.** During this initial meeting, Dr. Nelson and I discussed the following: (a) which of his two methods courses would participate in the study, (b) non-negotiable aspects of the intervention that would need to be accommodated in his class, (c) how we would collaborate to integrate disciplinary literacy into his course, (d) how often I would visit the class for observations and my role during these visits, and (f) his role in the research.

Dr. Nelson was scheduled to teach two social studies methods courses, one for third-year pre-service teachers (juniors) and one for fourth-year pre-service teachers (seniors). These courses were the two methods courses required for students enrolled in secondary social studies education for typical students in the university teacher preparation program (e.g., they were not honors sections). We decided that the senior-level methods course would be the most appropriate course for the study because the number of pre-service teachers enrolled most closely matched the number of middle-school students enrolled in the eighth-grade class, which was necessary for blog pairing. Pre-service teachers would also be enrolled in a practicum, consisting of 60 field-based hours, through this course. I considered that the practicum may be relevant to the study because pre-service teachers would experience working with eighth-grade students and high-school students simultaneously and may be able to draw connections between the two populations. In addition, the experiences in the practicum typically provide pre-service teachers with opportunities to work with entire classes, sometimes guided by lesson plans in collaboration with their practicum teachers encourage. However, the blog
We then discussed how the essential elements of the intervention, particularly blogging, would be integrated into his course. Dr. Nelson decided to make blogging with the middle-school students a required project that would be 25 points of 100 points to determine a student’s final grade. We decided I would keep a spreadsheet to indicate pre-service teachers’ timeliness of blog postings, and I would provide Dr. Nelson with a copy of that sheet at the end of the semester before grades were due. Dr. Nelson and I also agreed that I would coordinate the pre-service teachers’ access to the middle-school students’ blogs, and the pre-service teachers would follow the weekly blog schedule that was most feasible for Ms. Wells’ class schedule. Further, Dr. Nelson recommended that students be required to write a post-project paper to reflect on three different aspects of the blog project: (a) analysis of pre-service teacher/middle-school student dialogue, (b) instructional strengths and weaknesses discovered during the project, and (c) influence of the project on future teaching. I agreed with this addition and, at Dr. Nelson’s request, I took responsibility for drafting a rubric for the project (see Appendix B), which Dr. Nelson then reviewed, agreeing that the rubric was suitable.

To expose pre-service teachers to the instructional strategies Ms. Wells was using to help structure middle-school students’ critical thought about their reading of history texts, we decided pre-service teachers should engage in the same strategies during coursework. Because I was working with Ms. Wells to create these strategies, and I would be observing her as she implemented this instruction into her curriculum, Dr.
Nelson preferred that I take responsibility for integrating disciplinary literacy instruction into his classroom. That decision had the advantage of insuring that the concept of disciplinary literacy would be represented validly, authentically, and consistently to the pre-service teachers. However, it limited somewhat the validity of data and conclusions in this context, because the instruction was not presented by a teacher educator with expertise in teaching social studies method and invested in that subject area. We agreed that I would teach six lessons, approximately 45 minutes each, focused on replica examples of the disciplinary literacy strategies that the middle-school students were learning in their South Carolina history class, followed by the opportunity for discussion and questions about the blog project. Dr. Nelson suggested that he would participate in the discussion about the blog project during class to help tie the project into other topics and issues the pre-service teachers were studying, thus mitigating to some extent the concern that the data would be less valid because I became, in effect, an assistant instructor in the class.

Based on the components of disciplinary literacy Ms. Wells and I agreed on in our initial meeting, I suggested that the disciplinary-literacy instruction lessons focus on the following components: (a) helping students make connections between texts and personal experience; (b) providing ways to structure students’ questioning of authors and/or texts; and (c) helping students critically evaluating text based on evidence. Dr. Nelson agreed, because these components aligned with his intended iterative cycles for the course. For example, Dr. Nelson’s syllabus topics included: (a) inquiry in social studies classrooms, (b) analyzing primary source documents, and (c) analyzing aspects of critical thinking.
We also decided that I would respond to all questions from his students about the blog project during the eight classes I attended and otherwise via email correspondence. Dr. Nelson indicated that he would encourage students to email me if I was not in class, but he would attempt to answer questions and provide information if he could. He also indicated that he would notify me either in person or via email of any questions students had for him on days that I was not in class. I received approximately two emails a week from pre-service teachers about the project. Most emails were related to technical issues or questions regarding actions pre-service teachers should take if their blog partner did not post reflections by the due date. I only received one email from a pre-service teachers asking for direction in how to respond to a student whose response indicated difficulty comprehending the assigned texts.

In this initial August meeting we agreed that I would attend each class where I implemented a disciplinary-literacy lesson, video-recording myself and the class during each lesson, and I would also collect data in the form of video recordings and field notes during the remainder of these class visits. We also decided that I would attend the second class of the semester to introduce the blog project to the pre-service teachers and conduct my initial direct observation of the class, collecting video and observational data. Dr. Nelson and I agreed that we would discuss my data and interpretations and possible modifications to the intervention on a bi-weekly basis, at minimum. However, like Ms. Wells, Dr. Nelson elected not to participate directly in data collection or analysis.

**Understanding and characterizing the context.** Because the university class only met once a week, an initial observation to provide a description of the site was
conducted during the second class meeting for two hours and 45 minutes. I recorded structured field notes (see Appendix C for guide) focusing on (a) instructor/pre-service teacher relationships, (b) pre-service teacher relationships, (c) instructional and social climate of the classroom, (d) class routines, and (e) instructor’s approach to social studies methods instruction. A video camera was also set up in the front of the room to record video data. I also consulted the university website to collect demographic data about the university’s student population. A summary of these data characterizing the university context follows.

SU is a land-grant university serving approximately 15,000 undergraduate students with 82% Caucasian students, 7% African American students, 2% Asian students, 1% Hispanic students, and 8% of students not indicating race. Sixty-eight percent of students at the university are in-state students. Twenty-eight pre-service teachers enrolled in Dr. Nelson’s undergraduate social studies methods course participated in the study. The course met once a week on Tuesdays for two hours and 45 minutes. The students in his class were in their senior practicum semester of their education programs and were taking coursework to teach at the secondary social studies level. However, approximately half of the students indicated in our initial discussion about the project that they were considering seeking middle-school teaching certification because the university did not offer an undergraduate middle-school education degree. My rationale for connecting secondary pre-service teachers with eighth-grade students will be discussed in the intervention section. Fourteen were male and fourteen were female. Three were African American, and 25 were Caucasian. All participants received
and returned IRB-approved permission forms providing consent to participate in the study.

Dr. Nelson’s syllabus indicated that each class was structured similarly. Observations confirmed that instruction matched the syllabus outline, and a class period consisted of an introductory lecture about different aspects of social studies education methods followed by group discussion about the lecture or about assigned readings. The course syllabus specified that assignments primarily consisted of papers (e.g., Professional Vision Statement), presentations (e.g., learning methodologies and strategies demonstrations), and projects (e.g., curriculum design project). The blog project from this formative experiment was also included in the required course projects.

Pre-service teachers seemed comfortable expressing their opinions and viewpoints about social studies education with Dr. Nelson, and he encouraged open communication in his classroom. During introductory lectures, Dr. Nelson encouraged pre-service teachers to address any questions or concerns they may have, and he was willing to guide his lecture to address those questions or concerns if they arose. For example, when Dr. Nelson outlined teacher-centered versus student-centered learning activities in social studies, one student, Camryn, expressed her interest in student-centered learning activities, but worried about the limitations of these types of activities due to the need for standardized testing preparation (Direct observation, 8/30). In this instance, Dr. Nelson redirected his lecture from outlining activities to engaging the class in discussion about ways that student-centered learning may be used, even when preparing students for standardized testing in social studies. Therefore, Dr. Nelson’s course was structured
conventionally, but he was flexible taking students’ questions and interests into consideration.

The Intervention

Essential Elements

The essential elements that define the intervention are (a) instruction and strategies guided by the concept of disciplinary-literacy strategy as integrated into a middle-school classroom and a university social studies methods course for pre-service teachers, and (b) blogging initiated by middle-school students responding to their reading of historical texts and online responses from their designated partners who are pre-service social studies teacher. These defining elements are considered essential because if their presence in instruction cannot be identified, the intervention investigated here no longer exists. The way these elements are implemented is subject to modification, but no modification can remove them entirely.

The Initial Version

After discussion with the middle-school teacher and the university instructor participating in this study, disciplinary-literacy strategies were initially planned to include adaptations of Questioning the Author (QtA; see Beck & McKeown, 2001; Beck et al., 1997; McKeown et al., 1993) and thinking in history (Beyer, 2008). QtA, a content-literacy strategy, introduces students to the perspective that authors are fallible, and authors may not always write in a manner that is clear and easy to comprehend, encouraging them to read texts repeatedly to question the author’s meaning to aid in comprehension of text. QtA has been found to be effective in structuring students’
thinking about the author’s role in shaping a text’s content and presentation (Beck & McKeown, 2001; Beck, McKeown, Sandora, Kucan, & Worth, 1996). As an instructional strategy, it has been found particularly useful in helping students read social studies textbooks, which typically present facts in a disconnected manner that may affect students’ understanding of text (Beck & McKeown, 2002). Queries, which according to McKeown and colleagues (1993) are a type of questions, are used in QtA to help students form connections between text and prior knowledge or what the author has said before to increase comprehension skills (McKeown et al, 1993). The following questions are typical Queries and were used in developing middle-school disciplinary-literacy strategies for this intervention (Beck et al., 1996):

1) What is the author trying to say?

2) What is the author’s message?

3) That’s what the author says, but what does it mean?

4) How does that connect with what the author already told us?

5) Does the author explain that clearly? Why or why not? What’s missing?

The purpose of these Queries is to enable students to grapple with a text while they read, making sense of ideas as they initially encounter them through a simulated dialogue with an author (Beck & McKeown, 2002). As such, these Queries may inspire critical thought, although they were designed to promote general understanding of a text toward determining conventional comprehension skills such as determining main ideas. Thus, for the present study the QtA Queries were adapted to focus explicitly on critical analysis
of history texts. These adaptations are illustrated in the framework for disciplinary literacy described in this section.

Beyer’s (2008) instructional approach, which provides guidelines for thinking about social studies, was selected to complement QtA. These guidelines are ordered so that the first letter of each guideline spells the acronym DECIDE, as follows:

- Define my goal
- Establish alternatives
- Consider consequences
- Investigate good and bad of each
- Determine the best alternative
- Express my choice

Beyer’s (2008) thinking guidelines were developed to be used in social studies, at various grade levels, and with different learning goals such as establishing bias, classifying information, evaluating sources for accuracy. Therefore, in the present study these guidelines were used in conjunction with QtA Queries to develop a framework for integrating disciplinary literacy into instruction. The framework consisted of the following eight questions:

1. What is the author trying to tell you or what do you think the author wants you to learn from this text? In other words, what is the purpose of reading this text?

2. What connections did you make with the text? Or, what did you think about when you read the text? (For example, did you think about any current events, information you learned in class, news, movies, or books you may have read?)
The aforementioned questions used as prompts were the foundation for disciplinary literacy-strategy instruction in this study, because they provided a method of structuring students’ reading of historical texts like historians (VanSledright, 2002a; Wineburg, 1991; 2001). The framework also establishes connections between prior knowledge and the information presented in a text, which may facilitate text-to-life applications, which is a defining aspect of disciplinary literacy (Moje, 2008).

QtA and DECIDE also supported middle-school students’ writing in the blogging activity, although they were not essential elements of the intervention, as noted in the previous section. Thus, they were subject to modification, including the substitution of
other activities aimed at instantiating disciplinary literacy, if data suggested that such a move might be warranted.

The blogging activity was the other essential element of the intervention. It was intended to reinforce practice with disciplinary literacy as participants read common supplemental history texts and critically reflected on and discussed those texts with their blog partners using an online discussion platform. Also, because writing a blog inherently entails reflection (Black, 2005; McDuffie & Slavit, 2003; Shoffner, 2007), it served to engage middle-school students in critical thought, thus furthering disciplinary literacy in social studies. Moreover, exposing middle-school students to pre-service teachers’ reactions to their blogs may help middle-school students create new knowledge (Maloney, 2007) about history.

Partnering eighth-grade students with secondary pre-service teachers to become blog partners, or blog buddies, a term Ms. Wells and I used with her students and which carried over into the university classroom, provided pre-service teachers with a window into middle-school students’ capabilities and viewpoints as well as how disciplinary literacy might be integrated into history instruction. Because pre-service teachers’ beliefs about instruction may be shaped by experiences in teacher education (Doppen, 2007), I reasoned that this project might provide them with a better understanding of how their future students may think about history texts. It would also allow them to engage in an instructional approach with potential to help students acquire disciplinary literacy, the second goal of this intervention. Moreover, blogging with an online partner to engage in critical discussion of history texts through a focus on reactions, reflection, and inquiry
supplemented and extended QtA’s original component of classroom discussion to simultaneously reinforce comprehension and learning skills.

All blogging between participants took place on the middle-school students’ blog sites. The blog platform, *My Big Campus*, facilitated online discussion. *My Big Campus* is a closed, academic social network site that is used solely for school-related activities. A closed, social network is a network restricted to invited users where users have their own personal online spaces, such as a blog, within the network and only other members may access those spaces to view, but not edit, content. Only the blog feature on *My Big Campus* was utilized for this project. Individuals who worked in the district’s office of technology provided technical support to set up the middle-school students’ blogs and provided usernames and passwords to access those blogs. Additionally, usernames and passwords were supplied to pre-service teachers so that they could access their partner’s blog. Pre-service teachers accessed their middle-school partners’ blogs by logging onto the *My Big Campus* site and scrolling through the list of students’ names in the middle-school class to find their buddy’s site.

**Implementing the Intervention**

**Disciplinary-literacy instruction.** I collaborated with Ms. Wells and Dr. Nelson throughout the intervention. As described in a previous section of this chapter, in our first meeting in April, Ms. Wells and I targeted three components of disciplinary literacy in social studies that would be the focus of this intervention and that were consistent with state and national history standards: (a) making personal and textual connections between history texts; (b) questioning an author’s intent in writing a history text; and (c)
accurately evaluating history texts by drawing conclusions based on textual evidence. Second and third meetings were held in August prior to the intervention. During these two meetings, Ms. Wells and I discussed components of disciplinary literacy, the disciplinary-literacy framework including QtA and DECIDE, strategies that may be developed using QtA and DECIDE, and how disciplinary literacy would fit into Ms. Wells’ curriculum.

During the second meeting, Ms. Wells agreed to create weekly lessons utilizing explicit strategies focused on the three aforementioned components. During the third meeting, three strategies that utilized a graphic organizer (see Appendix D), a note-making chart (see Appendix E), and a discussion web (see Appendix F) to structure disciplinary-literacy skills were discussed and designed, using the eight-question framework, described previously in this chapter, to be used in these lessons and strategies. These lessons would be incorporated into Ms. Wells’ eighth-grade history curriculum to support topics that she would be teaching. Ms. Wells and I also discussed the primary and secondary sources her students would read and respond to in their blogs. I presented four sources: *The Letterbook of Eliza Lucas Pinckney* (Pinckney, 1997); *South Carolina Women* (Bodie, 1991); *Voices of the American Revolution in the Carolinas* (Southern, 2009); *Voices of Carolina Slave Children* (Rhyne, 1999). Ms. Wells agreed on using all of the sources except *The Letterbook of Eliza Lucas Pinckney*, because she believed that the reading level was too difficult for most of the students in her class. Also, *South Carolina Women* contained an excerpt on Eliza Lucas Pinckney that Ms. Wells believed would be more interesting for students to read and was at a more
appropriate reading level. She also presented a secondary source, *The Thirteen Colonies: South Carolina* (Doherty & Doherty, 2005), that she thought would be useful for participants to discuss. This discussion leading to instructional decisions illustrates how we collaborated in creating the lessons.

Ms. Wells and I decided that we would select supplementary excerpts from the aforementioned sources for participants to read one week prior to each new reading. She would provide copies of the selected excerpts for her students to read outside of class, and I would provide copies of the same selected excerpts for the pre-service teachers to read outside of class. During this third meeting, Ms. Wells and I also decided that students would receive what she called minor grades for each blog post; minor grades in Ms. Wells’ class counted for 20 percent of students’ overall nine-weeks average. Ms. Wells indicated that most of her students failed to complete homework assignments, and she thought assigning a grade for each post would encourage students to complete each reading and post in a timely manner. Therefore, Ms. Wells would check students’ blog posts to assign a grade, but also to read students’ reactions to the history texts and thus inform subsequent instruction including the extent to which skills related to disciplinary-literacy were evident. However, I also checked posts weekly as data to help determine enhancing or inhibiting factors to the pedagogical goals of the intervention to inform modifications.

**Blogging.** Ms. Wells and I decided she would designate one class period at the beginning of the intervention to help students set up their blogs in the school computer lab. Students would then blog once a week, outside of class. We originally decided that
the blogs would be created and managed by the middle-school students in keeping with the spirit of blogs as a personal space for reflective writing and discussion to be shared, in this instance with their partners their teacher, the university professor, and with me in the role of researcher. However, during the third meeting, Dr. Banks notified us that the district had implemented a new policy requiring that all blogs be set up and managed by district personnel using My Big Campus (see Appendix G for screenshot of homepage). Consequently, Ms. Wells and I decided that we would use a class period at the beginning of the intervention to familiarize middle-school students with using My Big Campus. Students would then post their first blog entry during that period so that we could assist students as needed. Dr. Nelson and I agreed that I would coordinate pre-service teachers’ access to My Big Campus, and I distributed directions to accessing My Big Campus and provided pre-service teachers with login information to access their partner’s blog site, as supplied by the technology coordinator in the district office. I would also provide support to the students in Dr. Nelson’s class concerning any technological problems they might encounter using the site.

Middle-school students were partnered with pre-service teachers prior to the beginning of the intervention, and no participants changed partners during the project. To create partners for blogging, the middle-school students were given the opportunity to indicate whether they preferred a male or female pre-service teacher. Three female middle-school students indicated a preference for blogging with a female pre-service teacher and were paired accordingly. Other students did not indicate a preference. All
other pairings were matched sequentially from an alphabetical list of students and pre-service teachers.

The blogging schedule was originally structured so that middle-school students would post reactions to the history readings or to their blog buddy’s response to a previous posting by Tuesday of each week. The pre-service teachers would respond by the following Thursday evening. The initial blog exchange between middle-school students and pre-service teachers was framed as an informal introduction. Middle-school students were provided their blog buddy’s name and were instructed to introduce themselves to their buddy in 8-10 sentences sharing information such as descriptions of family, hobbies, favorite subjects, books, or films. Students also included information regarding their interest in history. Pre-service teachers responded by acknowledging their buddies’ interests and then providing information about their own personal interests and so forth. This exchange was intended for participants to establish rapport with their assigned blog buddy.

Subsequent exchanges focused on reactions to Ms. Wells’ assigned history texts that we had selected during our planning meetings. The texts followed events in South Carolina history being studied in the middle-school class. The texts were provided to the pre-service teachers, as photocopies, to read along with the middle-school students at least one week prior to the date the post was due. All participants were assigned new texts, which were supplemental to content being taught in Ms. Wells’ classroom, to read every other week, alternating between reacting to the history text assigned one week and then responding to their blog buddy’s response to their reaction the next. All readings
were 5-7 paragraphs each (sample texts are provided in Appendices H-I). These relatively short texts were selected purposefully to increase the likelihood that students would focus on reading critically and not be distracted by a lengthy reading assignment.

Table 3.1 overviews the supplementary texts and the reading schedule in this study between the informal introductory blog and the final blog during the intervention phase. This schedule also determined the iterative cycles of iterative data analysis, which will be described in subsequent sections.

Table 3.1

Reading Schedule

<table>
<thead>
<tr>
<th>Week</th>
<th>Topic &amp; Supplementary Text</th>
<th>Type of Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 &amp; 2</td>
<td>Introductions</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>No assigned reading</td>
<td></td>
</tr>
<tr>
<td>3 &amp; 4</td>
<td>Colonial Women in the Carolinas</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td>“Affra Harleston Coming” – excerpt from <em>South Carolina Women</em> (Bodie, 1991)</td>
<td></td>
</tr>
<tr>
<td>5 &amp; 6</td>
<td>Slavery in the South Carolina</td>
<td>Primary</td>
</tr>
<tr>
<td></td>
<td>“They Said I Was Worth $400” – excerpt from <em>Voices of South Carolina Slave Children</em> (Rhyne, 1999)</td>
<td></td>
</tr>
<tr>
<td>7 &amp; 8</td>
<td>Plantation Life in South Carolina</td>
<td>Secondary</td>
</tr>
<tr>
<td></td>
<td>“Eliza Lucas Pinckney” – excerpt from <em>South Carolina Women</em> (Bodie, 1991)</td>
<td></td>
</tr>
<tr>
<td>9 &amp; 10</td>
<td>American Revolution in South Carolina</td>
<td>Primary</td>
</tr>
<tr>
<td></td>
<td>“The Battle at Stallions” excerpt from <em>Voices of the American Revolution</em> (Southern, 2009)</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>Closings and Farewells</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>No assigned readings</td>
<td></td>
</tr>
</tbody>
</table>
Data Collection and Analysis

Data in a formative experiment are gathered and analyzed in separate phases with each phase serving a different purpose. Data are collected first to create a detailed description of the context and to characterize the participants. The collection of that data and the results were reported previously in this chapter. Data are also collected just prior to implementing the intervention to establish a baseline from which a researcher can determine the extent to which progress is being made toward reaching the pedagogical goal. Additionally, data are collected and analyzed during the intervention phase to determine factors that enhance or inhibit progress in reaching the goal, to determine what modifications of the intervention those data might suggest, and to the extent to which the environment might be affected by the intervention. Finally, data are examined more holistically in what has been termed a retrospective analysis (Gravemeijer & Cobb, 2006). Unanticipated outcomes of the intervention and the extent to which the environment may have been transformed often emerge during that more holistic analysis. The remaining sections of this chapter explain how data were gathered and analyzed during these phases beginning with baseline data. Results for the baseline data are reported in this chapter, whereas results pertaining to modifications are reported in Chapter 4 and the results of the retrospective analysis in Chapter 5.

Baseline Data

In a formative experiment, baseline data establish a point of comparison to determine progress toward the pedagogical goals during the intervention. Given the first goal of this investigation, it was necessary to determine the extent to which relevant
disciplinary-literacy skills existed among the eighth-grade students before the intervention. Likewise, given the second goal, it was necessary to determine the extent to which pre-service teachers could determine and implement instructional techniques to help structure eighth-grade students’ disciplinary-literacy skills. Baseline data can be quantitative, qualitative, or both. In the present investigation, partly because no pertinent, valid and reliable quantitative instruments were available, baseline data were established using qualitative analysis including an established assessment referred to as a Strategic Content Literacy Assessment (SCLA) (Alvermann, Gillis, & Phelps, 2012). See Appendices J-O for examples of the SCLAs used in this study.

**Strategic Content Literacy Assessment.** The SCLA is a disciplinary-based informal reading assessment adapted from Brownlie, Feniak, and Schnellert’s (2006) Strategic Reading Assessment, which focuses on generic reading practices. In general, the SCLA is a type of assessment with clearly articulated curriculum targets to provide feedback on what and how students learn. Teachers can customize these targets for literacy strategies and skills specific to any content area. To develop an SCLA, teachers first determine content-specific literacy-based skills to be assessed. They then select a short content-area text relevant to the current topic being studied and develop three or four questions or prompts that address the targeted strategies or skills to have students respond to after reading the text. Teachers develop a rubric targeting the skills assessed in the SCLA to determine individual students’ and the overall class’ specific strengths and weaknesses using the skills targeted in the SLCA. This rubric may be scored quantitatively by assigning point values to each targeted skill or qualitatively by writing
descriptions of how students did or did not use the targeted skills (Alvermann et al., 2012). In the present study, an SCLA was developed to establish participants’ use and exhibited skills relative to the targeted components of disciplinary literacy in history prior to the intervention.

The middle-school SCLA assessed the targeted disciplinary-literacy components addressed in the intervention: (a) making connections between personal and prior knowledge with texts, (b) questioning authors or texts, and (c) drawing conclusions based on evidence. Students completed the SCLA during the first part of a class period the week prior to the start of the intervention. To complete the baseline SCLA, middle-school students read a short, seven-sentence secondary source text, “The Lady of Cofitachequi” (Doherty & Doherty, 2005), about a Native American woman in Carolina history. Ms. Wells selected this text because it was relevant to the content being taught and because she considered it appropriate for students in her class at the lowest reading level. To determine if vocabulary interfered with understanding of text, I instructed students to circle any words that they did not understand. Students read the texts independently, and then responded to four questions that targeted the aforementioned disciplinary-literacy components. Responses were then qualitatively evaluated using a rubric (see Appendix P).

The use of a SCLA with pre-service teachers is not typical because it is a content-literacy assessment developed for K-12 classrooms, but for this study, an SCLA was used to provide descriptive information about how pre-service teachers approached disciplinary literacy instruction, specifically the components of disciplinary literacy that
were targeted in this intervention. By having pre-service teachers describe how they would help a middle-school student respond to history texts before they began receiving instruction in disciplinary literacy, I could better determine if their instructional techniques improved during the intervention. Thus, the pre-service teacher SCLA assessed the targeted disciplinary-literacy instructional techniques addressed in the second goal of the intervention: (a) helping students make connections between personal and prior knowledge and text, (b) helping students question the author and text, and (c) helping students draw conclusions based on evidence. To understand the extent to which pre-service teachers were aware of the components of disciplinary literacy among middle-school students and whether they could utilize instructional techniques to help students engage in these components, they were provided with a sample SCLA completed by an anonymous middle-school student the week prior to the start of the intervention. The sample SCLA was selected purposefully because I judged it to be neither the most or least well-developed response compared to the other middle-school student SCLA responses. I conferred with Ms. Wells about my decision, and she agreed that the SCLA I selected was representative of a typical student’s response. After reading the sample SCLA, pre-service teachers were given three questions that targeted instructional strategies for the disciplinary literacy skills addressed in the sample SCLA.

I used a rubric to qualitatively characterize middle-school students’ and pre-service teachers’ response to the SCLA. The rubric was adapted from Alvermann et al., (2010); rubrics for each class followed the same general structure. They are included in
Appendix P, and a scored SCLA from a middle-school student and a pre-service teacher are included in Appendix Q.

**Results for the middle-school students.** Most of the middle-school students were able to make some connections between texts or prior knowledge. Although there were nuances in the level of description students provided to explain their connections, most students were able to use this component of disciplinary literacy before the intervention began. Only seven students provided responses that did not evidence the ability to make connections between texts or prior knowledge. Although the majority of students were also able to identify questions they would ask the author or text, these questions were superficial and did not indicate well-developed skills in disciplinary literacy as it is was defined in this study for reading history texts. Only two students’ responses invoked critical thought. Most students were unable to critically evaluate the text or draw a conclusion about the text beyond providing a factual statement found in the text. A common response for the question that targeted skill was for students to rewrite the first or last sentence of the text provided in the SCLA. Only three students were able to draw rational and somewhat critical conclusions and provided evidence to support their conclusions. Overall, the middle-school classroom presented a range of disciplinary-literacy skill level although all of their responses indicated an opportunity for improvement.

**Results for the pre-service teachers.** Most pre-service teachers were able to provide responses that identified how they could use a student’s prior knowledge to help them form connections with text. Many of the responses identified general knowledge
of a appropriate procedure for helping students make connections to prior knowledge (e.g., ‘I’d ask the student questions to help them think about what they already know and use their answers to make connections’), but there was no evidence of how to use this procedure using specific questions or prompts. As the previous example displays, the majority of pre-service teachers were able to identify that questioning could be used to support a students’ questioning of the author or text, but methods for doing so were not specified. Similarly, most responses identified that asking inquiry-based questions may be necessary to help students critically evaluate texts, but only general suggestions were made for how that might be accomplished instructionally. In fact, only two techniques were identified across most pre-service teachers’ responses: (a) instructing students to ask themselves why they drew a particular conclusion or (b) instructing students to investigate further. Overall, baseline pre-service teacher SCLA evaluations indicated that pre-service teachers were able to describe general techniques, but were unable to indicated specific examples of those techniques or how those techniques might be implemented instructionally.

**Data Collection and Analysis during the Intervention**

Data collection in this formative experiment addressed the following four questions in Reinking and Bradley’s (2008) framework:

1. What factors, based on data collection and iterative data analysis, enhance or inhibit the intervention’s effectiveness in relation to the pedagogical goals?
2. How can the intervention be modified in light of these factors?
3. What unanticipated positive or negative outcomes does the intervention produce?
4. Has the instructional environment changed or been transformed as a result of the intervention?

To determine enhancing or inhibiting factors that might suggest modifications to the intervention and to detect any changes in the instructional environments, an embedded, single-case study (Yin, 2009) was utilized to analyze data iteratively throughout the intervention. Retrospective analysis (Gravemeijer & Cobb, 2006) conducted after the intervention determined unanticipated positive or negative outcomes of the intervention and connected findings to theory. The following subsections will describe sources of data collected, selection of focal participants, and methods of iterative and retrospective data analysis. Results of iterative data analysis will be reported in Chapter 4, and results of retrospective analysis will be discussed in Chapter 5.

Sources of data. Tests have been developed to increase validity in qualitative research in the social sciences (Yin, 2009). One such test, termed construct validity, identifies correct operational procedures for concepts being studied (Yin, 2009). Construct validity limits subjectivity, a common concern in qualitative research, in the reporting of results. One important method used to increase construct validity is the collection of multiple sources of data (Creswell, 2007; Yin, 2009), which has also been identified as a component of rigor in formative experiments (Reinking & Bradley, 2008). In this study, multiple sources of data were collected to determine factors enhancing or inhibiting the intervention’s effectiveness in the two settings of the study: (a) Townley, the middle school; (b) Southeastern University. Different data were collected in each
setting, as summarized in Table 3.2. Table 3.3 summarizes data sources, procedures, and purposes.

Table 3.2

*Data Collected for Each Setting*

<table>
<thead>
<tr>
<th>Setting</th>
<th>Data Collected</th>
</tr>
</thead>
<tbody>
<tr>
<td>Townley</td>
<td>Field notes</td>
</tr>
<tr>
<td></td>
<td>Participant observations</td>
</tr>
<tr>
<td></td>
<td>Informal interviews with students and Ms. Wells</td>
</tr>
<tr>
<td></td>
<td>Semi-structured interviews with focal</td>
</tr>
<tr>
<td></td>
<td>students and Ms. Wells</td>
</tr>
<tr>
<td></td>
<td>Video recordings</td>
</tr>
<tr>
<td></td>
<td>Pre-, mid-, and post-intervention SCLA</td>
</tr>
<tr>
<td></td>
<td>data</td>
</tr>
<tr>
<td></td>
<td>Blog postings</td>
</tr>
<tr>
<td>Southeastern University</td>
<td>Field notes</td>
</tr>
<tr>
<td></td>
<td>Participant observations</td>
</tr>
<tr>
<td></td>
<td>Informal interviews with pre-service teachers and Dr. Nelson</td>
</tr>
<tr>
<td></td>
<td>Semi-structured interviews with focal pre-service teachers and Dr. Nelson</td>
</tr>
<tr>
<td></td>
<td>Video recordings</td>
</tr>
<tr>
<td></td>
<td>Mid-intervention reflective questionnaire</td>
</tr>
<tr>
<td></td>
<td>Pre-, mid-, and post-intervention SCLA</td>
</tr>
<tr>
<td></td>
<td>data</td>
</tr>
<tr>
<td></td>
<td>Blog postings</td>
</tr>
</tbody>
</table>

Table 3.3

*Data sources, procedures, and purposes*

<table>
<thead>
<tr>
<th>Data source</th>
<th>Procedure</th>
<th>Purpose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informal meetings with Ms. Wells and Dr. Nelson (pre)</td>
<td>Meetings were conducted using a digital audio recorder to record the meetings and free-style notes were taken by the research, which were used to develop description of</td>
<td>To introduce the intervention and ascertain Ms. Wells’ and Dr. Nelson’s interest in participating in the intervention. To gain background information</td>
</tr>
<tr>
<td>Methodology</td>
<td>Description</td>
<td>Purpose</td>
</tr>
<tr>
<td>-------------</td>
<td>-------------</td>
<td>---------</td>
</tr>
<tr>
<td>Semi-structured interview with Dr. Banks</td>
<td>A meeting with Dr. Banks was held in April before the formative experiment began. The interview shaped the meeting, but Dr. Banks also offered a tour of the site after the meeting.</td>
<td>To gain demographic information about the middle-school research site and school district. To gain an administrator’s perspective on technology in the school and the type of instruction and curriculum common in the social studies department at the school.</td>
</tr>
<tr>
<td>Semi-structured interviews (Patton, 2002) with Ms. Wells and Dr. Nelson (pre, mid, post)</td>
<td>Pre-, mid-, and post-intervention interviews were conducted using a digital audio recorder to record the interviews, which were transcribed by the researcher. Interviews ranged from 15-30 minutes each.</td>
<td>To gain background information about Ms. Wells’ and Dr. Nelson’s perceptions of their respective classes and school settings and to inform iterative and retrospective data analysis.</td>
</tr>
<tr>
<td>Semi-structured interviews (Patton, 2002) with eight focal participants (pre, mid, post)</td>
<td>Pre-, mid-, and post-intervention interviews were conducted using a digital audio recorder to record the interviews, which were transcribed by the researcher. Interviews ranged from 10-15 minutes each.</td>
<td>To gain student and pre-service teacher perspectives about the intervention to inform iterative and retrospective data analysis.</td>
</tr>
<tr>
<td>Direct observations (Yin, 2009) (field notes and video recordings) of the middle-school class</td>
<td>Field note observations were conducted and video recordings were taken of the whole class for five consecutive days before the intervention began using a field note guide (see Appendix A) and Flip video cameras.</td>
<td>To gather an understanding of the classroom environment and set the classroom context before the intervention was implemented.</td>
</tr>
<tr>
<td>Direct observations (Yin, 2009) (field notes and video)</td>
<td>Field note observations were conducted and a video</td>
<td>To gather an initial understanding of the layout</td>
</tr>
<tr>
<td>Activity</td>
<td>Description</td>
<td>Reason</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Recordings) of the university methods class</td>
<td>Recording was taken for one class meeting (2 hours and 45 minutes) before the intervention began using a field note guide (see Appendix C) and a Flip video camera.</td>
<td>of the social studies methods course.</td>
</tr>
<tr>
<td>Baseline SCLA</td>
<td>See previous section for comprehensive description.</td>
<td>To determine participants’ understandings of disciplinary literacy prior to the start of the intervention.</td>
</tr>
<tr>
<td>Mid-intervention reflection questionnaire</td>
<td>A questionnaire consisting of 7 open-ended questions (see Appendix R) was distributed to all of the 28 pre-service teachers at the mid-point of the intervention.</td>
<td>To gain a holistic understanding of pre-service teachers’ perceptions, reactions to, and concerns about the blog project and disciplinary literacy instruction.</td>
</tr>
<tr>
<td>Mid-, and post-intervention SCLA</td>
<td>Mid- and post-intervention SCLA of similar length and the same format of the baseline SCLA were administered to both populations of participants. Only the text selection varied in these SCLA, but the text was from the same resource as the baseline SCLA (see Appendices L-O).</td>
<td>To determine and describe student progress in using disciplinary-literacy strategies and pre-service teacher progress in utilizing disciplinary-literacy instructional techniques.</td>
</tr>
<tr>
<td>Informal interviews (Patton, 2002) with Ms. Wells and Dr. Nelson during the intervention</td>
<td>Extensive notes were taken following each informal interaction with Ms. Wells and Dr. Nelson, such as unstructured discussions, and were compared with video or audio data for accuracy.</td>
<td>To gain the instructors’ insights into, reactions to, or concerns about the intervention.</td>
</tr>
<tr>
<td>Participant observations (Yin, 2009) including informal interviews of middle-school class</td>
<td>Participant observations were recorded during 25 class visits. Notes were free-style observational. Direct quotes were written down as accurately as possible.</td>
<td>To observe students’ interactions during class activities and how students interacted with and used disciplinary literacy strategies they were using.</td>
</tr>
<tr>
<td>Methodology</td>
<td>Description</td>
<td>Purpose</td>
</tr>
<tr>
<td>---------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Participant observations (Yin, 2009) including informal interviews of the</td>
<td>Participant observations were recorded during 5 class visits while pre-service teachers participated in disciplinary literacy lessons. Direct quotes were written down as accurately as possible directly after talking with or listening to pre-service teachers and compared with video data for accuracy.</td>
<td>To observe pre-service teachers’ responses to engaging in and using disciplinary literacy strategies they were learning in class.</td>
</tr>
<tr>
<td>university methods class</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Blog postings</td>
<td>Middle-school students and pre-service teachers posted a blog response to supplemental history texts each week for 10 weeks (totaling 20 blog posts for each pair of blog partners) using My Big Campus (see Appendices S and T for sample exchanges from two pairs of focal participants).</td>
<td>To study middle-school students’ understandings of and abilities to transfer disciplinary-literacy skills to their blog responses to history texts. Also, to gauge pre-service teachers’ understandings of and abilities to transfer disciplinary-literacy instructional techniques to their blog partners’ responses to history texts.</td>
</tr>
<tr>
<td>Video/audio data of middle-school classroom</td>
<td>Video/audio recordings were collected during each class visit using two Flip video cameras (one in the front of the room and one in the back). Both whole class recordings and recordings focused on focal students were collected.</td>
<td>To triangulate data describing the classroom environment and focal student and participant observations.</td>
</tr>
<tr>
<td>Video/audio data of university methods class</td>
<td>Video/audio recordings were collected during each class visit using one Flip video camera stationed at the front of the classroom. Whole class recordings</td>
<td>To triangulate data describing the classroom environment and focal student and participant observations.</td>
</tr>
</tbody>
</table>
were collected because the room was small enough to capture all students.

**Focal students.** To provide a comprehensive understanding of each setting, data were collected from the middle-school teacher, university instructor, the middle-school class, the university class, and four purposefully selected (Patton, 2002) pairs of blog partners. Pairs were selected because the online aspect of the intervention created a setting where participants collaborated, which intertwined populations and complicated analysis of individual focal participants.

Focal participant pairs yielded depth, insight, and rich understanding to the analysis of the larger class settings. Maximum variation sampling (Patton, 2002) was used to purposefully select focal pairs. Patton (2002) described maximum variation sampling as “purposeful sampling aim[ed] at capturing and describing the central themes that cut across a great deal of variation” (p. 235). This sampling procedure allowed for detailed study of students of varying academic and disciplinary-literacy ability levels and of different backgrounds in race or ethnicity and provided information-rich samples to strengthen iterative data analysis. From baseline data including the SCLA and informal interviews with Ms. Wells, the middle-school class, which was racially and culturally diverse, consisted of a range of student academic achievement and disciplinary literacy skills. However, the pre-service teacher class at the university was not particularly diverse in race and culture, and pre-service teachers’ baseline SCLA responses did not represent extreme variance in disciplinary-literacy instructional techniques. In addition all pre-service teachers were in good academic standing. Thus, the selection of the focal
pairs was based on characteristics of the middle-school students, not the pre-service teachers.

To select middle-school students, baseline SCLA evaluations were first consulted and considered to determine the range of students’ disciplinary literacy skills identified prior to the intervention. In addition, students’ gender and race were considered to select a sample of students representative of the whole class. On that basis, four students were selected. Ms. Wells was then consulted to determine if this selection also represented a range of academic achievement levels. She agreed with the selection.

The four focal pairs selected were: (a) Talia, an African American female middle-school student with a low understanding of disciplinary literacy and low academic achievement and her partner, Jill, a Caucasian female pre-service teacher; (b) Rosalyn, a Hispanic female middle-school student with an average understanding of disciplinary literacy and an average academic achievement and her partner, Ellen, a Caucasian female pre-service teacher; (c) Bennett, a Caucasian male middle-school student with an average understanding of disciplinary literacy and high academic achievement and his partner, Jason, a Caucasian male pre-service teacher, and (d) Jacob, a Caucasian male middle-school student who exhibited relatively high disciplinary literacy skills in history and high academic achievement and his partner, Charles, a Caucasian male pre-service teacher. Sample blog excerpts from two focal pairs of participants may be found in Appendices S and T.

Iterative cycles and modifications. Iterative data analysis was conducted using an embedded, single-case study approach (Yin, 2009). Case study research involves the
study of an issue or process, such as an intervention, explored through one or more cases within a bounded system (Creswell, 2007; Yin, 2009), such two classrooms in an academic semester. In an embedded, single-case study (Yin, 2009), a singular case is studied in-depth through analysis of subunits embedded within the case. This type of analysis provides opportunities for extensive analysis of a case, which enhances insight into the single case (Yin, 2009). The present investigation used an embedded, single-case study to examine the process of how the intervention was implemented and modified in both classroom settings.

However, cases may contain multiple units of interest that inform the case, and complexity thus becomes an issue in case study research (Patton, 2002). A solution is to organize the analysis by focusing on specific units, or embedded units of analysis (Yin, 2009), within the study to understand the overall case. In this study, five iterative cycles of instruction, following the topics outlined in the reading schedule in Table 3.1, were the units of analysis to determine factors that enhanced or inhibited the intervention’s effectiveness in achieving the pedagogical goals and for consequent modifications of the intervention. These embedded units within the intervention were analyzed in sequence using constant comparative methods (Glaser & Strauss, 1967) to identify themes that emerged from the data. Results from each cycle would inform modifications to the next cycle. Figure 3.1 represents the structure of the embedded, single-case study used in this intervention.
To iteratively analyze the embedded units of analysis, to describe case progress or change, and to determine modifications, I used an adaptation of McKenney, Nieveen, and van den Akker’s (2006) iterative process cycle in design research. My adaptation of this process is represented in Figure 3.2.
Figure 3.2. The iterative process of analysis to determine modifications.

I collected and analyzed qualitative data every two weeks, for each embedded unit of analysis in the single-case study, throughout the intervention as described in Figure 3. This analysis identified enhancing or inhibiting features of the intervention and determined modifications to the intervention. Analysis utilized constant comparative methods (Glaser & Strauss, 1967) through a process of open and axial coding (Corbin &
Strauss, 2008) to relate concepts and categories found within raw data (see Table 3.2 for data collected in each setting), which informed modification decisions. Open coding was used to break down data into coded segments. Axial coding allowed for the connection of codes and creation of concepts and categories (Corbin & Strauss, 2008) across settings. Every two weeks I read through field notes, interviews, participant observations, and watched video data and developed codes to sort, organize, and label data. I then formed connections between codes to construct categories. These categories informed the identification of enhancing or inhibiting features of the intervention. Figure 3.3 represents this analytic process using a representative embedded unit of analysis.

*Figure 3.3. Process of iterative data analysis.*
A representative sample of coding with excerpts from my data can be found in Appendix U. Results of iterative data analysis are reported in Chapter 4.

**Retrospective Data Analysis**

A retrospective analysis (Gravemeijer & Cobb, 2006) was conducted in February after the intervention phase ended the second week in November. A retrospective analysis considers holistically all the data collected during the investigation and aims to “contribute to the development of a local instructional theory” (p. 37) and to construct an overall understanding of the progress and outcomes of the formative experiment. In retrospective analysis, the entire data set is analyzed to provide overarching ideas, themes, or constructs concerning the intervention to develop or reconstruct an optimal instructional sequence. The purpose of this analysis is to determine an appropriate sequence of the intervention based on iterative and post-study insights, which serve to empirically ground results of the formative or design experiment (Gravemeijer & Cobb, 2006). Therefore, because modifications took place during the intervention, data must be revisited to describe and delineate insights gained from the study as a whole and to consider how an intervention with a greater probability of success might be implemented in a similar context in the future. This process involves refining or refuting conjectures made during the intervention to justify final claims or assertions (Gravemeijer & Cobb, 2006).

Gravemeijer and Cobb (2006) suggested using a variant of the constant comparative methods (Glaser & Strauss, 1967) approach to work through data chronologically. Retrospective data analysis in this study was chronological, but
specifically, it was conducted in six stages that Duffy (2001) employed in analyzing data from her formative experiment. In that study, Duffy (2001) examined the outcome of a balanced literacy program intervention on the reading growth of elementary-level struggling readers. I chose her approach as a model because I also aimed to study the outcome of the intervention on the middle-school students’ and pre-service teachers’ growth and progress in using and understanding disciplinary literacy. The six stages of my retrospective analysis closely followed the phases Duffy established for post-study analysis. Following Duffy, in Phase I, I utilized Merriam’s (1998) approach to creating a descriptive account of the data, as McKenney et al. (2006) recommend using rich descriptions to support the context, situation, design decisions, and research results in formative or design research. Phase II consisted of reviewing all my notes, recordings, and videos to begin to code data to construct categories across the data (Merriam, 1998).

In Phase III, I created records (Duffy, 2001) in digital folders for each of my constructed categories, which contained supporting data. After creating these folders, I constructed tables and charts to summarize data within and across categories, and I coded the summaries to form connections or to note discrepancies (e.g. Strauss & Corbin, 1998).

Phase IV entailed determining overall categories of progress during the experiment by comparing or contrasting codes from Phase III. Appendix V portrays the analysis processes of Phases III and IV with examples. I also began to triangulate data sources during this phase (Yin, 2009). In Phase V, I determined themes, based on results from Phase IV to summarize the intervention during the course of the experiment. Finally, in Phase VI, I revisited and discussed data findings with my advisor to increase finding
validity. The results of the retrospective analysis are presented and discussed in Chapter 5.

**Methodological Rigor**

Methodological rigor in this investigation can be considered from three standpoints: (a) validity of the methodological approach, (b) standards of rigor for conducting a particular formative experiment, and (c) standards of rigor for collecting and analyzing qualitative data. Although consequential validity (Messick, 1992), which was established through articulation of how the intervention might make a difference in accomplishing the pedagogical goals and established general validity in using a formative experiment approach, the second and third standpoints will be the focus of this section. Because the second and third standpoints overlap, they will be discussed in conjunction.

First, to establish rigor in this formative experiment, I followed Hoadley’s (2004) suggestion that systemic validity, in which theory, research, and practice are closely aligned, must be met in design-based research. I explicitly described how theory grounded this study and intervention and how research and practice were coherent with that theory. Additionally, multiple sources of data were collected and different sources of evidence were corroborated to determine factors that enhanced or inhibited progress to accomplishing those defined goals through a process of triangulation, which is recommended in qualitative research (Creswell, 2007) and formative experiments (Reinking & Bradley, 2008). Moreover, attention and openness to all sources of data to understand a wide range of factors that may influence an intervention was present in this
study and is necessary for rigor in formative experiment research (Reinking & Bradley, 2008).

Appropriate selection of research sites is also an important benchmark of rigor in formative experiment research (Reinking & Bradley, 2008). Formative experiments should be conducted in settings where neither success nor failure of the intervention is likely to consider how an intervention may work under good, but not exceptional, circumstances. A range of students at Townley who represented multiple levels of academic achievement participated in this study. Also, the population of pre-service teachers at Southeastern University was in good academic standing, but pre-service teachers were not enrolled in honors or receiving special services for academic success, according to Dr. Nelson.

In addition, I debriefed with my advisor multiple times during and after the study about my methods and findings to increase reliability of the research process and findings. I also conferred with a committee member who specializes in qualitative research to strengthen the design of my case study. Lincoln and Guba (1985) recommend these processes, which they term peer debriefing sessions, to keep the qualitative researcher honest and to allow hard questions to be asked about a researcher’s methods and interpretations. In addition, and a major component of both types of research, I utilized member checking throughout and post-study with participants. I solicited Ms. Wells’ and Dr. Nelsons’ views of credibility of my findings during iterative data analysis by sharing overall results of analysis and considering their perspectives. I also conducted member checks (Lincoln & Guba, 1985) with participants by asking them to read
transcripts after semi-structured interviews to insure my transcriptions captured their intended responses, and I asked follow-up questions during and after informal interviews to insure I understood what participants were trying to convey. I also created rich, thick descriptions of my settings and results to allow readers to make decisions regarding transferability (Lincoln & Guba, 1985). Creswell (2007) recommended this procedure “to enable readers to transfer information to other settings to determine whether findings can be transferred. . .” (p. 209). Although my study and findings are not generalizable, readers may be able to transfer or make connections between this study and other settings with shared characteristics.

Finally, and perhaps one of the most defining features of formative experiment research that increases rigor, I remained skeptical of the intervention and my findings to consider alternative perspectives and weaknesses of the intervention, which Brown (1992) encourages when conducting a design experiment. Thus, I was not convinced that my intervention would produce the desired effects or meet the pedagogical goals without significant modification, and I considered multiple interpretations of several sources of data throughout iterative analysis. It is important in formative experiment research to consider all data and not just select particular anecdotes that support success. Instead of seeking particular, but not representative, moments of success, fidelity to considering all data and different perspectives may illuminate failure, which sometimes best informs the practicality of an intervention in authentic educational settings.
Summary

This chapter described the methods used in this dissertation study to establish and design this formative experiment and intervention, recruit participants, collect and analyze data, and to establish validity and rigor. During the 11-week intervention, I sought to understand how disciplinary-literacy instruction paired with collaborative blogging might improve middle-school students’ and pre-service teachers’ disciplinary literacy skills and instructional techniques, respectively. Thus, I investigated how this intervention might practically and effectively be integrated into two classroom settings and an online discussion space. Multiple sources of qualitative data were collected and analyzed sequentially in five analysis cycles to determine factors that enhanced or inhibited the intervention’s effectiveness in achieving the pedagogical goals. These factors were used to determine modifications to the intervention, which will be described in Chapter 4. After the intervention was complete, I conducted post-study analysis to determine overall themes and findings, which I connected to local instructional theory. These results are discussed in Chapter 5.
CHAPTER FOUR

RESULTS

In this chapter, results of iterative data analysis that informed modifications to the intervention are discussed. Data analysis addressed the following questions in the formative experiment framework (Reinking & Bradley, 2008):

1. What factors, based on data collection and iterative data analysis, enhance or inhibit the intervention’s effectiveness?
2. How can the intervention be modified in light of these factors?
3. Has the instructional environment changed or been transformed as a result of the intervention?

As described in the previous chapter, iterative data analysis during the intervention was structured as an embedded, single-case study (Yin, 2009) with each iterative cycle being defined by the topics of instruction in the middle-school classroom, which were outlined in Table 3.1. In the first iterative cycle, themes were descriptive and illustrated the two settings that organized the data analysis (i.e., middle-school and university. Although the blogging space was not considered a separate setting, as described in Chapter 3, it is discussed separately in this cycle to describe interactions between the two populations of participants. In the second, third, and fourth iterative cycles, themes identified factors that enhanced or inhibited the intervention’s effectiveness in achieving the pedagogical goals and these informed modifications to the intervention. Results in the second, third, and fourth iterative cycles will be discussed in conjunction in one major section because modifications made in one of these iterative cycles sometimes produced outcomes or
required further modifications in a subsequent cycle. In the final iterative cycle, themes described the two settings at the end of the intervention, focusing specifically on transformations in the instructional environments. Again, the blogging space is reported separately in this cycle to describe discussion between the two populations. In this chapter results will be discussed accordingly as illustrated graphically in Figure 4.1.

![Figure 4.1. Organization of results of iterative data analysis.](image)

**A Preliminary Caveat**

My goal was to collaborate with Ms. Wells and Dr. Nelson as equals in our respective roles to integrate the intervention into their respective classrooms. Such a
relationship was easily established with Dr. Nelson, but not as easily with Ms. Wells. Dr. Banks, the assistant principal, who had helped with logistical and administrative aspects of the project at Townley, had recently completed her Ph.D. in Educational Administration conducting an experimental study. Consequently, Dr. Banks consistently, at the beginning of my study, admonished Ms. Wells not to interfere with my research, reiterating how important it was for me to control the research process. That may explain why Ms. Wells initially seemed to defer to my suggestions and opinions and seemed reluctant to offer her own. Her stance explains why in some instances in the results reported subsequently in this chapter, she seemed to seek my approval or to defer to me during what I intended to be our collaborative instructional planning and decisions about modifications based on the data. However, this issue was mitigated as Ms. Wells, and also Ms. Banks, came to understand more clearly the purpose and orientation of a formative experiment.

Results of Iterative Data Analysis

First Iteration

The overarching themes of anticipation, hesitation, and resistance emerged during analysis of the first iteration of the intervention devoted to the instructional topic of introducing middle-school students and pre-service teachers to one another. These themes are discussed in subsequent sections in the three settings that comprise the embedded units of analysis: the middle-school setting, the university setting, and the shared space for blogging. These themes also informed and led to some modifications to the intervention during subsequent iterations.
Middle-school setting. My field notes and video recordings during the first iteration documented the middle-school students’ excitement about participating in the intervention during the first two weeks of the intervention. For example, I noted that several students approached me the day they were scheduled to go to the computer lab to post their introductory blog posts to ask about their blog buddy, how often they would get to write to their buddy, or to explain what they planned to tell their blog buddy in their introductory posts (Field notes, 9/8). Other students entered the room and expressed excitement and announced, “It’s blog day!” or “We get to blog to our buddy today!” (Video, 9/8). Students seemed eager to have the opportunity to visit the computer lab and learn about the blog site, and Ms. Wells told me, “They have been talking about the blog project every day since I introduced you to the class last week. We’re really excited!” (Informal interview, 9/8).

One student, Wes (all names are pseudonyms), explained, “I’m really excited to be able to do stuff in class like I do at home. You know, like on the computer or Facebook. It’s cool that [the SU students] want to talk to us” (Informal interview, 9/8). Like Wes, other students expressed interest in using writing platforms in school that were similar to the ones they used outside of school, such as Facebook. Amber referenced her out-of-school writing and stated, “I keep a blog about my cartoons [that she created] at home, so my parents are kind of excited that I’ll be blogging about school now (Informal interview, 9/8). Students also seemed eager to blog because, as Cameron explained, “Social studies is all notes and Atlas [the name of the social studies workbook], notes and Atlas, and then a test. I’m just glad to get to do something besides that. I’m like yay
blogging!” (Informal interview, 9/8). The students’ excitement carried over into the computer lab where they were introduced to *My Big Campus* and posted their first blog introducing themselves to their blog partners.

In the computer lab, Ms. Wells distributed a prompt with possible introductory topics (e.g., hobbies, TV and cinema interests, involvement in sports or extracurricular activities, places they would like to travel or have traveled to) (see Appendix W for prompt) that we created to prompt students’ thinking about the content of their introductory blog posts. However, students were not required to use that list. As Ms. Wells and I walked around the computer lab, students discussed with us the information they planned to communicate to their buddies. Katherine, nervously asked Ms. Wells if she should tell her buddy that she was a “big fan of [the rival university]?” (Video, 9/8). Other students overheard and decided to also tell their blog partners about their college loyalties. Some students expressed excitement to read what their blog buddy would say in response to their introductions. Dax commented,

I’m from a big family and I love to play sports and watch football, especially. I wonder if my buddy has siblings or likes sports. I’ll tell them that I want to go to SU when I graduate high school to see what they say…None of my family has been to college. Do you think they’ll be able tell me what it’s like? (Informal interview, 9/8)

Other students, like Dax, were interested to know more about college and to talk to someone at a university, because many had never talked to a university student (Field notes, 9/8).
Some students indicated that they were excited to read their buddies’ responses, but they found their buddies’ vocabulary and writing style to be intimidating. For example, Amanda commented, “My buddy seems really nice and we have some things in common, but it’s like she’s writing a – what’s the word? – formal letter to me and it’s not like a conversation. Just seems weird for a blog” (Informal interview, 9/15). Amanda indicated that she liked her blog buddy, but she seemed intimidated and confused by her buddy’s formal writing style. Although many middle-school students were pleased with their blog partners’ responses, some, like Amanda, seemed anxious to communicate with their blog partners because of their formality of writing style and language. Ms. Wells communicated,

Some students are worried that their buddy won’t think they’re smart, or they’re concerned that their buddy will judge their spelling mistakes. I explained to them that they’re writing on a blog and they need to be clear in their writing, but since blogs are places where content is the most important thing, they shouldn’t be as worried about their spelling or grammar errors in this project. (Informal interview, 9/13)

Although Ms. Wells tried to reassure students who were less confident in their writing abilities, some students remained concerned about their blog partners’ perceptions of their writing and academic abilities (Observation, 9/13). However, most students seemed excited about their blog partners’ responses and using a blog in history and were enthusiastic about continuing discussion with their buddies.
The deviation from the status quo and the use of technology also seemed to pique students’ interest. Kristen inquired, “Ms. Wells told us we’re going to be trying out new ways to look at history. Do we get to work together and do more group work? (Informal interview, 9/8). Ms. Wells explained in my first semi-structured interview with her, “I do not get to do as much group work as I would like with my students because I worry that students would get off topic in small groups and the class space does not allow for students to move desks around easily” (Interview, 8/11). She hoped to use the disciplinary-literacy strategies as a way to incorporate more small-group work into her class, and she discussed this plan with students when introducing disciplinary literacy.

Ms. Wells explained the concept of disciplinary literacy to students during this first week of the intervention,

We’re going to do some reading and writing activities, sometimes as a class and sometimes in small groups that will help us investigate history and learn to read history in a way that helps us think critically about events that happened in the past. I think you’re going to enjoy these activities, and we’re going to try to do them at least one each week (Video, 9/13).

Ms. Wells later explained that she used the term critical thinking with her students instead of disciplinary literacy because she “felt that they could understand what it means to think critically better than they would understand literacy skills specific to a discipline” (Informal interview, 9/13).

She explained to students that she would assign them various types of documents to read in class and that they would be asked to form their own interpretations of those
documents to better understand history based on evidence (Video, 9/13). Students’ reactions to her introduction of disciplinary literacy activities were mixed. One student, Harold, raised his hand and asked, “So, we’re going to be doing stuff like we do in projects instead of our workbook? (Video, 9/13). This question elicited murmurs of approval from many students; others did not seem as excited (Field notes, 9/13). One student, Amanda, looked dismayed and later explained, “I like social studies because I like to take notes and do multiple-choice tests – I’m good at that. I hate projects” (Informal interview, 9/13). For students like Amanda, disciplinary-literacy activities differed from the types of social studies to which they were accustomed, and this difference appeared to worry them. However, most students seemed ready and willing to learn new approaches to history. Jacob, a focal student, reflected in a semi-structured interview,

> It’s nice that we’re going to be doing things to help us think. I like thinking – it’s much better than memorizing. Plus, I can argue my point when I think. It’s like watching the History Channel when they get guys from different places to talk about something in history. Everyone kind of has their own opinion even though they’re talking about the same thing (Interview, 9/9).

Thus, student reactions to the introduction to disciplinary literacy varied, but most students seemed enthusiastic about a new form of activities and instruction. These results suggested that initial reactions to the intervention among students, at least conceptually, is likely to be enthusiastically positive, although a few students may not like a shift away
from more conventional activities because they are comfortable with them and successful in that frame.

However, as the intervention progressed, disciplinary-literacy activities that differed from Ms. Wells’ typical instruction, such as copying notes from PowerPoint slides or completing workbook assignments, proved somewhat intimidating for most students. The first disciplinary-literacy activity Ms. Wells and I decided to implement used a graphic organizer (see Appendix D) to structure students’ reading of a secondary source article about English explorers in South Carolina. However, before implementing that activity and having students read the article, Ms. Wells decided that she would first introduce a primary source and a list of fourteen questions for students to address when approaching this type of source (see Appendix X). She noted, “This activity will be my jumping off point for disciplinary-literacy instruction” (Informal interview, 9/13). She indicated that she had used these questions as a guide at the beginning of her eighth-grade class for the past five years. She believed that the questions were important for studying primary sources, even if they did not necessarily structure reading of text. Ms. Wells believed, “This activity might refresh students’ memories of working with primary sources and give them practice reading a source before I introduce a new strategy” (Informal interview, 9/13). The questions addressed issues important to studying primary sources, such as considering the author’s background, but the questions were presented in a disjointed manner and did not guide comprehension.

The primary source she presented to students was the 1663 charter King Charles II of England presented to his lord proprietors to claim Carolina, which is a topic that
students had studied concerning the settlement of Carolina in South Carolina history. As Ms. Wells asked students about features of the document regarding format, audience, language, and writing style, students expressed frustration and concern about comprehending the document. Cameron raised his hand and explained, “I can’t use the reading guide because I don’t understand most of the words in this document” (Video, 9/15). Harold had similar concerns as Cameron and noted, “I get what this thing means in general, but I have no idea what the charter really says because the words are too old” (Video, 9/15). Archaic language was a primary concern for students, and the length of the document also seemed overwhelming (Field notes, 9/15). To acknowledge these concerns, Ms. Wells reviewed the first half of the primary source with the class to model how students should use the 14 questions. She did this by asking one of the questions and then thinking aloud about the contents of the charter to answer the question. Ms. Wells then divided the class into small groups to work through the final half of the primary source. She asked students to answer comprehension questions and to submit their answers for a grade.

However, the list of questions did not effectively scaffold students’ reading of the primary source or encourage disciplinary literacy, and students became disengaged when working through the questions in small groups. The following small-group discussion about the activity illustrates this disengagement:

*Kasey:* I don’t get it. Are we supposed to read these questions in order or just try to find the answers somewhere in this [points to the charter document].
Amber: I don’t even know how you read this thing. It’s too confusing.

Harold: Y’all just let me know when you get something because I can’t do this.

Kasey: We’ll just write something down. I’m sure she’ll give us the answers tomorrow. (Video, 9/15)

It seemed Ms. Wells’ well-intentioned attempts to support students reading of primary sources were inhibited by barriers such as archaic language, which impeded students’ comprehension of the text and discouraged them from successfully completing the assignment.

University setting. Like the middle-school students and Ms. Wells, pre-service teachers and Dr. Nelson seemed eager to begin the intervention and were interested in the experience it would provide. During my class visit during the first week of the intervention, Dr. Nelson introduced me to the students in his class and explained,

Ms. Colwell is a doc student who is interested in social studies education and literacy and is going to work with us this semester. She is going talk to you about the blog project, using disciplinary literacy, and your responsibilities in the project. I think this will be an interesting way for you guys to interact and learn about how students think about history and should nicely supplement your practicum field experiences (Video, 9/6).

This introduction served to establish my role in the classroom, but my interest in literacy prompted some concern about the intervention. A pre-service teacher, Camille, asked, “Are we going to have to do the same things we’re doing in our content area reading
class?” (Video, 9/6). I explained that I planned to focus on helping them connect literacy to history instruction to support disciplinary practices they were studying in their methods course. I used this opportunity to define disciplinary literacy and to introduce its key components that were being targeted in the middle-school class. To explain further, I passed out a handout that outlined disciplinary literacy, Questioning the Author (QtA) and thinking strategies in history (see Appendix Y). This introduction prompted Walt to respond, “Oh, so this isn’t really literacy. You’re just talking about helping us with social studies instruction” (Video, 9/6). Walt’s response seemed to reassure other members of the class, whose facial expressions expressed relief and indicated enthusiasm about participating in this project (Video, 9/6).

During discussion about the project, other pre-service teachers offered statements of interest such as, “It should be interesting to talk to students about history” and “It’ll be good to get to work with a student one-on-one to help them think about history” (Video, 9/6). These responses suggested a general willingness to engage in a project focused on disciplinary literacy. Further supporting these response, Camille approached me after class to follow up on her question, and explained, “We’re all just a little frustrated to have to take a reading class as secondary social studies teachers, so that’s why I asked [my question]. But it sounds like you’re really focused on history, so I’m looking forward to the project (Informal interview, 9/6). Camille’s question and explanation reflected distrust of the term literacy in a social studies methods course, which concerned some pre-service teachers during discussion about the project, but she, like most of the class, was interested in the project because of its focus on history.
Nonetheless, the majority of pre-service teachers appeared eager to engage in disciplinary-literacy instruction targeting helping students make connections with texts, question the author and text, and draw conclusions based on evidence. Although a few pre-service teachers questioned how often they could integrate instruction based on disciplinary practices in history into their future social studies classrooms because of standardized testing preparation, most pre-service teachers saw instruction supported by disciplinary-literacy as the type of instruction students should be receiving in history.

Pre-service teachers seemed convinced that disciplinary literacy was important, but they believed it would be challenging to find time to integrate such instruction into their future curricula. After I introduced disciplinary literacy as a concept and discussed the components of disciplinary literacy that would be targeted in this study, Sheila explained, “I know I’m going to have to prepare students for testing, but [disciplinary literacy] gets to the heart of why I think it’s important to study history (Informal interview, 9/13).” Like Sheila, many pre-service teachers seemed committed to using this type of instruction in their future classrooms. As I explained and described the components of disciplinary literacy and how it would be implemented with the middle-school students, many pre-service teachers began to nod and take notes on the three components (Observation, 9/13). One pre-service teacher, Gavin, commented,

I like that these components can be combined with learning standards for history. I can teach students to question text while studying an event.

You know, still cover the curricula that I need to cover but include some activities to build critical thinking skills (Video, 9/13).
Even though formal disciplinary-literacy strategy instruction had yet to begin, pre-service teachers were beginning to think about how this type of instruction may work in their future classroom.

However, my data suggested that most of the students in Dr. Nelson’s social studies methods class were wary of using a blog for discussion. A few pre-service teachers expressed concerns about forming an online learning relationship with middle-school students with questions such as, “Blogging seems really informal, so we’ll need to establish that we’re the teacher, right?” and, “Are they going to try to friend us on Facebook?” (Video, 9/6). To assuage such concerns, I explained that this was a mutual learning opportunity and an opportunity to have a one-on-one discussion with a student about history to practice disciplinary-literacy based instruction. Dr. Nelson supported my response and said,

Ms. Colwell has worked with the middle-school teacher to create a safe online discussion space that offers a way for you to learn about how middle-school students think about history. Use the same professional judgment regarding personal requests, such as friending a student on Facebook, as you would in your practicum field experiences. But remember, this project is a way for you to not have worry about the managerial duties of a teacher. This project is a way for you to establish a critical discussion about history with a student. (Video, 9/6)

This seemed to ease some pre-service teachers’ hesitations. However, discussion then shifted to the reality of incorporating a blog into a K-12 social studies classroom. Molly
explained, “I understand using the blog so that we can have a discussion with students who aren’t close [in location], but this wouldn’t really work in most classrooms. I’ve seen what goes on in my practicum teacher’s classroom. There’s no time for this type of project. (Video, 9/6). Some of her classmates nodded their heads in agreement with Molly or offered statements supporting her view, whereas others argued the value of using blogging. Elise countered, “I think my practicum students would love this type of project, and my teacher uses the Internet and wikis all the time. So, I think there’s more to blogging in history than just connecting people. (Video, 9/6). Thus, pre-service teachers were divided on whether a blog project should be incorporated into a social studies classroom, but their discussion illustrated their consideration of the practicality of the central component of the intervention, blogging. The data also suggest that field experiences, such as the practicum the university students were participating in during the semester, may be an obstacle to convincing them that integrating blogging into their instruction is feasible.

**Blogging space.** All participants displayed positive attitudes and enthusiasm toward the project in the online blogging space. Students and pre-service teachers shared their excitement about the project and meeting one another online, and they were eager to learn more about one another. One focal pair of participants, *Talia,* a middle-school student, (middle-school students’ names regarding blog correspondences are italicized; pre-service teachers’ names are in bold) and *Jill,* a pre-service teacher, exchanged introductions that were representative of other introductions that often established
common interests. Excerpts from focal pairs of participants will be used to illustrate blog data here and throughout this chapter.

_Talia:_ I am not involved in any sports but I love double dutch with my friends and sisters (Blog post, 9/8).

_Jill:_ I am terrible at sports, but I love to run. I ran a marathon in Disney World last year, and am training for another marathon (Blog post, 9/15).

_Talia:_ You’re not the only [one] terrible at sports that’s why I don’t play them! (Blog post, 9/21).

However, _Talia_ and _Jill_ did not share common school interests. Like most other blog partners, _Talia_ and _Jill_ liked different subjects in school.

_Talia:_ The subjects I dislike is social studies, science, and reading. I dislike these subjects because they are hard (Blog post, 9/8).

_Jill:_ My favorite subjects are the opposite of yours. I adore Social Studies and English, but I am not very good at Math. Let’s work together this semester to see if we can change your mind about Social Studies! (Blog post, 9/15).

Jill’s encouragement invoked a positive response from Talia, and established an online agreement to work toward a common goal. Talia responded to Jill’s response about her favorite subject by saying, “Maybe I can get to like social studies and English and you can [sp] get to like math and maybe we can both get to like science!” (Blog post, 9/21).

Many of the university students and their middle-school student blog partners established similar online agreements to work together during the blog project to make social studies
interesting. These initial blog exchanges provided a good foundation for the project by helping middle-school students and pre-service teachers form personal connections that supported a positive online relationship.

**Second through Fourth Iterations: Factors and Modifications**

As represented previously in Figure 4.1, three modifications were made to the intervention based on inhibiting factors. All modifications occurred in the middle-school and blog space. However, the modifications in Ms. Well’s classroom determined the types of disciplinary-literacy instruction implemented into Dr. Nelson’s classroom. In addition, as will be noted in this section, a few technological restrictions in the university setting reduced the feasibility of modifications in that setting. Further, these iterative cycles were grouped together and are discussed in this major section because modifications sometimes took place during an iterative cycle or over the course of multiple iterative cycles, which will be explained in the subsections below.

**Blogging.** The first modification to the intervention was a shift from middle-school students blogging outside of school to blogging during class in school. Figure 4.2 represents the sequence of how this modification in response to an initial inhibiting factor created subsequent enhancing and inhibiting factors and a further modification. This sequence will be discussed in more detail in this section.
Figure 4.2. Sequence of relevant factors and modifications to blogging.

**Inhibiting factors: Incentive and technological access.** Many students did not complete supplementary readings and post blog responses in the allotted time during the second iterative cycle. It became apparent that the intervention was dependent on timely completion of blog posts. Thus, lack of timely completion became an inhibiting factor indirectly limiting advancement of the pedagogical goal. My data suggested that two factors inhibited timely completion: (a) lack of incentive to complete assignments by
deadlines and (b) technological barriers to accessing *My Big Campus* outside of school and school computers.

Ms. Wells specified deadlines for each blog reading matched to the date the blog post was due. Initially, that deadline was the end of the school day each Tuesday. On the day initial blog responses were due for the second iterative cycle, many students admitted that they had not completed the reading and were under the impression that they would have time to read in class. Danna explained, “Ms. Wells is really good about not making us do our work at home. We always can make up what we don’t finish in class or don’t do for homework” (Participant observation, 9/22). That flexibility of homework deadlines created an obstacle for completing the readings and blog posting for homework. Ms. Wells stated, “Students have some trouble finishing homework, but I usually give them time to finish in class” (Informal interview, 9/22). She also noted, “I was worried that they wouldn’t keep up with homework for this project before we started, but I had hoped that they would be excited enough about the project to do the readings on time” (Informal interview, 9/22). Students seemed excited about continuing to blog with their buddies at this point in the project, but they knew that they could make up work they missed in class and seemed less inclined to complete homework because of Ms. Wells’ previous flexibility (Field notes, 9/22). Ms. Wells did explain to students that if they did not complete their homework and blog postings on time, their blog partners could not do their work, which would influence their buddy’s grade as well as theirs (Field notes, 9/22).
Although Ms. Wells mentioned influences to her students’ grades, grade reductions or penalties were typically not applied when students turned in late work or missed project deadlines. Ms. Wells’ method for holding students accountable for completing homework included having students provide reasons why they should do their homework and why they failed to complete homework. For example, the day a major project, unrelated to the intervention, was due Ms. Wells asked students to raise their hands if they had not finished their projects. Half of the students in the class raised their hands, and Ms. Wells told them to write a letter explaining why they had not finished by the deadline (Field notes, 9/22). Ms. Wells explained, “I don’t let students not do work. I don’t care how long it takes, they’ll finish a project or an assignment in my class, and I want them to think about why they didn’t finish an assignment on time” (Informal interview, 9/22). Thus, accountability was present in Ms. Wells’ class, but few incentives to complete work on time were observed in the first iterative cycle. Ms. Wells’ previous flexibility about completing assigned work and her ambivalent stance toward altering that flexibility inhibited the blogging activity, which required more conformity to completing readings by set deadlines.

Further, many students were unable to post their responses on time, because they could not access My Big Campus at home, and Ms. Wells only allotted enough class time for the few students who did not have Internet at home to use the computer lab the day initial blog posts for the unit were due (Informal interview, 9/20). Several parents notified Ms. Wells that they attempted to help
their child access the blog site at home without success. One parent reported that, after failed attempts to log in to *My Big Campus* at home, she and her son visited both county libraries and were still unable to log in (Informal interview, 9/20). I also tested five of the students’ accounts at the public library next to the middle-school. I, too, was unsuccessful. The technology coordinator for the district assisting in the *My Big Campus* account setup could not determine the source of this problem, although he hypothesized that district restrictions to students’ Internet and email account login information, which was the same as the login information for their accounts with *My Big Campus*, were most likely blocking access. However, he was unable to override these restrictions for this project (Email correspondence, 9/16/11). Therefore, Ms. Wells and I agreed on a modification to the intervention to address this obstacle.

**Modification.** The inability to access the blogging site outside of school was unanticipated, but it is an obstacle that may not be uncommon in schools and districts with strong controls to protect students from inappropriate activities. To address this obstacle, the intervention was modified to permit all blogging activities to occur in school where there was ready access to *My Big Campus* for entering and responding to blog postings. Students were also instructed to take notes on the supplementary readings because they would have to wait to respond to their readings until they came to class as opposed to posting responses directly after reading as they would if they completed blog assignments at home.
Moving the blogging to an in-class activity was not difficult, because, before the intervention was introduced, there was time for independent work during most class periods. For example, Ms. Wells usually administered lecture notes from PowerPoint slides or engaged students in a whole-class activity during the first 30-40 minutes of class and then students were assigned workbook pages or worksheet activities to complete individually or in pairs during the remainder of the period (Field notes 8/29-9/22). Thus, for this modification, students rotated in small groups (5-6 students) to the computer lab, which was located across the hall, to post their blog entries during the final 30-40 minutes of the 70-minute class period. The school’s technology teacher was always present in the lab to supervise. If she or the lab was unavailable, students used the computers in the media center where the media specialist supervised them.

**Enhancing factor: Increased accountability for reading.** That modification addressed concerns about students completing supplementary reading assignments before blog posts were due or reading too quickly before blogging. Students had to use their designated independent work time in class to go to the computer lab (Observation, 9/22). Because this time was limited, students were only allotted enough time in the lab to post their blog responses. Students could not read the assignment and complete the blog post in the amount of time Ms. Wells designated for blogging. Thus, she required students to take brief notes on the readings before going to the lab, and she did not allow them to take the copy of the reading to the lab. She also required students to show her their notes before she signed their admission slip to the computer lab (Observation 9/22), which
emerged as an enhancing feature of the modification because students were held more accountable for completing the readings.

Students also seemed motivated to read if their computer access was contingent on completing the assignment, another enhancing factor that emerged from the modification. Kerry, a student who struggled to turn in assignments on time or engage in work during class (Observations, 8/30-9/1, 9/8, 9/9, 9/15), failed to produce notes when Ms. Wells called his name to go to the computer lab (9/19). Ms. Wells explained, “You can’t go to the lab until you’ve done the reading and taken notes” (Field notes, 9/19). Although Kerry was visibly upset, he went back to his desk and began to read the assignment and write notes. In past incidents where Ms. Wells reprimanded Kerry for failure to complete assignments, he either put his head down on his desk (Observation, 8/31) or turned to talk to the student behind him (Observation 9/8). Kerry seemed encouraged to complete the assignment to gain access to the computer lab. In the future he completed all of his reading assignments on time.

Other students seemed similarly motivated to complete reading assignments. Talia, a focal student, noted in a semi-structured interview, “I’m not always that interested in the readings, but I try to get them done first before my other homework because I don’t want to miss blogging. That’s like the best part of social studies” (Interview, 10/6). Ms. Wells’ requirement for students to produce notes about the reading to blog seemed to prompt many students to finish the assigned readings on time. However, another inhibiting factor emerged after this modification was made, which also illustrates that many factors have enhancing and inhibiting dimensions.
Inhibiting factor: Access to computer lab and media center computers. Results from the fourth iterative cycle revealed additional inhibiting factors. During this iterative cycle on plantation life in the Carolinas, the media specialist was often unavailable when students needed to work on computers in the media center (Informal interview with Ms. Wells, 10/19), because the computer lab across the hall was being used for standardized testing, and students were not allowed to work in the second school computer lab unsupervised (Informal interview with Ms. Wells, 10/19). Thus, the only remaining available computers were located in the lower computer lab, which was only accessible for whole-class, teacher-supervised activities. However, Ms. Wells indicated interest in observing her students post blogs and observing how they reacted to their blog partners’ responses. She noted,

I’ve been really interested in the discussions that are taking place on the blogs, and I think some of the things the SU students are asking my students to think about are really great. I’d like to see how they react when they read blog posts and maybe ask them about their reactions while they’re writing on their blogs. Would that be ok with you? I won’t talk to them while they blog if it messes anything up for you. (Informal interview supported by video data, 10/19)

I encouraged Ms. Wells to observe her students while they blogged, and I explained that as long as she did not inform or prompt students what to write verbatim, she should feel free to ask them about their blogging or answer any questions they may have. I, too, was
interested in their reactions; therefore, Ms. Wells and I decided to make an additional modification.

Modification. Thus, another modification was made to blogging in this intervention that shifted students from rotating in groups to blog on lab or media center computers to students visiting the computer lab once a week, as a class, to post their responses. By making this modification, students would be able to use the second school computer lab, and Ms. Wells and I would be afforded the opportunity to observe and interact with students as they blogged. During the fourth iterative cycle and for the remainder of the intervention, Ms. Wells designated the first half of class each Thursday as the time the whole class would go to the computer lab to post their blog responses. She continued to check their notes before leaving the classroom for the lab to hold students accountable for completing the reading assignment. This procedure followed the same guidelines for blogging that she set with the first modification.

Enhancing features: Promoting digital technology in middle-school social studies. Students and Ms. Wells welcomed the change from students blogging outside of the classroom to incorporating blogging as a part of whole-class activities. As Ms. Wells read her students’ blog posts during the intervention, she seemed to be impressed by students’ positive reactions to blogging. She commented,

I knew they would be excited about blogging, but I didn’t think their excitement would last this long. I was under the impression that technology would just be old news to them after a while since they see it every day. I’m really impressed by how they stayed engaged with the
project and are even asking me if they can keep blogging about readings after you leave.  (Informal interview supported by audio feed from video, 10/25)

Ms. Wells’ observations of her students’ engagement with blogging and in the computer lab seemed to encourage her to integrate into her teaching more activities that utilized computers and Internet technology. For example, her use of the computer lab increased during this unit in the intervention. Observations and informal interviews with Ms. Wells revealed that she had begun to include activities such as Web Quests and online biography and document searches in the computer lab at least once a week, which furthered progress toward the pedagogical goal set for the middle-school students in this study. Ms. Wells appeared encouraged by students’ positive responses to blogging and indicated that those responses influenced her decision to incorporate more digital technology into her teaching. She stated,

I’m also kind of surprised at myself for wanting to incorporate the blogging as a part of class time. I’ll admit when you first approached me about the project, what sold me was that students would blog on their own time and I wouldn’t have to worry about going to the computer lab. Now, I’m interested in seeing them at work in the lab, and I keep thinking of ways I can include technology in my class. (Informal interview supported by audio feed from video, 10/25)

Also, her students enjoyed working in the computer lab, and they seemed to look forward to classes that included activities there. Julie explained, “It’s so much better
going to the lab than going to class, even though I know, like, it is class” (Informal interview, 10/27). When asked if she liked blogging as a class Julie stated, “Yeah, I like it better. I mean I get to sit next to my friends, and when we get finished we talk about what we wrote” (Informal interview, 10/27). Although Ms. Wells monitored students as they blogged to insure that they were writing their own thoughts and not just copying each other’s work, she encouraged them to discuss what they had written after they posted their blog responses. Often, Ms. Wells would listen to students’ ideas and reference students’ comments when the class had returned to the classroom, indicating that Ms. Wells was accommodating the intervention in her curricula and incorporating it into her regular instruction instead of integrating it only to please me or because it was expected in this study. For example, Ms. Wells and I observed, and then discussed, the following conversation between Maria and Siena in the computer lab:

Maria: What’d you say [nodding her head at the computer]?  
Siena: Just that I didn’t know about Eliza Lucas Pink-something [laughs] taught her slaves to read and educated them.  
Maria: Yeah! I said that too. I didn’t know women could read back then.  
My grandma said she had to teach herself to read and she not that old.  
Siena: [Laughs] Your grandma is old. Uh, I don’t know, Eliza was rich so I figured she could read. I just thought people would get killed if they taught a slave or were nice to them, you know? (Video, 10/27).

After listening to this conversation, Ms. Wells was enthusiastic about the girls’ insight. She then used this conversation to prompt a small-group discussion activity about slaves’
relationships with plantation owners (Field notes, 10/27). She told the class before they broke into small-groups,

Maria and Siena had a great conversation about what they wrote to their blog buddies. They talked about if it was ok or not for plantation owners to educate their slaves. Use your notes to think about reasons why plantation owners may or may not educate slaves. Come up with three pros and three cons and organize them in a t-chart. Then, choose someone to present your pros and cons to the class (Video, 10/27)

Ms. Wells indicated that she already had this activity planned (Informal interview, 10/27), but she was able to make a connection between students’ blogging and in-class activities. Thus, modifying the blogging activity from an individual in-class activity where students rotated in and out of the computer lab to a whole-class computer lab activity seemed to enhance other unanticipated positive outcomes of in the intervention.

Disciplinary-literacy instruction. This modification entailed a transition from explicit strategy instruction, using strategies Ms. Wells and I developed prior to the intervention, to model-based disciplinary-literacy instruction, using activities that supported the targeted components of disciplinary literacy through model-based activities. This modification occurred during the second iterative cycle. Figure 4.3 represents the inhibiting factor leading to this modification and its outcome. Details are provided in the subsections following the figure.
**Figure 4.3.** Modification to disciplinary-literacy instruction.

**Inhibiting factor: Ms. Wells’ resistance to explicit strategy instruction.** Ms. Wells’ stance toward and decisions about history instruction in general and implementation of disciplinary-literacy activities in particular seemed grounded in her perceptions of how her student would respond. For example, as we jointly planned for her to introduce the first disciplinary-literacy strategy, she indicated that she would introduce the graphic organizer (see Appendix D) to scaffold students’ reading of a secondary print-based text source about cash crops in Colonial Carolina (Meeting notes, 9/15). During the planning meeting, she outlined the lesson that she had planned, and she asked if I had any suggestions. The lesson seemed to employ the graphic organizer we had discussed in our second planning meeting in August. Thus, I did not offer any
suggestions. She informed me that she would implement this lesson the following Monday, and I agreed to attend that class to observe. However, Ms. Wells did not implement the graphic organizer into Monday’s lesson. Instead, she implemented another activity that used the 14-question guide to primary sources that she had used in the first iteration when students were reading the Carolina Charter document (Observation, 9/19), which was described in a previous section. The activity focused on reading an authentic advertisement about settlement in Carolina Colony, and, as she had done previously, Ms. Wells modeled answering questions in the guide before assigning students to work in groups to answer comprehension-based questions.

Although the advertisement was a shorter text than the Carolina Charter document used previously, students still struggled. Anita commented, “I get it’s an advertisement but I don’t get these words” (Field notes, 9/19). Zan noted, “I think these questions [referring to the reading guide] are supposed to help us think about [the advertisement] but there’s too many questions to answer. By the time I get to the last question, I forget what I’ve already thought about before and this doesn’t make sense” (Participant-observation supported by video, 9/19). Zan explained his frustration, “I already thought reading social studies was hard but this kind of stuff makes it even harder. Is this what we’ll have to do in high school?” (Participant-observation supported by video, 9/19).

Beyond this lesson, no disciplinary-literacy strategies or activities were observed during this entire unit beyond the 14-question guide provided for the primary source activity, which was not aimed specifically at guiding comprehension about history texts. These observations contradicted Ms. Wells’ prior interview statements regarding her
interest in and commitment to content-area literacy as discussed in Chapter 3. For example, Ms. Wells explained in our initial interview,

I think, especially with the new [Common Core] standards, I need to learn more strategies to help students understand how to think critically about history. It’s hard for students to do that, especially my struggling readers, and I’m interested in this project because I want for students to have a way to read primary sources, or just other texts that aren’t their textbooks, and understand those texts. I like that you’re going to work with my curriculum to integrate content literacy strategies that will support what I already have to cover in history. (Semi-structured interview, 8/11)

After the second class I observed in this second iterative cycle, Ms. Wells explained that she did not believe students had successfully completed the primary source activity from the previous week, and she wanted students to practice reading a primary source again before moving on to a disciplinary-literacy activity (Informal interview, 9/19). She also expressed concern about her students’ reading comprehension skills and about how those skills would affect their engagement in the project,

This is one thing [i.e., reading comprehension] that concerns me. I have multiple students who struggle with reading and I worry that this project may be too hard for them. I think it might be good for them, but I’m worried that the strategies are going to overwhelm them, like the primary source activity. They just seemed so discouraged, and I want them to enjoy studying history. (Informal interview, 9/19)
Ms. Wells indicated that it was important for students to experience success when they engaged in learning about history and that they enjoy history activities. To acknowledge her concern, I suggested that the graphic organizer might be useful in structuring students’ reading comprehension skills while also encouraging disciplinary literacy because it was based in elements of QtA. This suggestion seemed to encourage Ms. Wells, and she confirmed she would implement the graphic organizer lesson in my next visit. However, during that next visit, Ms. Wells used the entire period to introduce a research project, using models from former students’ finished projects, to explain the project and instruct students in understanding point of view (Observation, 9/22).

Again, after class Ms. Wells explained that she needed to delay the lesson using the graphic organizer, because some students were behind in their workbooks, and she wanted everyone to “be on the same page before getting into disciplinary literacy” (Informal interview, 9/22). She then committed to implementing the graphic organizer strategy into her teaching the following Wednesday. Yet, neither did she implement it then. She again apologized and explained at the end of the class,

I really like the graphic organizer activity, but some students seem to be struggling with completing workbook assignments and understanding basic textbook information on their own. I’m trying to wait until they get caught up before I move on to a new type of activity. I don’t want them to get lost with drawing conclusions and thinking about text (Informal interview, 9/28).
Nevertheless, because Ms. Wells allowed students to work at their own pace on workbook and supplementary activities and deadlines were flexible in her class, it seemed difficult for all students to complete their workbook assignments before implementing the disciplinary-literacy strategy. Ms. Wells also noted,

   I’m not exactly crazy about the workbook activities, but they’re a really good way for students to get exactly what they need to get out of the textbook readings. *Atlas* [the title of the workbook] has a nice variety of activities where students select the correct answers. This helps them prepare for standardized testing although it’s not exactly what I’d like for them to learn from my class. Like I said, I’m excited to get to the graphic organizer, but I need to make sure they’re all on the same page first.

   (Informal interview, 9/28)

Ms. Wells seemed concerned that students would learn specific information from the assigned text, and the graphic organizer, and the other disciplinary-literacy strategies focused instead on developing personal ideas and opinions with less teacher-influence. Thus, I requested a meeting, for the following day during her second period planning, to discuss a modification to the intervention that would possibly address her reluctance to implement the disciplinary-literacy strategies we had agreed upon.

   *Modification to the intervention.* To address Ms. Wells’ reluctance to initiate the graphic organizer as a disciplinary-literacy activity, I proposed a modification to incorporate disciplinary-literacy instruction into curricula using a model blog activity,
using sample blog posts that contained the targeted components of disciplinary literacy in the intervention, instead of an explicit strategy, such as graphic organizer.

My data indicated that an inhibiting factor to the pedagogical goal for the middle-school students was that Ms. Wells used little explicit-strategy instruction in her class, relying primarily on model-based instruction, such as providing students with previous examples of student to use as guides in activities and using think-alouds to explain how to consider primary sources, and transmission modes of instruction, such as providing notes for students to copy from PowerPoint, in her teaching. Additionally, she seemed concerned that students extract specific information from the text and produce work that reflected her ideas about history, which was an inhibiting factor to the pedagogical goal of implementing disciplinary literacy through making connections, questioning text, and drawing conclusions based on evidence. Using techniques such as modeling and lecture, Ms. Wells guided her students to learn specific information about text and seemed reluctant to use other types of strategies or activities. Taking these instructional methods into consideration, I suggested that instead of using the graphic organizer to introduce disciplinary literacy, Ms. Wells use a model-blog activity that utilized a sample blog exchange and a corresponding activity that targeted the three elements of disciplinary literacy we had discussed in our first meeting. Ms. Wells immediately approved of this activity (Meeting notes, 9/29), and during that meeting we developed a model-blog exchange, made up of invented responses between a middle-school student and pre-service teacher. The responses were based on the excerpt “Affra Harleston Coming” (Bodie, 1991), which was one of the blog readings, and we designed an activity that
would help students to identify elements of critical thinking, the term Ms. Wells used, to use with the model (see Appendix Z for activity). The activity had students seek and find excerpts that portrayed making connections with text, questioning the author or text, and drawing conclusions based on evidence within the invented blog exchange, which was a way for Ms. Wells to control the information students selected and learned while allowing students to consider how to engage in disciplinary literacy. We decided to use that particular reading, because students had already blogged about it, and they were familiar with the topic. Ms. Wells decided to incorporate the activity in class that day, and she inquired if I could stay for fourth period to observe the lesson.

Ms. Wells decided to display the model blog post on her interactive white board, because she could use it to highlight relevant features of the model blog post as students discussed them. Students seemed intrigued and many asked whose blog posts were used in the model post (Field notes, 9/29). Ms. Wells explained that she and I had created a model blog exchange on the reading that they had already completed “to use to talk about critical thinking and blogging” (Field notes, 9/29). She also noted,

Some of you had questions about what your blog post should look like and how you should respond to your buddy. I realized you have never done this type of project before, and you may want an example. This may help you identify characteristics that should be included in your next blog reflection and response (Video, 9/29).

Many students nodded their heads in approval, and Dax exclaimed, “I see something in the model that I wrote about!” (Field notes, 9/29). This comment seemed to prompt other
students to study the whiteboard, as I noted that they all leaned forward to see what was displayed (Observation, 9/29). Ms. Wells used students’ interest in the model post to explain, “Ms. Colwell and I have already discussed that we’re going to be on the lookout for good posts by you and your blog buddies to use as examples to study each week. We’re going to be looking for lots of critical thinking” (Video, 9/29). This statement seemed to excite students, and Dax commented again, “You mean, so I could be up there [on the whiteboard]?” (Field notes, 9/29). Ms. Wells confirmed that he was correct, and handed out hard copies of the model blog exchange to students.

After reading the blog exchange, Ms. Wells paired students to complete the activity where they found elements of disciplinary literacy, or critical thinking, the term Ms. Wells used. A whole-class discussion followed focusing on where they had located elements of critical thinking in the model blog exchange, targeting text that displayed making connections, questioning the author or text, and drawing conclusions based on evidence. Students seemed engaged throughout the activity locating elements of disciplinary literacy and discussing how the model resembled their own posts (Field notes, 9/29). After the lesson, Ms. Wells stated, “They loved that activity. I can’t wait to do that every week with them. I think it’s going to help them really get into thinking critically and using disciplinary literacy” (Informal interview, 9/29). Ms. Wells’ approval of the activity and how her students responded to it seemed to prompt her eagerness to incorporate activities aimed at developing disciplinary literacy into her classroom, which could not have occurred prior to this modification, because she resisted implementing any instruction aimed at promoting disciplinary literacy.
However, Ms. Wells’ eagerness to use the model blog was inconsistent with her previous comment regarding her reluctance to integrate the graphic organizer activity before all students were caught up with their workbook activities. She indicated she wanted all students to have finished all of their assigned workbook pages before introducing a new activity. Yet, based on her reaction to and implementation of the model blog activity, Ms. Wells seemed most concerned with how her students would respond to disciplinary literacy instruction, particularly instruction that deviated from her usual pedagogical practices. The shift from an explicit strategy, which was not typical of strategies Ms. Wells used in her classroom, to the use of a model blog, which seemed more typical of other types of activities she used where she controlled information students learned, seemed to encourage her to integrate disciplinary literacy into her teaching. After integrating the model-based activity into her teaching, and witnessing her students’ positive responses to engaging in disciplinary literacy, Ms. Wells seemed more inclined to use other activities and strategies that focused on the intervention’s targeted components of disciplinary literacy.

**Outcome: Engaged learners using disciplinary literacy.** Ms. Wells described the third iterative cycle, which focused on slavery, as a “hot topic” (Informal interview, 10/5) in her eighth-grade curriculum. She shared that she had struggled with instruction on this topic. She explained,

> Up until this point [in students’ schooling], so much of what we teach students about slavery is detached, especially here in the South. We talk about slavery from an economic standpoint or a ‘this is something bad but
I had nothing to do with it so don’t blame me’ standpoint. I think we shelter students from a lot of the harsh realities to keep racial tension at bay and so that we don’t have to deal with the tough questions.

(Interview, 10/5)

However, Ms. Wells continued to describe the topic of slavery in terms of the South Carolina history curriculum and disciplinary literacy and noted,

But, I think this project gives me an opportunity to integrate some actual voices from South Carolina history and events not in the textbook and lets students think critically about actual people and events in our history using the elements of disciplinary literacy we’ve been working on, which may, you know, give way to critical discussion, not an avalanche of loose opinion where no one is really listening to each other. I think [students] can use the structure that we looked at last week in the model post to help guide considerate discussion. (Interview, 10/5)

Ms. Wells’ used this opportunity the intervention presented to “integrate some actual voices from South Carolina history and events not in the textbook” to provide a platform for increased use of disciplinary-literacy instruction. Further, Ms. Wells’ commitment to integrating disciplinary-literacy into her instruction seemed to increase because of her positive experience using the model blog the previous week. For instance, she approached me the day after students posted their initial responses to the readings on slavery in South Carolina and stated,
They got so much out of the blog exchange activity last week, I’m going to do it again this week after their buddies respond to their posts using one of their exchanges. But, today I thought I’d use the graphic organizer with them to critically discuss an article about a captain of a slave ship. Is that ok? I know we didn’t plan it. (Informal interview supported by audio feed from video, 10/6)

Ms. Wells’ positive experience with the model-blog modification in previous instruction seemed to support her decision to integrate the graphic organizer as a disciplinary-literacy strategy, consistent with our discussion weeks earlier, but that she had initially avoided. In addition, her instructional plan during the third iterative cycle, including the activities she used, created a classroom of engaged learners, which differed from the previous two cycles’ when students appeared detached and frustrated about studying history and primary sources.

My data suggested that the graphic organizer activity paired with the primary source containing narrative from a captain of a slave ship provided a scaffold to support students’ reading of texts while simultaneously encouraging disciplinary literacy skills in history. For example, many students seemed more engaged than when I had observed them previously doing workbook activities or using Ms. Wells’ 14-question guide to primary sources. Previously, they seemed to complete tasks mechanically without much regard for success, especially given Ms. Wells’ flexibility about completing assignments. Students seemed engaged in the graphic-organizer activity, considering their methods of alternating between reading texts and referring to the organizer (Observation, 10/6).
Demetri, a struggling reader who often avoided doing work in class, also appeared engaged with the activity, and when I stopped by his desk to observe his responses, he said, “I can get these questions. They’re about this [points to the reading] and what I think” (Participant observation, 10/6). Demetri seemed to experience success with this activity and opted to complete the assignment, because he could answer the questions or prompts in the graphic organizer. Students also appeared to be engaged in discussion about their responses. Jacob, a focal student, and Bobby’s discussion was particularly illuminating:

\[
\text{Jacob: } \text{You thought the captain wasn’t that bad? He was carrying slaves to America!} \\
\text{Bobby: } \text{What he was doing wasn’t good, but he had his reasons, and it seems like he felt bad.} \\
\text{Jacob: } \text{There’s no good reason to do what he did.} \\
\text{Bobby: } \text{But in his situation there may be something different you haven’t thought about. Like I said here [points to graphic organizer], my dad was in Afghanistan and I don’t think he thought everything he had to do was good, but he had his reasons and sometimes those reasons are bigger than a simple good or bad. (Video, 10/6)}
\]

Bobby and Jacob’s discussion went beyond simple understanding of the text to a discussion about right and wrong and the reasons why people in history made certain decisions. Further, because of the graphic organizer, Bobby made personal connections with the text that helped him consider different reasons for making a decision, which is
evidence that he and his classmates were acquiring skills and dispositions consistent with disciplinary literacy in history. When the students noticed my presence, Jacob, who was always quick to offer his opinion, stated, “This makes me think! I like it! But I’m still not sure he’s right” (Field notes, 10/6). Even though Jacob was not convinced of Bobby’s response to the text, he did indicate that he had considered his classmate’s response. These representative verbal exchanges indicated that progress was being made toward achieving the pedagogical goal that was the aim of this investigation for middle-school students.

Ms. Wells used the graphic organizer again in the third iterative cycle, and paired it with excerpts from an eyewitness account in a letter written by Governor William Bull to the Royal Council, of the Stono Rebellion (Observation, 10/12). She assigned students to work in the same identical small groups as she had done during the first primary source activity described in the first iterative cycle. Students were observed struggling during the first iterative cycle with the first primary source activity, but now they seemed to be more at ease with reading primary sources and had positive experiences reading this primary source. The graphic organizer supported their reading and their engagement in reading primary sources and helped them consider connections and question the author’s intent. As students read through excerpts from the letter, they used the graphic organizer to make connections and evaluate the text. While observing the group I had observed previously during the first iterative cycle, I witnessed the following exchange:

*Harold:* Ok, so this is a letter by Governor Bull about the Stono Rebellion and he seems mad.
**Kasey:** Yeah, he’s mad because the rebellion scared him and he’s worried that more slaves will rebel and the white people will lose control.

**Amber:** I don’t really understand what the word ‘discerned’ means [pointing to the box in the organizer where students address any words they do not understand].

**Kasey:** I’ll look it up. [She looks up the word in the dictionary.] It means to see or to recognize. Ok, so he saw that there was going to be a rebellion, like Ms. Wells talked about earlier.

**Harold:** Yeah, and the governor wanted to notify the Royal Council because he wanted to get the Indians [Native Americans] to help control the slaves.

**Amber:** And the French to help too.

**Kasey:** The French?

**Harold:** Yeah, they used to like us. You’ve seen *The Patriot* [reference to a film starring Mel Gibson about the American Revolution], right?

(Video, 10/6)

The graphic organizer provided support for helping students consider vocabulary in the primary source as they read and formed connections to a film set during the American Revolution. They also considered the author’s purpose for writing the text, thus addressing two of the components of disciplinary literacy in history.

Instruction in the class of pre-service teachers was also enhanced as a result of the first modification. Pre-service teachers participated in the model-blog activity, because I
incorporated and modeled Ms. Wells’ disciplinary-literacy instructional strategies and techniques in their university class. However, in Dr. Nelson’s university class pre-service teachers studied the blog exchange and discussed disciplinary-literacy instructional techniques displayed in the blog posts. They, too, responded positively to the model-blog activity. Some students indicated that the model helped them understand the structure of a blog response and the format their responses should follow. Alex explained, “Ok. So this helps me understand a little better how to write the blog responses. I wasn’t sure that I was doing it right, or if my responses were helpful for my buddy” (Video, 10/4). Another pre-service teacher, Ross, also commented on the usefulness of the model, “Oh, so we don’t have to ask question after question about the reading. I wanted to share more of my opinions in my blog response, but I didn’t know if I could” (Video, 10/4). Although these guidelines were outlined in pre-service teachers’ rubrics for the blog project, the examples in the model seemed to provide a concrete example to which they could refer during the project.

Pre-service teachers also discussed learning interactions in the blog example. Molly explained,

The college student’s response [in the model post] did a good job of scaffolding the students’ understanding of the reading by pulling them into it and making them a part of Affra’s situation. I think that’s a really useful technique. I also like that the college student talks about their own feelings. That makes the conversation a little more balanced. I think my response made our discussion more one-sided.” (Video, 10/4)
Similarly, many of Molly’s classmates discussed examples of useful techniques and compared them to their own. Thus, this modification enhanced disciplinary-literacy instruction in Dr. Nelson’s class and engaged pre-service teachers positively in a new type of instructional strategy. This outcome, too, represented progress in achieving the pedagogical goal aimed at developing pre-service teachers’ awareness of disciplinary literacy and developing dispositions that might promote their use of this perspective in their future teaching.

Further, enhancing factors emerged in the blog site as a result of this modification. Although integrating activities such as the graphic organizer could be an intervention without the blogging, the blogging provided means to transfer strategies and skills learned in class to an activity separate from classroom instruction and for students to make connections between in-class learning and out-of-class assignments, to question the author and text, and to draw conclusions based on evidence outside of class activities where Ms. Wells, and I, monitored their discussions. The blog provided a space for students to reflect on their interpretations of text and to verbalize conclusions more as a conversation instead of simply completing a graphic organizer as an assignment.

During the online blogging, most students discussed connections between the supplementary readings for this unit and their prior knowledge or personal experiences, a targeted component of disciplinary-literacy instruction in this intervention. A representative exchange between a focal pair of blog partners, Jacob, a high-achieving student, and Charles, illustrates enhancing factors that began to emerge in the third iterative cycle based on modifying the intervention to integrate instruction grounded in
the targeted disciplinary-literacy components of the intervention into the middle-school classroom.

*Jacob*: I guess I thought about how life was back then and how it is now and that the white people should not have been so insensitive and should have treated the slaves as equals. I don’t mean for my idea to sound so cliché, but it came out that way. I already knew about the horrendous treatment we put the slaves through, but I did not now [sp] that we were offensive enough to auction them off like pigs. The opinion and voice of the slave and auction scenario are interesting also to me. (Blog post, 10/6)

*Charles*: Regarding the Starke [They Said I was Worth $400] article, I was impressed with what you came up with after reading it. You seem to have a good grasp on how slaves were viewed back then and how it definitely [was] wrong the way they were treated more as property than as human beings. I also thought it was interesting the way this slave’s tone and attitude was when writing the passage. Do you think this slave was treated fairly well by his masters by the way this article was written?

(Blog post, 10/9)

Although *Jacob’s* writing and vocabulary was advanced compared to other students’ in his class, like many of his classmates he exhibited few of the skills or dispositions associated with disciplinary literacy in history at the beginning of the intervention.

*Jacob’s* reply suggested that he was connecting what he knew about slavery to what he learned from reading the supplementary text, thus representing an enactment of
disciplinary literacy. Further, Charles was able to prompt extended disciplinary-literacy learning by asking Jacob about the author of the text and the author’s beliefs. Thus, this exchange further illustrates both middle-school students and pre-service teachers’ progress toward the respective pedagogical goals of this formative experiment. This exchange also suggests how using a blog site may support and encourage transfer of disciplinary-literacy strategies to activities beyond the walls of classrooms.

**Reflective blog writing.** Described in this section is a modification implemented during the third iterative cycle aimed to structure middle-school students’ reflective blog writing. Figure 4.4 summarizes the inhibiting factor that led to this modification, and the outcome of the modification. A detailed presentation of the results follows in subsequent sections.
**Figure 4.4.** Modification to reflective blog writing.

**Inhibiting factor: Reflective writing and discussion.** Students’ difficulty in writing reflective blogs and engaging in online discussion emerged as inhibiting factors in the second iterative cycle. In the second iterative cycle, Ms. Wells gave middle-school students a general prompt to guide reading and reflective writing about the excerpt, “Affra Harleston Coming” (Bodie, 1990). The prompt follows:

Post a response on your blog (at least 5-8 sentences) responding to this week’s reading. Write about any thoughts that came to mind while reading about Affra Harleston Coming. Respond to what you thought was interesting about the reading and what you still wondered after you finished reading. Remember these are your opinions, so there is no right or wrong response!

Ms. Wells also reminded students that their blog was a place to “write what you feel about the reading and talk to your buddy about things the reading made you think of and how you were able to make connections with the reading” (Field notes, 9/19). Ms. Wells’ students generally wrote fewer than six sentences focusing mainly on parts of the reading that they were unable to understand because of difficult vocabulary or a lack of historical knowledge. Few of their initial blog posts on the reading evidenced the skills or dispositions of disciplinary literacy in history, which was understandable because Ms. Wells had not introduced any relevant instruction until the end of the second iterative cycle. However, students’ responses also lacked reflection about the reading, which I determined through an analysis of all blog posts using constant comparative methods.
(Glaser & Strauss, 1967). Instead, most students’ posts focused on what they found interesting or confusing.

The responses of the three focal students illustrate such lack of reflection among most of the students. Bennett, an average-achieving student, addressed two elements of the aforementioned prompt to comment on what he thought was interesting and what he wanted to know more about after reading the text, focusing on the difficulty he had comprehending the text. He stated in his blog,

> I thought this story was interesting because it was a true story. When she said “I have only four shillings in my pocket,” I got a little confused because I didn’t know what they were. I think shillings may be a type of money, but she said her family in Ireland penniless, so I’m a little confused, because pennies are united states money. I’m also still wondering was she doing this for herself or for her family, because she said her family was in Ireland penniless but it never told what happened or if they ever got in touch again (Blog post, 9/21)

Students also seemed unwilling or unable to write responses to initiate discussion about a text with their blog buddy. For example, Rosalyn, another focal student of average academic achievement, structured her blog response like a journal entry:

> Affra Harleston Coming: I find it interesting that she still asked to go on the boat even thought she didn’t have much money. She looked wealthy, because of her appearance, but she was practically broke because her father got “laid off”, I guess you could call it, after working for an
unworthy man. I like the fact that she got buried next to her husband after she died. I would want it the same way. (Blog post, 9/21)

Rosalyn’s response, like Bennett’s, also indicated comprehension difficulty; she only focused on superficial interests or musings about the readings without attempting to engage in discussion about the text with her buddy. These posts were consistent with the baseline data indicating that students did not have well developed skills and dispositions related to critical reflection and questioning of historical texts.

Further, most students, despite encouragement to do so, did not write responses that addressed their buddy’s opinions, questions, or that prompted further discussion. Talia and Jill’s exchange portrays this lack of response:

Jill: You mentioned that you liked the part where Affra and John Coming were married, and I have to agree. John was kind enough to ‘ease her fears’ on the boat about whether [her] brother managed to get on a different boat…But I also really enjoyed reading about Affra as a person…This got me to thinking about women during this time period. Do you think Affra was typical of women in the 1600s, or was she special? I’d like to hear your opinions about this! (Blog post, 9/22)

Talia: I really liked the whole thing it was great and I learned things I didnt know about south carolina and european history. I think she was special but you might think different (Blog post, 9/27)

Talia acknowledged Jill’s question, but she did not provide any opinions or explanations for her response. This type of response was typical.
Some students provided insight into why they had difficulty responding to their blog partners’ prompts. Bobby explained, “I don’t know what to say to my buddy unless he asks a question, and then I don’t know what to write because I might not say what he wants me to say. They know so much about history and this is my worst subject” (Informal interview, 9/22). Bobby’s insecurities were consistent with Ms. Wells’ suggestion that her students were concerned with pre-service teachers’ perceptions of their ability levels. Tandy addressed Bobby’s comment. She stated, “Um-hmm, that scares me too, but my buddy seems cool and he knows I ain’t [sic] as old as him. So I don’t think he’d laugh at me or anything. He’s gonna [sic] be a teacher! (Informal interview, 9/22).

Ms. Wells also suggested that students may be hesitant to write their opinions on their blog because they were concerned about their blog partners’ perceptions of them. She explained,

Some of the students have told me that they’re worried that their blog buddy will think they’re stupid or not very smart because they don’t have “college” [she visually indicated quotes] things to say to their buddies about history. I told them that their buddies are studying to become teachers, and they really want to help them by talking about history. But, I think they’re just worried the pre-service teachers will think badly about them, and they really care what their buddies think of them. (Informal interview supported by audio feed from video data, 9/28)
Thus, students’ insecurities about expressing their opinions online may have been one obstacle to engagement in writing reflective responses to history readings. Ms. Wells also commented, “I think students are struggling with the blog writing because they aren’t used to having discussions about history texts. This is new for them” (Informal interview, 9/22). Classroom observations supported this hypothesis because no discussion was observed in Ms. Wells’ class beyond whole-class discussion of Ms. Wells’ lecture notes followed by questions that solicited a single correct response with students raising their hands to volunteer answers (Observations 8/29-9/2, 9/19, 9/22).

Although the middle-school students responded to journal prompts at the beginning of every class period, these prompts, as reported in Chapter 3, usually asked students to summarize or list information (e.g., “List five things you learned yesterday”, Journal prompt, 9/22 or “Brainstorm five things you know about Eliza Lucas Pinckney”, Journal prompt, 10/6). Most prompts did not encourage students to explain their responses. Their blog responses reflected this lack of experience suggesting that students were unprepared to engage in reflective blog writing about history texts. I discussed this observation with Ms. Wells during a planning meeting and she explained,

I have them do prompts as bell work [a term she used to describe daily assignments she gave so that students were in their seats and working by the time the bell rings], but I barely have enough time to grade journals, much less respond to their writing. So, they aren’t getting a lot of feedback from their writing. I’d consider this blog project to be a new experience for most of these students (Informal interview, 9/22).
Ms. Wells indicated that time was an obstacle to grading journal entries, which provided students with little or no feedback on their journal responses. Further, Ms. Wells did not exhibit concern over her lack of response to these assignments and seemed to assign journal writing so that students would develop a routine to be in their desks and working by the time the bell rang for class to begin.

Before making any modifications to the intervention in response to these inhibiting factors, Ms. Wells and I decided that she should reiterate to her students the overall objectives of blogging, which were to critically reflect on history texts through discussion with pre-service teachers. She verbally provided technology-focused examples of discussion to depict how students should approach collaborative and reflective online writing. She explained, “Pretend you’re on Skype, but instead of talking you have to write back and forth to one another in full paragraphs” (Field notes, 9/28).

Ms. Wells also described written communication on Facebook using the private message feature, which allows users to send long text-based messages to one another without the message being displayed to other users. One student, Harold, raised his hand and announced, “I don’t write use [Facebook message] to write long messages. I just use it to keep my messages private” (Video, 9/28). Other students indicated they agreed with Harold by nodding their heads (Observation, 9/28). Maria explained, “That’s why I text. I don’t have to write anything long in a text, and we can talk back and forth quickly” (Video, 9/28). These students’ explanations of how they used technology-based writing platforms, such as Facebook and texting, indicated that they may have viewed the blog site as a platform to write short messages, which may partially explain why students were
reluctant or less likely to engage in reflective, in-depth writing. Although a few students indicated that they had experience blogging, most students only used sites such as Facebook to engage in online writing. These findings informed the subsequent modification.

**Modification.** To address the finding that Ms. Wells’ students were unprepared, and perhaps disinclined, to write reflectively and thus to engage in subsequent discussions about history texts, the intervention was modified in the third iterative cycle. The modification was to provide students with a guide with prompts for considering text and writing a response after reading. The guide with prompts is included in Appendix AA. This modification also supplemented indirectly the model blog discussed in the previous modification. Initially, I reasoned that the blog models presented in the first modification would serve as models to guide the students’ blog posts and responses. However, Ms. Wells was concerned that students would not spontaneously transfer writing modeled in the model blog. She noted,

Most [students] struggle with writing in my class. I think they need a highly-scaffolded, maybe step-by-step, guide to posting and responding on their blogs. I think they might get the disciplinary-literacy elements out of the new modeling activity, but I don’t think the writing styles will transfer without guided instruction. From what I’ve seen in the blog responses so far and their questions in class, I think they need to be more aware of their writing and learn to ask themselves specific questions as they write. This
is something [the English Language Arts teacher] and I have been talking about” (Informal interview, 10/3).

Thus, in the third iterative cycle, Ms. Wells and I developed and distributed to students a guide to writing and responding to blogs. It consisted of seven guiding questions and prompts to consider as students wrote their responses to the readings and two prompts to follow when responding to their blog buddy. These questions and prompts followed the general framework created for disciplinary-literacy instruction in the intervention, discussed in Chapter 3, and supported comprehension of the text, and provided a structure for writing blog posts and responses. This modification had positive outcomes that became enhancing factors revealed in the next instructional unit and that will be discussed in the subsequent section.

**Outcome: Writers engaged in discussion using disciplinary literacy.** Middle-school students’ responses to the readings in this third unit evidenced substantial progress toward accomplishing the pedagogical goal of increasing use of disciplinary literacy when compared to baseline data and to the blog postings in the previous instructional units. Presumably that progress was due, at least in part, to some of the modifications. In an initial study in a single context, it is difficult to attribute progress entirely to modifications. Participants may have become more comfortable with blogging by the third iterative cycle. However, their blog responses improved after the introduction of the guide for writing blog responses. *Rosalyn and Ellen’s* blog discussion was representative of participants’ blog exchanges, and I present here an excerpt from their exchange. *Rosalyn* and *Ellen* discussed themes of equality and social class.
**Rosalyn:** When I read the text, the first thing that came to my mind, was about how people still, not necessarily African Americans, aren’t treated rightt. Before I even read the text, I knew that slaves were taken against their will and they were bought and sold freely. I found it really interesting that in the social class, the field workers were at the bottom even though they workk the hardest! Would yu have agreed with their social class? (Blog post, 10/10)

**Ellen:** It’s interesting to consider a social hierarchy among slaves; many white southerners during this time simply thought that all blacks were of the same status – a status that was, above all, inferior to whites. I agree it unfortunate that the slaves who probably did the most (and hardest) labor were at the bottom of this class system. Why do you think this was the case? (Blog post, 10/11)

*Rosalyn’s* response indicates progress toward the pedagogical goal for the middle-school students, because she drew connections between prior knowledge about slavery and the text. **Ellen** was able to respond to *Rosalyn* in a way that connected their individual opinions and prompted further critical thought from *Rosalyn* about the reasons behind social hierarchy among slaves. That prompting of critical thought also indicates progress toward the pedagogical goal set for the pre-service teachers. *Rosalyn* replied, “I think [the field workers] were looked down on because they were just there and didn’t interfere with the other people [on the plantation] much” (Blog post, 10/13). *Rosalyn’s* reply
suggests that she considered Ellen’s response and how social responsibilities of a slave’s job may determine social status within the slave community.

Transformations in the Instructional Environments

Themes that emerged during analysis of the fifth, and final, iterative cycle indicated (a) transformations in use and perceptions of technology-based instruction in history and (b) transformations in use and perceptions of literacy in history. These transformations will be discussed in the following subsections by setting: middle school, university, and blog space.

Technology transformations.

Middle-school setting. The first iterative cycle indicated that middle-school students were enthusiastic and eager to blog about and to discuss history texts with pre-service teachers. It seemed that their eagerness was, in part, due to the minimal amount of computer or Internet activities they were accustomed to in social studies. That is, Ms. Wells primarily used conventional paper-based activities in her history classroom, using her interactive white board mostly to provide notes for middle-school students to take, providing little opportunity for students to engage in activities involving a computer or the Internet. Ms. Wells also noted during the fourth iterative cycle that her expectation was that students would become disengaged with blogging after a few weeks when the project lost its novelty. However, results from the previous four iterative cycles indicated that students’ engagement remained high, and perhaps increased, during the intervention. That high level of engagement seemed to encourage Ms. Wells to integrate more activities that involved students working in the computer lab, as was noted in the
description of the blogging modification, and to integrate technology into her classroom. Thus, by the fifth iterative cycle, multiple types of digital technology that had not been used routinely before were being used in Ms. Wells’ classroom. That transformation was accompanied by Ms. Wells’ integrating digital technology into her instruction.

At the beginning of the intervention, Ms. Wells’ use of technology rarely extended beyond notes displayed on PowerPoint slides (Field notes, 8/29-9/2, 9/19, 9/22, 9/28). However, the final unit of analysis revealed more diversity and frequency of use. For example, she now regularly (at least twice a week) integrated into her instruction online sources and activities such as a YouTube videos that aligned with curricular material, a History Channel video excerpt to prompt point of view discussions, and Web Quest computer activities to explore different teacher-selected Internet documents in history. These activities supported instruction grounded in the targeted components of disciplinary literacy in this study, such as considering perspective by questioning the author and text and evaluating information to draw conclusions.

During my first observation of the fifth unit of analysis Ms. Wells’ classroom routine had clearly changed from when I had observed her prior to the intervention and during the initial iterative cycle. She had begun to use digital technology more frequently, and it had become a more integrated part of her teaching to support history learning. For example, during the fifth instructional unit, she announced to her students, Instead of a written prompt for your journal today, we’re going to watch a YouTube video that paints a picture of a very important event in American
and South Carolina history. I want you to first watch the video and then describe how the video made you feel in your journal (Video, 11/2).

The video titled, “Too Late to Apologize: A Declaration” (Soomo Publishing, 2010) was a portrayal of the signing of the Declaration of Independence with a parody of the song “Apologize” (Tedder, 2007), which is a recent pop song familiar to her students (Field notes, 11/2). Ms. Wells commented,

Someone showed me this video last year, and I thought it was great, but I never knew what to do with it besides just showing it and moving on. But, they really seem to be into the whole blogging about history so I thought “Ah ha! I’ll use it as a journal and see what they say”. (Informal interview, 11/2)

While watching the video, students laughed at the satirical portrayals of the British, cheered with the signers of the Declaration of Independence, and all students were observed writing in their journals at the closing of the song (Observation, 11/2). After finishing their journal entries, Ms. Wells engaged the class in whole-class discussion about their feelings toward the song, and Wes commented,

It gave me like chills, you know. We studied this [event] in school before but I always just thought of it in black and white, like a silent and calm. I never thought that [the signers] might have been angry or with feelings. But then this video puts it the present and I’m like, yeah, they were ticked. Man, they were mad and they should of been mad! (Video, 11/2)
The use of a YouTube video seemed to change Wes’ perspective and understanding of the signing of the Declaration of Independence. Relative to the pedagogical goal for the Ms. Wells’ classroom, Wes was able to form a connection with the event, a component of disciplinary literacy, with the video that enhanced his understanding of the context of the signing of the Declaration of Independence. Other students responded positively, and Harold questioned, “Do they have a video for other events in history because I get this so much more out of this [than the textbook] (Video, 11/2). Students were able to make a connection with an important event in American history because of Ms. Wells’ decision to integrate technology in a meaningful way into her teaching.

*University setting.* Evidence from whole-class and small-group discussions suggested that the intervention changed some students’ perceptions about using technology in their future teaching.

For example, results from the first iterative cycle indicated that many pre-service teachers were hesitant or had concerns about the practicality of using a blog in social studies instruction. Although concerns remained during the fifth instructional unit at the end of the intervention, blogging with a middle-school student about history texts seemed to redirect those concerns. During a whole-class discussion initiated by the pre-service teachers at the beginning of class, and addressing the pros and cons of integrating a blog into history curriculum, teachers expressed different sentiments about blogging than they had in the first iterative cycle. Jessie discussed this change in perspective in a small-group discussion. She explained,
I knew integrating technology into the classroom is tough, and this project really gave me a first-hand understanding how many obstacles a teacher can face. I’m still uncertain of how to realistically navigate those obstacles as a first-year teacher who’s trying to cover like everything the principal tells me I have to cover. But, I think, for me at least, blogging with a student and seeing how motivated and excited they are to blog, even if their grammar and spelling is terrible, convinced me that technology should be a part of what I do because it is relevant to students’ lives and we need to make those connections as teachers. (Video, 11/1)

Jessie’s explanation illustrates the conflicting thoughts Dr. Nelson’s students expressed during the fifth unit of analysis regarding the use of Internet technology, specifically blogging, in history instruction. Like Jessie, Sarah expressed hesitation about integrating a Web 2.0 tool, such as blogging, into her future social studies classes, but she used her practicum experience to inform her hesitations:

I also have some issues with the whole technology thing because it just seems like a lot of work on top of what we already have to do. What I liked about this project was that the technology was all a part of writing about history, which seemed a lot more doable. Like I could do a project where students used technology to write or something like that. I’m with Jessie, reading my buddy’s blog made me happy because I could see their excitement to just use the computer. I also saw that they’ve gotten better, not much better, but a little better talking about these texts and I really
think the blog helped with some of that. Just with them getting used to
writing about their opinions. Their writing is so much more engaged than
I’ve seen in my practicum teacher’s classroom because all they do is write
summaries on notebook paper to turn in. (Video 11/1)

Observing the middle-school students’ motivation to be involved with blogging about
history texts seemed to be important to pre-service teachers when considering whether
they might use a blog or other forms of digital technology in their future classrooms.
Sarah also indicated blogging helped her student engage in disciplinary literacy and made
blogging more appealing for her to integrate the perspective of disciplinary literacy into
her anticipated instruction, thus indicating some progress towards the pedagogical goal
for the pre-service teachers in this study. Sarah compared her experience in the blog
project with what she was observing during her practicum in a social studies classroom
that semester. Like Jessie, she remained wary of the amount of work required to
integrate digital technology into her future classroom, but she considered how she may
meet multiple objectives through integration into the existing curriculum instead of
adding new content or instruction.

**Literacy transformations.** Different views of literacy also emerged in the fifth
iterative cycle. These views indicated transformations in perceptions about and use of
literacy in history.

**Middle-school setting.** In Ms. Wells’ classroom, the intervention during this fifth
instructional unit seemed to stimulate activities and perspectives consistent with
disciplinary literacy in history, such as considering perspective in history and making
connections between texts and prior knowledge. Some of these activities and perspectives went beyond the boundaries of the intervention. One prominent example was that of a “document walk activity,” which Ms. Wells developed independently outside of the intervention. In that activity, groups of five students rotated, or walked, to different stations, each containing a primary source that they analyzed to address the question, “What are the causes of the American Revolution?” (Field notes, 11/4). Groups then wrote one sentence that explained the cause of the Revolution based on the primary sources. The primary sources consisted of pictures and political cartoons from the Revolutionary War time period (see Appendix BB for samples). Ms. Wells used this activity to help students think about different causes of the war from different perspectives to build students’ overall understanding of the American Revolution before they began to look at the War in South Carolina history (Informal interview, 11/4). As students walked from station to station, Ms. Wells reminded them, “Remember those questions you think about when you read for your blog. Ask yourself why the author created these sources, and think about connections you can make from what you already know about the Revolution” (Video, 11/4). Ms. Wells’ reference to the blog project indicated she was connecting objectives of disciplinary literacy from the intervention to other class activities. This type of activity also contrasted with the activities I observed at the beginning of the intervention.

Ms. Wells explained why she initiated this new activity, “I’ve had this activity since a workshop I did a few years ago, but I’ve never used it before” (Informal interview, 11/4). When I questioned why she decided to implement this activity now she
stated, “[The students] just seem to be doing so much better with disciplinary literacy. I thought this might be more interesting than notes, and I can still cover all of the information they need on this topic through the activity. This is so much better than notes!” (Informal interview, 11/4). Ms. Wells eventually did give students a page of notes on the Revolutionary War after the activity that day, but I observed that note taking had decreased in this iterative cycle when compared to the amount of notes that Ms. Wells gave at the beginning of the intervention. After class, I indicated to Ms. Wells that I had observed an increase in her use of small-group activities and lessons related to disciplinary literacy. She responded,

You know, I’ve started to use a lot more group activities like the document walk because I find that students are more engaged and excited about what we’re studying when we do these types of things. I think what I’ve found interesting about the blog project is that I’m getting ideas about how I can include more activities like [the document walk] in my lessons and still hit the same objectives as when I just give notes on an event. And, the way we’ve looked at literacy in this project is so much more integral to what I’m already doing with my lessons, I don’t think of [literacy] as just reading anymore. (Informal interview, 11/4)

Ms. Wells’ statement was consistent with the concept of disciplinary literacy, and the instructional actions she described further supported the pedagogical goal for the middle-school students in this study.
Students also seemed engaged in the document walk, with all students contributing to analysis of sources (Observation, 11/4). Anita commented, “I like this kind of stuff. I feel like we get to say what we think” (Participant observation, 11/4). Dana, Anita’s group mate concurred, “I wish we got to do this all the time. It’s more fun to work together” (Participant observation, 11/4). Statements such as Anita’s and Dana’s indicated students enjoyed the activity, and a classroom that involved productive group where students were encouraged to discuss their opinions and insights seemed to emerge at the end of the intervention. Thus, appeal was an important factor in students’ engagement with activities grounded in disciplinary literacy. Design-based research, including formative experiments, certainly focuses on effectiveness, but they also investigate efficiency and appeal. Ms. Wells used activities targeting disciplinary literacy in history because she experienced their appeal and efficiency through the intervention, which was noted in the description of the document walk activity. Ms. Wells indicated that this activity was efficient as she could easily access the materials needed for the activity and it provided students with background information while they practiced using thinking skills, as opposed to giving students notes to copy from the interactive whiteboard. In addition, her students found this activity appealing and seemed motivated to engage in them.

Ms. Wells also had students engage in another activity suggesting that she was integrating disciplinary literacy into her instruction beyond the intervention. She asked students to read two websites that described Christopher Gadsden, a South Carolina statesman and soldier in the Revolutionary War (Field notes, 11/9). She then directed
them to compare the information in the websites in relation to Gadsden’s beliefs, personal life, professional life, character strengths, and character weaknesses. Students organized this information around a stick figure to “flesh out Gadsden’s character” by describing his beliefs, professional life, personal life, strengths, weaknesses, and a quote that described him (Field notes, 11/9). Students were allowed to talk with one another as they worked. The following conversation between Zan and Bobby illustrates students’ efforts to corroborate information.

Zan: Hey, what did you put for strength?

Bobby: I said he was a fighter.

Zan: This [pointing to the first document] says he never made it to fight in the war.

Bobby: I know but this [pointing to the second document] says he was a fighter like in politics and the government.

Zan: Oh, that makes sense with what this says about him with the Stamp Act stuff. (Video, 11/9)

This excerpt demonstrates these students’ efforts to corroborate information between two sources of information to determine one of Gadsden’s character strengths, thus giving evidence of a component of disciplinary literacy in history that I had not observed during baseline or the early iterative cycles. Components of disciplinary literacy were not only being integrated into Ms. Wells’ teaching, but students were approaching texts more like historians. Although some students struggled to read and corroborate information
between texts, Bobby and Zan’s interaction was typical of many students’ discussions with one another during this activity. For example, Julie and Kasey discussed his beliefs.

*Julie:* So [Gadsden] like really hated Britain. Could that be a weakness?

Too much passion or hatred?

*Kasey:* I think you could say that. Like with all of the people who died standing up for their freedom.

*Julie:* Yeah, but that could be a strength too.

*Kasey:* Oh, maybe. Like this [pointing to first document] talks about his legacy right here. I think that makes his passion a strength.

*Julie:* Right. This [pointing to the second document] says things like that too. Like if he hadn’t been so passionate he wouldn’t have stood up for what he believed in and he wouldn’t have been so important in South Carolina history.

Julie and Kasey’s discussion illustrates drawing connections between text and prior knowledge, as well as comparing two texts to draw conclusions about Gadsden’s strengths and weaknesses, which are components of disciplinary literacy targeted in this intervention.

Further, Ms. Wells began to integrate literacy strategies beyond the three types of strategies developed for the intervention, including the following: (a) an adaptation of the Frayer model (Frayer, Frederick, & Klausmeier, 1969), which is a visual aid, commonly used to support content area reading, to help students organize and make connections with text, to analyze the Tea Crisis (Observation 11/9), (b) Four Square (Alvermann et
al., 2010) for vocabulary instruction, which helps students learn vocabulary through visual associations, writing the definition in their own words, and making personal connections with the word, (Observation 11/4), (c) an anticipation guide to introduce the Revolutionary War (11/2), and (d) a biopoem about the signers of the Declaration of Independence from South Carolina (Observation 11/4). Ms. Wells indicated she had learned these strategies in professional development seminars concerning content-area literacy (Informal interview, 11/2). However, I did not observe her using these strategies until the fifth iterative cycle. Also, Ms. Wells adapted some of these content-literacy strategies, such as the Frayer model (see Appendix CC), to extend the components of the intervention such as making connections with text, which aimed to develop disciplinary literacy. She noted,

I feel like I’ve gotten to do so many things these past few months that I haven’t done before with literacy. I used strategies I hadn’t thought about in years because my students just responded so well to what we were doing with the project. It’s been eye-opening because I used to just tell students what they didn’t know, but now I’m finding ways to help them read and learn without so much of my help. And it’s working in a lot of ways, I think. The struggling readers still struggle, but they’re keeping up and that’s encouraging. (Interview, 11/9)

Ms. Wells’ comment aligned with her use of the aforementioned literacy strategies that encouraged disciplinary literacy and provided methods for students to learn information with her support instead of direct instruction through notes. Thus, my data suggested that
 literacy-based, student-centered instruction became a more common aspect of instruction in Ms. Wells’ classroom by the end of the intervention.

**University setting.** The topic of literacy became a more prevalent topic of discussion in the Dr. Nelson’s classroom by the fifth iterative cycle. This discussion seemed to be directly related to pre-service teachers’ experiences in the blog project and their online discussions with their blog partners. Although there was evidence that middle-school students’ reading comprehension skills and disciplinary literacy skills improved in the fifth iterative cycle, their skills did not match pre-service teachers’ expectations of what those skills should be for an eighth-grade student. Data collected throughout the intervention suggested that pre-service teachers were surprised at the middle-school students’ lack of reading comprehension. In the second iterative cycle, many pre-service teachers somewhat dismissed this issue. For example, Alec stated in a small-group discussion during the second iterative cycle,

> I was caught off guard by my buddy’s comprehension. I just assumed a thirteen-year-old would know how to read and understand a text. I imagine a high-school student wouldn’t have these problems, so I guess it’s just something I’ll have to deal with for this project. (Video, 9/27)

Alec’s sentiment about his buddy’s reading comprehension indicated he was not connecting the project to his future teaching and considered it only as an assignment to be completed. Other pre-service teachers made similar comments during discussion and interviews in the second cycle indicating a disconnect between their buddies’ reading comprehension and their future students.
Although blogging with struggling readers still frustrated some of the pre-service teachers in the final iterative cycle of the intervention, all pre-service teachers seemed to indicate, through discussion and interviews, a higher awareness of the role literacy plays in social studies. In the fifth unit of analysis, pre-service teachers seemed to make connections between their blog partners and their future students’ literacy skills, and these connections were not indicated in the second iterative cycle. Pre-service teachers still seemed concerned about the possibility of having to confront literacy issues in their future classrooms, but they began to consider how their experiences were relevant to their future students. For example, Caleb inquired, “Isn’t there a minimum reading level to get to eighth grade? I feel like [my buddy] isn’t anywhere near an eighth-grade reading level. This kind of scares me because this kid is going to be in high school next year, and I’m wondering if my students will have the same issues” (Participant observation confirmed by video data, 11/8). This type of questioning and surprise characterized many pre-service teachers’ reactions to students’ reading comprehension skills in the project and they began to realize that they may have to teach students with low comprehension skills.

Some pre-service teachers acknowledged that they were aware that their buddies may have difficulty with reading comprehension. James stated, “I knew that struggling readers existed. I learned that in coursework, but I never really thought I’d have to teach them since I want to work with older students. Guess I was wrong” (Video, 11/8). Thus, the blogging revealed an important reality about reading ability that the pre-service teachers had not considered, or considered realistically, despite being informed about that
reality in their other coursework. The pedagogical goal of helping pre-service teachers improve their use and understanding of disciplinary-literacy instructional techniques through blogging also confronted pre-service teachers with the relevance of literacy skills. A few pre-service teachers distanced their future responsibilities as a teacher from the blog project. For instance, Nolan announced to his discussion group, “There are some serious reading comprehension issues with my buddy, but I’m just getting through this project because I’m going to teach ninth and tenth graders, not eighth-graders. So, I won’t have to really deal with this again” (Participant observation, 11/8). This disconnect seemed to alleviate Nolan’s concern over his buddy’s comprehension abilities and separate this experience from his future teaching.

Yet, regardless of pre-service teachers’ perceptions of students’ literacy levels or how they would address those levels, all pre-service teachers seemed to agree in the fifth iterative cycle that literacy was an important aspect of teaching social studies and that difficulty in reading and interpreting texts could interfere with their teaching and their efforts to instill disciplinary literacy. However, some pre-service teachers expressed interest in learning how to work with struggling adolescent readers. Camryn stated,

I’m glad we’re getting this [blogging] experience. I’m figuring out ways to help scaffold my buddy’s reading instead of just telling her to reread the information again and again. I want to incorporate disciplinary-literacy in my [future] classroom, but I need to know how to help them just get through some of the readings and understand basic information. I think these guides we’ve worked with and discussions help (Video, 11/8).
Thus, the blog project and pre-service teachers’ growing awareness of literacy in history seemed to encourage students to better understand literacy and disciplinary literacy to help their blog partners and to learn strategies for their future classrooms, which also evidences progress toward the pedagogical goal for the pre-service teachers. Dr. Nelson also encouraged his students to adopt this stance, and he explained that they all would encounter students with reading difficulties in their classrooms (Field notes, 11/8). He indicated that he was working with pre-service teachers on their unit projects to encourage them to consider the different types of learners they would encounter in their future classrooms and to plan for different learning styles and different types of readers (Informal interview, 11/8). This consideration of literacy and working with different types of learners seemed to emerge in the blog project at the end of the intervention. In a small-group discussion during the fifth iterative cycle, Samantha described working with her buddy and how she tried to promote her referent disciplinary literacy skills while targeting her students reading comprehension problems. She said,

Last week my buddy just did not understand what she read and she wrote a response that didn’t make a lot of sense. At the beginning of the project this was so frustrating for me, and I got angry about her not being able to read well or I’d just say that she didn’t do the assignment. But last week I thought about the things she did well with, and thinking about something from someone’s perspective is one of her strengths. So, I used that to help her think about the reading from the viewpoint of Eliza Lucas Pinkney, even though the reading was more of a story about her, and I pointed out a
few places where she could specifically [think about her point of view].

Her response to me was so much better and had some critical thinking in it, and I was like ‘Yes!’ I helped her understand. (Video, 11/8)

Samantha’s description of blogging emphasizes her interest in helping her buddy comprehend and in increasing her disciplinary-literacy skills. Elise also commented, “I’m really trying to focus on helping my buddy understand the readings as well as look at disciplinary literacy because I realize that not all of my students are going to be able to just get what they read, but I can’t let that stop inquiry-centered instruction” (Video, 11/8). Thus, it seemed that although middle-school students’ reading comprehension abilities surprised pre-service teachers, many were interested in learning how to address these issues while planning disciplinary instruction. Further, many seemed motivated to address literacy in their future instruction based on their experience working with the middle-school students.

**Blogging space.** A greater awareness and use of disciplinary literacy was also evident in the blog posting and responses, supporting changes displayed in the two contexts. Three representative focal blog buddy pairs were selected to illustrate these changes. All pairs displayed some use of the components associated with disciplinary literacy in history, while discussing the text, “The Battle at Stallions” (Southern, 2009) in the fifth iterative cycle. The text for this unit was a primary source and a memoir of Major Thomas Young, who fought in the Battle at Stallions in South Carolina during the Revolutionary War.
Although Ms. Wells considered the text to be at grade reading level, many students indicated that they found the text difficult to read because the author used formal language typical of that time period (Field notes, 11/2). However, all pairs were able to make more meaningful connections with text and have more balanced discussions than was evidenced in the second iterative cycle, when participants began blog discussions about history texts. A few pairs only made minor connections with text. Many drew connections between text and prior knowledge or personal connections and they questioned the author or text in some manner, and some pairs displayed the ability to make connections, question the author or text, and evaluate information to draw conclusions in their blog discussions.

One pair, Talia, a middle-school student, and Jill, a pre-service teacher, illustrates blog partners who only discussed connections with texts. Talia only discussed one incident in the reading, and she did not write about the battle, which was the central focus of the memoir. She was, however, able to make a connection with text, which Jill used to initiate a discussion. They wrote,

*Talia*: I think the article was great what about you? I like that the battle was in [an area close to Townley] but I just moved to [the town where Townley was located] about a year ago before I came down here I lived in a place called Sumter. So I’m just starting to know the area and couldn’t really see where the battle was. Thomas was a great man before his brother died but after that he was very sad and angry when his brother died I would be too so I can understand his feeling. (Blog post, 11/3)
Jill: I thought [the memoir] was really interesting considering you are from [the town where Townley was located]. I bet it is easier to reading knowing the whole story took place in your backyard! You’re right, Thomas was tore up about the death of his brother. In fact he said, “I do not believe I had ever used an oath before that day, but then I tore up open my bosom, and swore that I would never rest till I had avenged his death.” What did you think about the next few lines when he talks about the Tories? How do you think his feelings of revenge affected how he fought in the battle? Can you imagine what it would look like? (Blog post, 11/9)

Talia was able to empathize with the author and make a connection to why he would want revenge, but there was no evidence of questioning the author or text, or to drawing conclusions based on evidence. However, Talia’s response in this unit showed a stronger connection to text through this personal connection than her previous responses in the second and third iterative cycles. Jill used Talia’s connection to Thomas’ anger to refer to text in the reading that Talia seemed to comprehend and relate to help her imagine what the battle may have looked like.

A second pair, Bennett, a middle-school student, and Jason, a pre-service teacher, engaged in an exchange that made connections between present-day army tactics and the battle described in the text and questioned the author and text. Bennett and Jason’s discussion indicated more connections with text and questioning the author’s motives for writing text. However, critical evaluations were not evidenced in this exchange. They discussed,
Bennett: Its good to get to blog today. The Battle of Stallions, I think the author is trying to tell me about what happened to the tories and whigs in this minor battle. I think he really wanted to tell which group was most powerful, the patriots or loyalist (Whigs or the Tories), but I think the text is bias because it is telling the entire story in the view-point of one person so we may not be sure about the battle. he is only telling the story from the whigs point of view not from them both…The story made me think of army tactics that I’ve read about and I wondered were the whigs tactics more powerful because of who they were (british) or because they just had a strong military and leader. (Blog post, 11/3)

Jason: I’m glad that you enjoyed the reading, and that you got a lot out of it. You are right about there being bias in this story since it only presents the viewpoint of Thomas Young. Memoirs tend to only present one side of a story, so when you read it, you have to be careful to not take everything said for granted…Young wasn’t necessarily trying to tell you that the Whigs were more powerful, but the tactics used by the Whigs were better than those used by the Tories…Also, isn’t it interesting that Mrs. Stallions was a sister of the attacking Captain? (Blog post, 11/8)

Bennett made connections between army strategies with which he was familiar and the tactics of the Whigs. He also considered what the author’s purpose was in writing the text, but he considered the source biased, which forced him to consider the reliability of Young’s account of battle. Jason confirmed Bennett’s assumption that the
text was biased and provided a direct answer to his question about army tactics. **Jason** attempted to prompt **Bennett** to consider how the war placed a strain on family relationships. However, **Bennett** only confirmed **Jason’s** interest and stated, “I did think that it was very interesting that stallions was sisters with the enemy captain. It was also kind of sad that they were fighting against relatives and distant family members” (Blog post, 11/15). **Bennett’s** responses indicated use of questioning the author and making connections, but **Jason** did not successfully encourage **Bennett** to form more meaningful connections with the text. Yet, **Bennett** and **Jason’s** discussions had become richer in content and more consistent with disciplinary literacy when compared to their initial discussions about history texts.

A third pair, **Jacob** and **Charles**, exemplifies discussion that made connections, questioned the text or author, and evaluated text. They wrote,

**Jacob**: Now we work on the Battle at Stallions…I thought that it was sad and felt angry with Thomas Young when his brother was killed and also when stallions’ wife was killed by a ball shot. The story was sad because of this, but I enjoyed the main character’s bravery in joining the war at such a young age. This was interesting and also the fact that amid all of the violence the main character was able to act calmly and get things done. Resilient was a good trait I thought the main character possessed. I still wonder who would be considered the winner of this battle because stallions’ wife was killed and she was also the sister of Love, who was on the other side. (Blog post, 11/3)
**Charles:** I thought the Battle at Stallions was very interesting because you don’t hear much about the smaller battles that took place during the American Revolution. I also admired Thomas Young’s bravery in joining the war at only 16 years old! I believe his brother being murdered was the motivating factor for him to join. Resilient is a great word to use when describing Thomas Young! Even after his brother’s recent death and joining at such a young age, he has a good head on his shoulders and stays alive during the first skirmish. What do you think happened to Thomas Young after the war based on his account of bravery? (Blog post, 11/9)

**Charles’** post responded to all of Jacob’s reactions and encouraged Jacob to consider events after the text was written. Jacob responded, “I wonder if the main character of this passage ever became a captain or a general and led in another battle, because of his resilience. But, it was written from his point of view, so I don’t know if everything he said is accurate” (Blog post, 11/15). In his final blog post, Jacob prompted Charles to consider Young’s point of view, to which Charles responded, “That would be an interesting topic to research either at the library or on the internet” (Blog post, 11/16).

Even though Jacob and Charles had strong discussions in the second iterative cycle, Jacob displayed ability to incorporate making connections with text, questioning the author and text, and evaluating text into his blogging by the fifth iterative cycle. Also, Charles’ prompting and encouragement to consider point of view and other resources for research indicated a transformation in what was already a strong pair of blog partners.

This example, along with the two previous examples, supports the types of
transformations that occurred in disciplinary literacy in the two settings, especially during the fifth iterative cycle.

Summary

This chapter described results of the embedded, single-case study (Yin, 2009), which was used to guide iterative data analysis during the intervention. Data informed three modifications to the intervention that targeted blogging, explicit disciplinary-literacy strategy instruction, and written response on the blog site. All modifications were a result of data collected in the Ms. Wells’ classroom or blog setting. However, Dr. Nelson’s classroom was also influenced by the modifications to the intervention. Results suggested that all modifications advanced the pedagogical goals. In Chapter Five these results will be discussed more holistically in relation to how they help illuminate an attempt to integrate disciplinary literacy into instruction, what pedagogical principles were generated, how the these results enrich understandings of disciplinary literacy, and what the implications are for instructional practice and further research.
CHAPTER FIVE

DISCUSSION

This chapter presents assertions from a retrospective analysis of the data collected during this investigation, and it discusses those assertions in light of (a) the results presented in Chapter 4, (b) unanticipated outcomes of the intervention, and (c) this study’s limitations. Implications for classroom practice and future research will also be discussed.

Assertions from Retrospective Analysis

At the conclusion of the intervention, the data collected during this study were analyzed holistically to conduct what Gravemiejer and Cobb (2006) refer to as retrospective analysis (see Chapter 3 for specific methodological information). The purpose of a retrospective analysis is to reveal supportable assertions, or claims justified by data, that may reaffirm existing theory, refine that theory, or generate new theory (Gravemiejer & Cobb, 2006). However, in design-based research, theory is considered differently than in other methodological approaches. For example, in design-based research, the search for overarching causes of phenomena in classroom environments is less important than the search for consequences and the relationships between complex variables (Cherryholmes, 1992). Design-based researchers seek to connect research to what Cobb, Confrey, diSessa, Lehrer, and Schauble (2003) refer to as local, humble theories addressing practical relationships between and among relevant factors in classrooms. Findings can be generalizable, not from a sample to a population as in conventional experiments, but by instantiating pedagogical theory and informing contexts
similar to those investigated (case-to-case generalizations according to Firestone, 1993). In addition, multiple theoretical perspectives are considered in design-based research to guide interpretations during retrospective analysis (Gravemeijer & Cobb, 2006).

The remainder of this section discusses three assertions that emerged from the retrospective analysis: (a) teacher beliefs about history instruction, (b) the role of digital technology in supporting disciplinary literacy, and (c) middle-school students’ engagement in disciplinary literacy. The first assertion pertains to social studies teachers’ struggle to reconcile their beliefs and instructional practices. The second assertion that emerged was that online writing may support adolescents’ engagement and disciplinary literacy in social studies. The final assertion is that eighth-grade students are capable of engaging in disciplinary literacy, but explicit strategies may be necessary for them to be successful. In the following sections, these three assertions are detailed and supported with data collected during this investigation.

Teacher Beliefs about History Instruction

A dominant theme that emerged during the retrospective analysis was that Ms. Wells’ and the pre-service teachers’ beliefs were key to influencing how instruction aimed at promoting disciplinary literacy were viewed and enacted. Beliefs also influenced their perspectives about using digital technology to support history learning. That conclusion is consistent with a robust literature related to teachers’ practices in general, the practice of teaching social studies, and the use integration of digital technologies into instruction. Teachers’ beliefs about methods of instruction mediate the types of instruction they enact (Cochran-Smith & Ziechner, 2005). In social studies,
studies of pre-service teachers’ beliefs have examined the relation between perspectives and classroom practices (see Adler, 1984; Fehn & Koeppen, 1998; Goodman & Adler, 1985; Ross, 1987), finding that some pre-service teachers’ beliefs conflicted with their instructional decisions. In addition, VanHover and Yeager (2007) found that in-service social studies teachers may also struggle with the conflict between beliefs and instructional decisions.

Consistent with these findings, the first assertion that emerged in this study indicated in-service and pre-service teachers may struggle with beliefs about instruction and these beliefs may conflict with their practices. Results relative to this assertion supported and extended the current literature on teacher comfort using disciplinary-literacy instruction (Moje, 2008; Shanahan & Shanahan, 2008) and literature concerning the integration of Information and Communication (ICT) technology into literacy-focused instruction (Hutchison & Reinking, 2010), specifically in history (VanFossen & Waterson, 2008). Further, results indicated that, because of the importance of teacher beliefs in social studies, the integration of disciplinary literacy into the middle-school and pre-service teacher classroom may best be approached through collaboration between classroom instructors and literacy specialists, which reinforce Draper et al.’s (2010) suggestions. The influence of beliefs in the present investigation will be discussed for Ms. Wells and for the pre-service teachers respectively in the subsequent subsections.

**Ms. Wells’ beliefs.** The retrospective analysis revealed support for the perspective that many teachers may be uncomfortable or unprepared to integrate disciplinary literacy in their classrooms (Moje, 2008; Shanahan & Shanahan, 2008). That
is, in history, many teachers believe in and follow a transmission-model of instruction (Stanley & Nelson, 1994) that conflicts with the concept of disciplinary literacy and instructional activities consistent with that concept. A transmission model places emphasis on teachers imparting historical knowledge to students instead of having them practice critical thinking about history subject matter as do historians (Stanley & Nelson, 1994). Because this perspective is well established among social studies teachers, the results of the present study are likely to generalize to many social studies classrooms. Firestone (1993) and Yin (2009) have referred to this type of qualitative application as analytic generalization and suggested that qualitative research may be generalizable in application to theory, not sample-to-population application. Ms. Wells’ beliefs in this study, at least initially as evidenced by her instructional decisions and responses, aligned with a transmission model of instruction in social studies. The present study revealed how such a model operates, and specifically how it creates entrenched resistance to disciplinary literacy even when a teacher is committed to engaging students in the critical analysis associated with approaching history like a historian. However, this study also reveals how the intervention, under the specific conditions of this investigation, penetrated that resistance and altered beliefs and practice.

Data collected before the intervention was implemented indicated Ms. Wells’ investment in instruction that transmitted knowledge to her students. For example, in an early interview aimed at understanding Ms. Wells’ methods of instruction, she made the following statement about the instructional techniques she used in her eighth-grade history classroom as she discussed the strategies she used to address struggling learners:
You know, I discuss things we read as a class to make sure everyone gets the information out of the reading that they should. I also walk them through the notes I give to make sure they understand what they’re writing down. It’s also helpful for them to complete assignments with a partner who is a better reader…I think sometimes these aren’t the most exciting or thought-provoking things to do in class, but at least I know [students] are getting what they need to out of the lesson. I wish I could use more disciplinary practices, though. Disciplinary literacy is what history instruction should be about. I want students to be able to think critically and really get into history learning and investigation. (Interview, 8/11)

Although Ms. Wells was not confident that transmission methods of instruction were the most stimulating activities, she seemed comfortable with these methods because she was in control of what students learned and served as the font of information in the classroom. Her ambivalence adds another perspective to the literature addressing teachers’ comfort with integrating disciplinary literacy into their content classrooms (Shanahan & Shanahan, 2008; Moje, 2008). For example, Shanahan and Shanahan (2008) noted in their exploratory study of teachers’ and experts’ disciplinary literacy practices, that teachers may not implement disciplinary literacy into their curricula because they are unprepared to integrate instruction grounded in disciplinary literacy. However, Ms. Wells’ initial reluctance to integrate disciplinary literacy into her classroom did not seem related to her lack of preparation to implement this type of instruction. Instead, she seemed to rely on transmission models of instruction, using strategies she felt
comfortable with, because she seemed more confident that those models provided her students with specific knowledge she wanted them to gain, which informed possible explanations for her resistance to integrating disciplinary literacy at the beginning of the intervention. Although a lack of preparation may have been a contributing factor in her reluctance to integrate disciplinary literacy into her teaching, her beliefs seemed to be more influential in her reluctance.

VanSledright (2002a) also indicated concerns about students learning specific information about history when describing fifth-grade students’ engagement in investigative thinking about history. He discussed that although he was encouraged in his findings of how fifth-grade students could effectively investigate and analyze historical documents to draw conclusions, he, as researcher who also took part in instruction in the classroom, felt the pressure of insuring that students performed well on standardized testing and thus the pressure to transmit information. Although Ms. Wells and I discussed the role of standardized testing in her history curriculum, she did not express explicitly that it was the reason behind her hesitation to integrate disciplinary literacy. She did, like VanSledright (2002a), acknowledge the prominence of standardized testing in planning her history curriculum. Nevertheless, Ms. Wells perceived the intervention as a means to supplement, not take the place of, her current instruction. Instead, she held established beliefs about effective instruction in history and the types of activities that should be used in that instruction, and those beliefs seemed to conflict with incorporating student-centered and inquiry-based learning activities in a history classroom. Yet, Ms.
Wells’ beliefs about history instruction seemed to shift by the end of the intervention, indicating a transformation of the environment for teaching and learning.

For Ms. Wells, collaboration with me to integrate disciplinary literacy comfortably into her teaching using methods she believed were useful to her students was important. Making modifications to disciplinary-literacy instruction to better suit her teaching methods seemed to encourage her to integrate more instruction grounded in disciplinary literacy into her teaching. This finding was consistent with Draper et al.’s (2010) suggestion that collaboration between teachers and literacy specialists may be a key component to effectively integrate disciplinary literacy into the disciplines. Ms. Wells eventually implemented disciplinary literacy when she was able to reconcile it with her existing beliefs about using modeling as a part of instruction. This finding also illustrates how tension between conflicting instructional perspectives and preference for certain instructional methods may be important factors in teacher resistance to integrating disciplinary literacy. Externalizing these tensions, as occurred in this study, served as a catalyst for Ms. Wells to move away from transmission models of instruction to integrating disciplinary literacy methods.

Consequently, observing the benefits of her students’ engaging in activities inspired by disciplinary-literacy seemed to encourage her to create more opportunities to use the original strategies designed for this intervention, and to integrate more strategies and instruction utilizing disciplinary literacy in her South Carolina history class. Thus, a theoretical position supported by data in this study, which may be useful to informing efforts to promote disciplinary literacy, is that reluctance or resistance is likely to remain
until social studies teachers experience the benefits of disciplinary literacy in a way that either reconciles or transcends their beliefs about history instruction. That position has important implications for promoting disciplinary literacy, particularly in teacher development. It is not enough to write commentary or articles about disciplinary literacy or to offer general suggestions for what disciplinary-literacy practices may look like in each discipline to convince teachers that disciplinary literacy is a viable concept. Instead, it must be demonstrated in meaningful and feasible ways that take into account teachers’ beliefs. As Draper et al. (2010) suggested, it may be necessary for literacy specialists to work collaboratively with content teachers to discuss learning objectives and instructional methods explicitly in terms of beliefs about instruction and what beliefs may support or undermine not only disciplinary literacy, but also the essence of helping students experience the fundamental processes of their discipline.

Further, results indicated Ms. Wells wanted her students to enjoy learning and enjoy the practices and strategies they engaged in during class. Her concern that her students may struggle with disciplinary literacy seemed to inhibit her from using the explicit strategies developed for the intervention. Although her preferences for certain types of instruction, such as modeling, also seemed to be important, Ms. Wells’ statements and actions repeatedly indicated that she valued her students’ approval of and positive reactions to her instruction. After observing her students’ success and engagement in instruction grounded in disciplinary literacy, she was more inclined to use the strategies developed for the intervention. Thus, the positive reactions that student had to the blogging activity may have reinforced Ms. Wells’ accommodation of disciplinary
literacy into her instruction. In that vein, Ms. Wells began to use the strategies associated with the intervention as well as similar strategies beyond those created and discussed in our planning sessions. This interpretation is consistent with Sturtevant and Linek’s (2003) suggestion that content teachers who successfully integrate literacy into their curricula are concerned about student interactions with content-literacy strategies and engagement in content. Ms. Wells valued instruction that positively engaged her students in history learning, suggesting that integrating disciplinary literacy into content curricula may require particular consideration of teachers’ values and concerns, as opposed to focusing exclusively on instructional activities that reflect disciplinary literacy. Again, these findings suggest collaboration between literacy specialists and content teachers, and that such collaborations need to take teachers’ beliefs into account (Draper et al., 2010). This finding also highlights the necessity for more research aimed at understanding teachers’ reactions to and perceptions of disciplinary literacy to determine what mechanisms might stimulate a teacher to initiate instruction grounded in disciplinary literacy with less intense collaboration with a literacy specialist.

Ms. Wells’ beliefs about blogging also seemed to influence her use of digital technology in her classroom. Although Ms. Wells believed that her students would benefit from blogging with pre-service teachers and that they would enjoy blogging, she indicated that she was hesitant about students’ long-term engagement with blogging, which is another manifestation of her concern that students remain positively engaged with instruction. Aligning with Zhao and Cziko’s (2001) suggestions about beliefs and adoption of technology, Ms. Wells had to witness or experience benefits of digital
technology in eighth-grade social studies, and those benefits had to align with her goals of instruction, before she was convinced that technology could enhance her curricula without being an additional and time-consuming activity in her classroom. Her perceptions that integrating digital technology required considerable time and effort, which would interfere with other instructional goals, seemed to prevent Ms. Wells from integrating digital technology into her instruction at the beginning of the intervention. That finding is consistent with Hutchison & Reinking’s (2010; 2011) national survey results indicating that teachers considered time to be a primary obstacle to integrating interactive communication technologies into instruction.

Thus, it may be even more difficult to integrate this type of intervention into instruction because it confronts beliefs about simultaneously integrating disciplinary literacy and technology into instruction. Yet, this present study suggests that it is possible, under the right conditions, to circumvent or rise above beliefs that may inhibit integration of disciplinary literacy into history instruction. The integration of Internet technology into activities that supported history learning seemed to alleviate Ms. Wells’ concerns and thus promote her use of technology in social studies. Mishra and Koehler (2005) also stress the importance of integrating technology into content area learning. In that regard, findings of the present study support the technological pedagogical content knowledge (TPCK) model (see Chapter 2) of integrating technology into instruction. TPCK emphasizes integrating technology into curricula as a method of enhancing, not adding to, content instruction.
Pre-service teachers’ beliefs. Although the pre-service teachers did not express any resistance to the concept of disciplinary literacy, their blog responses occasionally suggested that, like Ms. Wells, they wanted their partners to arrive at the same conclusions they had about what the important ideas in the texts were. Although guidance is a component of disciplinary-literacy instruction in history, pre-service teachers sometimes used questioning and responses to transmit their own knowledge to their partner. Most of the pre-service teachers participating in this study perceived the role of the teacher to be a supplier of knowledge, suggesting that the transmission of knowledge is a perceived role of teacher among those preparing to be teachers (Doppen, 2007). Such perceptions sometimes conflicted with integrating disciplinary literacy in history. In fact, one recurring complaint from pre-service teachers about the blog project was their uncertainty of what Ms. Wells wanted students to learn from the readings. For example, Jessie indicated in a response she wrote approximately halfway through the intervention phase,

I think the project is going well and my blog buddy is getting better at discussion. But, I’m concerned I’m not making sure my buddy takes away from the reading what the teacher wants them to take away. I’m able to use the disciplinary-literacy strategies to help them understand the text and think about it and it’s exciting to see them thinking more critically, but I don’t know if they’re getting the right information out of it.

Jessie’s comment was consistent with many of her peers’ concerns that their buddies learn what Ms. Wells wanted them to learn instead of helping students think more
critically about texts and form their own interpretations based on evidence. This concern
was consistent with other concerns they expressed about correct forms of writing on the
blog and which practices constituted good teaching practices. Dr. Nelson’s students
indicated that they held established beliefs about history instruction and those beliefs
seemed to make them uncertain about aspects of the intervention such as using digital
technology to support instruction and instruction that allowed students to form their own
interpretations of history text.

Like Ms. Wells, they did not express opposition to disciplinary literacy, and, in
fact, often expressed support of it, but they were concerned with activities that did not
directly address standardized testing. As Abe explained, “[Disciplinary literacy] makes
sense and it seems like what that goal of history should be, and it’s what we learn in our
history courses, but my [practicum] teacher tells me that I need to keep testing in the back
of my mind the whole time I’m planning instruction” (Video, 9/20). Comments, such as
Abe’s, suggested that this concern stemmed from their experiences discussing and
planning instruction with teachers during their practicum and other field-based
experiences.

However, their experiences in this project seemed to influence the pre-service
teachers’ beliefs concerning disciplinary literacy, suggesting that the intervention might
be a way to break the cycle of conflict between learning in teacher education programs,
experiences in the field, and future instructional methods. The pre-service teachers were
privy to the modifications and types of instruction Ms. Wells used in her classroom
through the disciplinary-literacy lessons I implemented in their classroom, because I
explained modifications and strategies Ms. Wells was using as I incorporated the lessons. Thus, they witnessed a history teacher integrating disciplinary literacy into her classroom, including her struggles to reconcile it with her beliefs and previous instruction, and they observed firsthand the positive outcomes that instruction had on middle-school students’ thinking about the history texts discussed through blogging. That experience created an interest in meeting Ms. Wells and talking to her about disciplinary literacy. Alex commented,

I’d really like to meet this teacher because I think she’s doing things that I’d like to do in my classroom and students seem to get it. I mean my buddy has come a long way in our blog discussions. I’d love to pick her brain about how she does it. She’s different than my practicum teacher. [laughs]. (Video, 11/1).

As these pre-service teachers discussed Ms. Wells’ instructional techniques and as they observed the benefits of disciplinary literacy in the context of this project, they were conceptualizing differently their future instruction as social studies teachers. Doppen’s (2007) findings regarding the influence of positive experiences in social studies education substantiate the importance of such activities. Providing pre-service teachers with a method to observe a teacher, to study disciplinary literacy in content coursework, and to interact with students engaged in disciplinary literacy instruction helped shape their ideas about instruction and to reconsider transmission modes of instruction many of them were witnessing in their field experiences. In addition, they began to consider literacy as a
component of history instruction integral to student participation and success in learning during their experiences blogging with students about history texts.

At the beginning of the study, pre-service teachers had not considered literacy as relevant to social studies instructional methods, which aligns with findings in content-area literacy research (Donahue, 2000; O’Brien & Stuart, 1990). Only after I explained that the foundations of disciplinary literacy aligned with inquiry-based instructional methods in history were pre-service teachers comfortable with the project. Thus, pre-service teachers conceptualized disciplinary literacy to be in the realm of history methods, whereas they referred to literacy instruction as helping students learn to read and write, and they believed that the latter was not their responsibility.

However, once they experienced working with middle-school students who were struggling readers and who struggled with disciplinary literacy, their perceptions of literacy seemed to change. Although some pre-service teachers continued to separate their experience in with the blog project from their future classrooms, for many of them, this awareness encouraged interest in learning how to instruct adolescent readers who were struggling with the history texts in this intervention. That finding is consistent with findings regarding beginning teachers’ perceptions of content literacy (Bintz, 1997; Vigil & Dick, 1987). Those findings suggest that many content teachers become interested in content literacy after experience teaching students who struggle with reading and writing. This developing awareness of the role of literacy in content learning is also consistent with previous findings suggesting that providing pre-service teacher with authentic instructional practice through Internet technology, such as online discussion, may support
pre-service teachers’ understanding of literacy in the content areas (Groenke, 2008). Most of the pre-service teachers in this study became inclined to consider the reality of their future classrooms and students’ ability levels, thus presumably helping them be better prepared for the realities of their future instruction. That finding also provides evidence of progress toward the pedagogical goal for the pre-service teachers in this formative experiment. In our final class discussion about the blog project, Ross explained,

I know this project has had its obstacles with students not being able to get on their blogs at home and not being able to use the library computers, but I think it was good to know a real teacher was working through these issues and thought this activity was worth the extra time. My blog buddy never stopped trying to get better at talking about history, and I think I can see that having me as her audience and her knowing that other students in the class might read what she wrote really influenced her effort. I think this exact project would be difficult to, I don’t know, orchestrate in my own classroom, but I have ideas now for how I could use something like this to have my students talk to each other (Video, 11/8).

Ross indicated that it was beneficial knowing that this project was actually being used in a classroom and it promoted positive student outcomes, which highlights the intervention’s potential to promote deeper thinking about disciplinary literacy in pre-service teacher education and how it might be integrated into social studies instruction.
At the end of the study, the pre-service teachers did not reflect substantial enthusiasm for integrating technology into their future instruction, but nonetheless, the data suggested they had begun to consider the usefulness of doing so to benefit student learning and engagement. For example, some of them commented on the attractiveness of My Big Campus and with blogging about history. Jo noted, “The system that we are using to blog with the students is great. I could really do some cool things with a connected, closed system like this” (Mid-project reflection, 10/11). Gavin also reflected, “It’s been interesting developing an online connection with a student. Gives me lots of ideas for developing deeper in- and out-of-class learning relationships with my future students” (Mid-project reflection, 10/11).

For Ms. Wells and for the pre-service teachers, the experiences during the intervention seemed to convince them that technology could enhance history instruction. That conclusion is consistent with findings that pedagogical benefits accrue when teachers are provided with opportunities to use technology in meaningful ways. For example, research has found that practice using digital technology in instruction may encourage teachers and pre-service teachers to use technology in their current or future instruction (Groff & Mouzza, 2008; Wilson & Wright, 2009). Lipscomb and Doppen (2004) suggest this practice is especially beneficial in pre-service social studies teacher education where teachers begin to shape ideas about using technology in their future classrooms. They argued that it is important to offer pre-service teachers experience using technology in instruction, because these experiences may influence their future instructional methods, a finding also supported by Wright and Wilson (2009).
Additionally, the integration of technology into content learning for adolescents supports relevant and meaningful instruction, which was indicated in data from the middle-school classroom, and may be an important component for effective instruction for adolescents (Alvermann, 2001).

**Using Digital Technology to Support Disciplinary Literacy**

Results from this study supported forming connections between middle-school students’ in- and out-of-school literacy activities and extended literature suggesting the use of computer technology to positively transform literacy instruction (Labbo & Reinking, 1999; Leu et al., 2004; Reinking & Watkins, 2000). Additionally, these findings support Moje’s (2009) call to bridge old and new literacies to better support adolescent literacy and instruction.

Specifically, the middle-school students in this study seemed more motivated to read print-based texts about history because they could express their opinions on a blog site, which was consistent with their online communication outside of school. Kasey’s comment highlights this finding:

> I just like blogging like I love Facebooking. It’s awesome to type on people’s walls and wait for them to write back – like with our buddies. I keep checking my blog to see what they’ve written or if anyone else has responded to what I wrote about. It’s like letting me know that what I’ve written is interesting. Like when you post something on Facebook and see what they have to say about your posts. So much more exciting than class. Class is for like tests and notes and stuff that gets a check-mark. The blog
is to talk about what we read and what we think, not like elementary-school social studies. (Informal interview supported by audio feed from video, 10/12)

The social networking features of My Big Campus were not used in this study. Yet, students made connections between the blog site and Facebook that strengthened their engagement in discussing history texts, which is consistent with Alvermann’s (2001) findings that when adolescents can connect in- and out-of-school literacy practices, they may be more willing to engage in those practices. Kasey’s statement also illustrated the value of audience and of receiving timely responses online. This study reinforced findings in the literature (e.g., McGrail & Davis, 2011; Utecht, 2007) suggesting that the purpose of blogging is to promote conversational discussion and provide an audience for students’ writing, which can focus students’ writing and extend learning, reflection, and understanding about a topic.

The present study also indicated, however, that to engage students in online writing practices, those practices must conform to the acceptable practices of the online platform. For example, most pre-service teachers remained dissatisfied with the middle-school students’ use of informal writing styles when posting on their blog sites and consistently requested that I ask Ms. Wells to have students write formally. However, at least at the beginning of the intervention, middle-school students’ writing was consistent with the informal writing they used when posting comments on social networking sites. The decision to allow students to use informal writing styles when blogging reinforced
connections students made between writing on their blogs and writing on their personal social network sites. Rosalyn’s explanation highlights that decision,

Yeah, you know it’s like I don’t like to write much at all – I am a terrible speller. I do it because I have to in school, but when I get home and Facebook I’ll type to my friends like all day if I could. . . And, Ms. Wells lets us use Facebook writing, so it’s not a big deal that I misspell a lot of words or forget where to put a comma…Makes me want to write more (Interview, 10/12).

Students were conscious of the type of writing appropriate for an online discussion site, such as a blog or Facebook. Formal writing on a blog seemed to stand in opposition to their understandings of blogging. Middle-school students’ writing did improve during the intervention and became more formal, which will be discussed in a subsequent section regarding unanticipated outcomes of the intervention. However, the blog was an activity created to stimulate and support critical discussion about content, where all students could write with less concern for formal writing techniques, which seemed to support students’ engagement with blogging and critical analysis of texts. Talia’s statement illustrates this engagement,

I don’t like social studies and I’m not good at writing or talking about it. I like math because I’m good at it…But I think the blog will be good. Ms. Wells says that we can just write what we think and as long as our buddies can understand what we say, it’s ok…I like that because I can think about what I’m reading and the questions we have to think about and
connections and all of that. It doesn’t have to matter if my writing is good or not. That’s why I don’t like to do projects. I don’t write so good (Interview, 9/7).

Students’ engagement with blogging may have increased their sense of self-efficacy (Bandura, 1997). For example, even when students’ blog posts indicated they struggled with using disciplinary literacy, they seemed encouraged, based on observations of students’ blogging in the computer lab and their eagerness to write to their blog partners or read what their blog partners had written, to continue participating in the project because they felt more confident and comfortable discussing history texts on a blog site, which they felt was a less formal space for writing and readers of their posts would be less critical. Further, this finding was consistent with the literature supporting the use of digital technologies and the Internet in the classrooms to motivate and engage students in literacy learning (e.g., Gambrell, 2006; Kamil, Intrator, & Kim, 2000). In addition, the quality of the content and critical analysis of the disciplinary-literacy skills of interest displayed in posts improved during the intervention. McGrail and Davis (2011) similarly found that blogging among upper-elementary students increased their focus on content when standard conventions of writing were not required. The finding in the present investigation also is consistent with Shoffner (2007) who suggested that online writing, such as blogging, is appealing and may enhance content learning.

**Middle-School Students’ Engagement in Disciplinary Literacy**

The third assertion that emerged from retrospective analysis was that middle-school students in the present investigation seemed capable of engaging in disciplinary
literacy in history provided that they were supplied with a supporting structure for reading and investigating text. The baseline data reported in Chapter 3 and the data collected in the middle-school classroom at the beginning of the study indicated that most students displayed limited use of disciplinary literacy and struggled to engage in activities that required critical readings of texts. Their struggle seemed explained, in part, by their lack of a supportive structure to guide their reading and responses. Yet, when students received instruction guided by the perspective of disciplinary literacy and as they were guided to write blog responses to their reading of historical texts, they began to display relevant skills.

Retrospective analysis indicated that explicit strategies were an important factor in students’ progress in using disciplinary literacy. Although Ms. Wells used implicit and explicit strategies in instruction supported by disciplinary literacy during the intervention, the explicit strategies, such as the graphic organizer, seemed to be more effective in helping students read history texts critically and accordingly write blog responses reflecting a critical stance than the implicit strategies, such as the model blogs, that had students locate components of disciplinary literacy without explicit guidance of how to engage in making connections with and between texts, questioning the author and text, and drawing conclusions based on evidence. That interpretation is consistent with Nokes’ (2010a) suggestion that explicit strategies used in history instruction may be beneficial to students. Results of the present study suggested that middle-school students, particularly struggling readers, may need explicit strategies to engage in the
critical reading characteristic of disciplinary literacy in history. Tandy, a focal student Ms. Wells identified as a struggling reader, illustrates that possibility when she stated,

I like when we look at blog posts together as a class because I like to guess what everyone has written. But, they don’t really help me that much. This help [sic] me read the hard stuff. [Displays a graphic organizer]. All this new stuff we’ve been doing in class has been hard, a lot harder, but I can do it with these sheets. Ms. Wells has a stack over there that we can use to help us, and a lot of us do. Even the smarties. [laughs] (Informal interview, 11/7).

Several other students who were identified as reading below grade level made similar statements. An analysis of blog posts, revealed that students seemed to use the guiding prompts, created in the third modification to the intervention and which utilized the same prompts and questions from the explicit strategies developed for the intervention, to write their blog responses until the end of the intervention. Jacob noted in our post-study interview, “Yeah, I don’t really need to look at that sheet [the guiding prompts] to write anymore. But I do go through the questions in my head as I type up my response. My response wouldn’t be as good if I didn’t [do that]” (Interview, 11/16). Students seemed consciously aware of how the explicit strategies helped them read, understand, and think about texts, and with these strategies, they were able to engage in disciplinary literacy.
Unanticipated Outcomes of the Intervention

Three related and noteworthy unanticipated outcomes emerged in the retrospective analysis. First, middle-school students’ style of writing their blog posting changed between their initial postings and their postings at the end of the intervention phase of the study. Their writing shifted from an informal style that did not adhere to formal mechanics of writing to a more formal style that included, for example, proper capitalization, use of punctuation, and spelling. There was clear evidence that this shift was the middle-school students’ efforts to mimic the more formal styles of their university blog partners. Second, the blog exchanges with the university students that were central to this intervention seemed to heighten middle-school students’ awareness of the ideas and opinions they expressed in their blog posts. Finally, Ms. Wells’ interest in her students’ writing also seemed to increase as a result of this shift in writing.

Ms. Wells and I anticipated that it would be more natural for students to use an informal writing style consistent with what they might use, for example, in social networking outside of school. The opinions, reactions, and interpretations students posted on their blogs were emphasized with no expectation that students must attend to the formal conventions of writing. For example, slang and emoticons were acceptable, if students’ ideas were clearly expressed and explained for their blog partners. Thus, Ms. Wells gave students the direction that formal mechanics of writing such as proper capitalization of words, abbreviations, spelling, or punctuation would not affect their grades, but that clarity and content were important.
However, most of the pre-service teachers responded to their buddies more formally, for example using proper grammar and punctuation, even though they were not explicitly directed to do so. Their use of more formal writing may have reflected that they were assuming the role of a teacher who should model formal writing. During the intervention, presumably to imitate the more formal writing of their blog partners, the middle-school students’ writing became more conventional. The exchanges between Anita, a middle-school student, and Elise, a pre-service teacher, illustrate this shift.

In her first blog post, Anita wrote:

Hii myy name is Anita, imm your blogg buddyy :) imm inn thee eigghthh gradee and myy favoritee subject is MATH. Manyy of myy frandzz call mee [a variation of her name] butt ii likee to be calledd Anita insteadd. .

.ii usee to be inn thiss soccerr teamm witt all of myy frandzz. ii still lovee to plyy soccerr evenn thoughh its veryy tiringg. (Blog post, 9/8)

Anita seemed to use multiple letters to stress an elongation of words. I noted several students in the middle-school class using this style in their blog posts and asked Anita what the multiple letters represented. She replied, “Oh, it’s just the way we write to each other to like show how we want the words to sound if we were actually talking instead of writing. Like if you see your friend in the hall you’d say “Heeeyyyyy! [stresses the letters e and y]. It’s like talking” (Informal interview, 9/28). Ms. Wells inquired if this type of writing style was problematic for the pre-service teachers, and because no pre-service teacher had indicated that they could not understand their buddy’s posts, we decided we would not require students to alter their writing styles.
Elise’s response to Anita was formal, and she used proper mechanics of writing. She responded,

Hi Anita! My name is Elise. I am so excited to be your blog buddy! I think it is awesome that your favorite subject is math. My favorite subject is history. I love learning about things that happened in the past. I find it pretty interesting. . . My hobbies are playing my violin, shopping, and reading. (Blog post, 9/13)

Elise’s response was clear, concise, and did not contain spelling or mechanical errors.

Anita and Elise continued to write using their respective styles for the next blog exchange, but Anita’s writing style on the blog site began to change by the third iterative cycle. By the end of the intervention, Anita had adopted a more academic writing style. She blogged in her final post,

I would have felt confused and angry because I would have thought that he was on our side, and if someone on our side would have suddenly betrayed us and shot at us, it would be horrible. Especially if they would have killed a loved one that was either family or a friend. (Blog post, 11/15).

I commented to Anita during class in the final week of the intervention that her writing style in her blog posts seemed different from the style she used at the beginning of the intervention and asked if she had noticed this change. She indicated she noticed and explained, “Ms. Wells told us to make our writing clear, and Elise’s responses are really good, so I try to make mine as good as hers” (Informal interview, 11/15).
This unanticipated outcome suggested that connecting pre-service teachers to middle-school students to discuss history texts through written responses may heighten middle-school students’ consciousness of the image they projected with their writing. Mirroring the type of writing their blog partner used may have been one method that middle-school students used to project a positive image. Hall (2007) suggested that middle-school students may make conscious decisions regarding literacy abilities to project a specific type of academic identity to their classmates. Although Hall’s (2007) study focused on adolescents’ reading abilities, it seemed that the middle-school students in this study also attempted to project a positive image to pre-service teachers through their writing. Indeed, the middle-school students indicated interest and engagement in talking to a pre-service teacher during this study but were also self-conscious about expressing their opinions about history texts and sought approval from their blog partners. Bennett indicated this consciousness in our final post-intervention semi-structured interview. He explained,

I liked when my buddy would agree with my opinions and what I wrote on my blog because he’s smart. I mean, he goes to Southeastern University so he’s gotta [sic] be smart. I knew he’d know more than me about [history] so sometimes I worried that he might think I wasn’t as smart. . . . I mean, I know he’s going to know more than me and that he wants to be a teacher and all, but I still thought it was nice when he had the same ideas as me because it made me feel like I’d done good, or well [smiles], on the readings and my response.
Like Bennett, many middle-school students seemed to seek approval from the pre-service teachers and my data suggested that they were concerned that their blog partners agreed with their reflections. Ms. Wells also indicated that students were concerned that the pre-service teachers would question their intelligence based on their blog postings. That finding, although not initially anticipated in this study, may be consistent with theory in adolescent psychology, specifically Elkind’s (1967), and more recently, Lapsley, FitzGerald, Rice, & Jackson’s (1989) theories of imaginary audience, suggesting that adolescents, particularly those in middle-school, consider themselves foci of attention and are self-conscious, because they perceive their actions are constantly being judged by others.

Because the pre-service teachers with whom they were corresponding represented an authentic audience, these theories of adolescent psychology may explain the middle-school students’ heightened awareness of how they were representing themselves as they posted their comments on the blog in this project. Heightened awareness may also be relative to Hall’s (2007) suggestions about middle-school students’ projected academic identity, suggesting how a blog may promote students’ development of an academic identity while simultaneously cautioning teachers to consider the sensitivity of adolescents’ perceptions of ability and intelligence. As Kist (2008) suggested, it is important to establish a personal relationship in collaborative online activities, such as blogging, to support a safe space for online discussion. The middle-school students’ reactions in this study suggest, at least indirectly, that such initial relationship building may be an
important aspect of the present intervention. Likewise, it may be wise to inform pre-service teachers about this likely need among adolescents before they begin to correspond with middle-school students.

Finally, the shift in her students’ writing styles attracted Ms. Wells’ attention, even to the point that she gave it as a reason for continuing the intervention after the study. It also generated an interest in the possibilities for integrating writing into her teaching. She stated,

What I think was most helpful for students was, first, having someone that they knew was going to actively read and respond to their blog posts. Even if they didn’t exactly respond to everything their buddy wrote, they seemed to like that someone was interested in their writing and had an opinion about it. Also, I think it was very interesting to see how positively they responded to having written response to their posts. It made me rethink the check marks I’ve been giving them in their journals. Maybe I should give less prompts and provide more feedback. Or, maybe something like the blog project would be a way for me to give more feedback in less time. Do you know of anyone who has 38 laptops for sale that are cheap? [laughs.] (Interview, 11/16)

Writing seemed to be important to Ms. Wells, and she seemed encouraged and pleased with the intervention because it highlighted writing in history. She also noted that she thought blogging might be a way to improve students’ journal writing, which they
engaged in at the beginning of each class, and said she planned to start replying to her students, which she had not done before.

**Limitations**

The intervention in this study was a 13-week formative experiment conducted in two settings of education. Data and results are specific to this relatively limited time frame and to these two settings, although the findings may be particularly useful to practitioners who work in similar contexts. The results and interpretations are also tentative pending further research aimed at implementing the intervention in other contexts toward achieving similar goals. Reinking and Bradley (2008) suggested that replication in multiple contexts is a methodological necessity in conducting formative experiments to reveal what pedagogical principles tend to emerge across contexts. They also suggested that design-based research ideally involves an interdisciplinary team to bring multiple perspectives to collecting, analyzing, and interpreting data and to designing modifications, although they recognize the value of studies, such as this one, when such collaboration is not feasible.

Another common limitation of formative experiments is determining the extent to which a researcher’s presence in a classroom, particularly a researcher’s involvement in the design and implementation of the intervention, may influence findings. However, close collaboration and a researcher’s presence and involvement in the design and implementation of the intervention should not necessarily be seen as a fatal flaw in formative experiment research. Instead, these roles may enhance understanding of how
collaboration in education can serve to benefit K-12 and university settings and curricula and encourage stronger connections between these two areas.

My roles in the two settings of this study were similar to roles a literacy specialist or literacy faculty member might play in a middle-school or university classroom, which are realistically complementary roles and reflect professional partnerships that may be formed in various areas of education. In the middle-school classroom, Ms. Wells was the teacher, and she used her discretion and knowledge about teaching eighth-grade history to implement disciplinary literacy. My role in her classroom was that of a colleague interested in history instruction from the standpoint of literacy. Ms. Wells was the expert in history, and I was the expert in literacy. Further, middle-school students did not seem to view me as an instructor. Ms. Wells explained my presence as a university graduate student who was in her classroom to coordinate the blog project. All students’ questions about class topics or assignments were directed to Ms. Wells, but students also seemed comfortable talking to me about the blog project and other activities they worked on in class. Therefore, they were comfortable with my presence but did not consider me their teacher.

In addition, in the university setting, my role was akin to a co-instructor who worked with Dr. Nelson to incorporate the blog project into the methods course. Pre-service teachers seemed comfortable talking to me and asking me questions about the blog project. They seemed to view the project as a part of their methods course, not a separate project disassociated from their required projects and assignments, in part because Dr. Nelson discussed it as a part of his syllabus and incorporated it into class
discussion. Although my presence was notable in both classroom settings, and may be viewed as a limitation, I did not adopt a role that would have been unimaginable outside of a research project, and collaborating with instructors in their classrooms provided a close lens to better observe and understand both settings and how disciplinary literacy may work in middle-school and pre-service teacher education. Nonetheless, my presence and my role were atypical, and it is doubtful that many of the aspects of this project would have occurred naturally without my involvement.

**Did the Intervention Further the Pedagogical Goals?**

Mid- and post-intervention Strategic Content Literacy Assessment (SCLA) results for the middle-school students indicated a gradual progression of targeted disciplinary-literacy skills during the intervention. Because the SCLA was not presented as an activity in the intervention such as the explicit strategies, model blog activities, or blogging, this progression also indicates that middle-school students were transferring what they were learning about disciplinary literacy to a task other than the activities in the intervention. Ms. Wells distributed the SCLA to students and did not discuss them relative to instructional activities targeting disciplinary literacy nor did she prompt them to consider the strategies they were learning and practicing in the intervention, suggesting that students used disciplinary literacy on a task that was not explicitly connected to the intervention.

Although middle-school students initially struggled to read and to respond to texts critically like historians, by the end of the intervention these skills had improved. Drawing conclusions based on evidence was the most difficult component for middle-
school students, many began to make text-to-life connections, consider texts by comparing information they learned from other texts and in class, and question the author or text, all of which are components of disciplinary literacy in history.

Likewise, the mid- and post-intervention SCLA results for the pre-service teachers indicated that pre-service teachers did gain instructional techniques to support eighth-grade students’ engagement in disciplinary literacy. However, the pre-service teachers were aware that the SCLA was a part of my study and not created by Dr. Nelson. Thus, they may have been inclined to provide responses that aligned with the lessons that I led in the methods class. Nevertheless, multiple sources also suggested pre-service teachers were learning instructional techniques and exhibiting that they were aware of how to use those techniques in instruction.

Pre-service teachers improved in using specific questioning and prompting techniques to help middle-school students engage in disciplinary literacy, although they struggled most with prompting students to draw conclusions based on evidence. Nonetheless, they gained perspective and understanding of how disciplinary literacy and literacy may become a part of their future history instruction. Thus, there was evidence of progress in achieving both pedagogical goals.

Overall, iterative and retrospective analyses indicated that both populations of participants displayed progress toward the pedagogical goals established for this intervention, which suggests that this intervention merits more investigation as a promising approach to integrating disciplinary literacy into social studies instruction for middle-school students and into methods courses for pre-service teachers preparing to be
social studies teachers. That conclusion is bolstered by the positive unanticipated outcomes of the present study.

**Implications for Disciplinary Literacy**

I conducted this study, in part, as a response to the limited empirical literature base focusing on interventions aimed at developing disciplinary literacy, particularly in history. One of my main interests as an adolescent literacy educator and researcher concerns whether it is practical for social studies and other content-area teachers to integrate disciplinary literacy into their instruction. Consequently, I was interested in whether disciplinary literacy as a pedagogical perspective, if not a theory, could be applied authentically to content-area teaching, and, if so, how. Further, efforts to do so promised to inform how disciplinary literacy might be more appropriately conceived and communicated. This formative experiment thus examined how disciplinary literacy became a part of a middle-school classroom and university classroom supporting middle-school students’ history learning and pre-service teachers’ methods of history instruction and prompted the following conclusions pertaining to the concept of disciplinary literacy: (a) Collaboration between disciplines may be a useful consideration in disciplinary literacy; (b) Strategy instruction may be a necessary part of disciplinary literacy; and (c) Disciplinary literacy is a promising perspective in content instruction. These conclusions also raise questions about some of the defining characteristics of disciplinary literacy.

**Possible Collaboration between Disciplines**

A prominent implication of this study for implementing disciplinary literacy into history instruction is that although disciplinary literacy prioritizes differences between
literacy skills in each discipline, it may be useful, when applicable, to make connections between different content areas to support disciplinary literacy in a particular subject area. For example, few students in this study were able to draw conclusions based on evidence by the end of the intervention. That may not be surprising given that VanSledright’s (2002a) work suggested that drawing conclusions based on evidence may be the most difficult component of disciplinary literacy for students reading historical texts. Yet, in this study, some students specifically drew on skills they had learned in their language arts classes to help them draw conclusions. Dax, a student in Ms. Wells’ class, explained,

We think about conclusions in [English Language Arts (ELA)] and the teacher says it’s good to look at the first or last sentence of the paragraph to figure out what its saying. Like when you look at this kind of reading stuff [points to an informational text] – not stories. This is harder than [ELA]. I try to think about what I already know like this box says [points to graphic organizer] and what I wondered when I read the passage [points to another box in the graphic organizer] and I know the answers to those things. But, I start to get mixed up when I think about them all together.

( Participant observation, 10/20)

Dax’s explanation and students’ SCLA results also indicated that students appeared to have competing strategies regarding drawing conclusions, which seemed to confuse them as they attempted to draw conclusions. Students seemed to acquire strategies for drawing conclusions in English Language Arts (ELA) class, and many attempted to use these
strategies in their history class. Thus, this study indicated that a practical consideration for integrating disciplinary literacy into history may be for teachers to consider skills and strategies that support disciplinary literacy across content areas in which students may be learning similar skills and strategies.

Dax, as per his comment above, was already familiar with the concept of drawing conclusions based on readings from his ELA class. However, the strategies he was learning in history conflicted with the strategies his ELA teacher taught him, and he, like many students, struggled with that component of disciplinary literacy. In this particular circumstance, instruction grounded in disciplinary literacy may have been enhanced if Ms. Wells had identified and explained that reading to draw conclusions in history may be different than reading to draw conclusions in ELA. Nevertheless, when I inquired if Dax was referring to learning to find the thesis or main idea of a text when he described drawing conclusions, he responded by stating,

No, we’re reading [informational texts] in [ELA] too. [The ELA teacher] wants us to draw conclusions by thinking about what we read and what [the text] tells us. But if we run into trouble, she says she we can always look for a conclusion in the final paragraph (Participant observation, 10/20).

Dax’s explanation indicated that students were engaged in similar practices in ELA and history class, but the strategies they were learning were different. Ms. Wells also explained,
Yeah, [the ELA] teacher and I need to get together more often to talk about some of these strategies I’ve been using. She seems to be doing similar things in her class with the informational text [instructional] units, and I think we’d do well to talk to each other and maybe share some of our strategies with each other. I think the students get confused sometimes because even though they’re learning similar types of things in here and in [ELA class], [the ELA teacher] and I approach instruction differently. I think she sometimes gives struggling students simple strategies that aren’t really effective to just get them through the assignment. But, I know she’s been working on helping them draw conclusions based on evidence they find in texts and she’s been using some Southern texts, which is what we’re doing in here, so I think we could collaborate to help our students

(Informal interview, 10/20)

This implication is consistent with Kloehn’s (2009) conclusions that the fields of history and English may benefit from collaboration to achieve common literacy goals. Yet, this finding calls into question fundamental principles of disciplinary literacy that emphasize distinct differences between literacy practices in the disciplines (Moje, 2008; 2010/2011). The present study suggests considering connections between disciplines, when applicable, to support literacy-based instruction in the disciplines. Although literacy skills may often be specific to a particular discipline, some general literacy practices and strategies may be useful across at least some disciplines and may overlap to enhance student learning.
Strategy Instruction

This study also raises questions concerning strategy instruction in disciplinary literacy. Many perspectives related to disciplinary literacy do not express explicitly how instructional strategies might be integrated into the disciplines (e.g., Juel et al., 2010; Moje, 2008; Wilson, 2011). Perhaps literacy researchers invested in the concept of disciplinary literacy have tended to focus on defining practices specific to a discipline instead of general strategies for the sake of distinguishing disciplinary literacy from content-area literacy (see Moje, 2008). Yet, this study and studies in the field of history expound the importance of strategy instruction in developing young adolescent students’ investigative skills in history (Barton 1997; Nokes et al., 2007; VanSledright, 2002a), and many effective content-area literacy strategies exist that may be modified relatively little to enhance disciplinary practices in history (Nokes, 2008; Nokes, 2010b). This study indicated that it may be fruitful for educators and specialists in the fields of history education and adolescent literacy to consider strategies to support disciplinary literacy that build on existing content-area literacy strategies, which Draper et al. (2010) and Nokes (2010a; 2010b) also suggested.

For example, in this study Questioning the Author (Beck & McKeown, 2001; Beck, McKeown et al., 1997; McKeown et al., 1993), an established content-area literacy strategy, was used, along with Beyer’s (2008) thinking in history strategies, to develop a framework for disciplinary literacy in eighth-grade history, as discussed in Chapter 3. These strategies helped scaffold middle-school students’ comprehension of and critical thinking about history texts. Findings from the present study indicated that students and
pre-service teachers found these strategies useful in instruction. Further, Ms. Wells also used content-area literacy strategies that were appropriate for instruction grounded in disciplinary literacy to support students’ learning and thinking about texts. These strategies seemed to be effective. Perhaps literacy researchers and specialists should consider how existing content-area literacy strategies may ground practices of study specific to a discipline, which would promote disciplinary literacy. Although these strategies may need to be altered or supported with other methods more specific to the discipline, which was done in this study by supplementing QtA with Beyer’s (2008) thinking in history strategies, providing pre-service and in-service teachers with opportunities to adapt content-literacy strategies to their respective disciplines may encourage more literacy to content connections and encourage literacy in the content areas. Further, this view encourages teachers to consider which literacy-based strategies support their content areas with the understanding that what works for one content area may not work for another, valuing differences between contents and underlining the importance of content in adolescent literacy, while also recognizing that some commonalities exist between disciplines, which was discussed in the previous subsection.

**Promise of Disciplinary Literacy in Content Instruction**

Although discrepancies were found between authentic practice and abstract perspectives on disciplinary literacy, retrospective analysis nonetheless supported the promise of disciplinary literacy to enhance content learning. Ms. Wells and the pre-service teachers were more inclined to consider literacy in history because it was approached in a manner that was consistent with disciplinary practices in history.
inclination seemed to overcome a major obstacle of content-area literacy, which suggests that content teachers are resistant to content-literacy because they do not see themselves as responsible for literacy instruction (O’Brien et al., 1995). However, when approached from a disciplinary standpoint, the teachers in this study were more willing to discuss and to attempt to integrate literacy into history instruction because it emphasized and supported existing content and their goals for instruction.

This implication is important because many adolescents struggle with reading and writing in the content areas, and they need literacy-based instruction to develop strategies and skills to succeed in content learning (Alvermann & Moore, 1991). Yet, decades of research suggests that content teachers still struggle with and resist using content-area literacy strategies, in part because they believe that the strategies suggested by content-area literacy were too general and did not authentically support content learning (Conley, 2008). Considering these obstacles in content-area literacy, the field of adolescent literacy may be better supported by a new perspective such as disciplinary literacy. Nevertheless, more interventions and research in classrooms are needed to better understand how disciplinary literacy may best be integrated into the content areas and into pre-service teacher education to provide a more comprehensive understanding to that perspective.

**Recommendations for Classroom Practice**

Formative experiments seek to provide practical guidance for practitioners as well as add to existing empirical literature. This study offers recommendations for middle-
school teachers and university instructors considering integrating a similar intervention into their classrooms:

1) To aid in incorporating digital and Internet technology into teaching, middle-school teachers should develop a working relationship with district technology personnel. As discussed in Chapters 4 and 5, obstacles to using digital technology in instruction may arise as a result of district policies and restrictions on Internet access. Blogging may impinge on those policies. Technology personnel may help circumvent these obstacles. Solutions should be tested in advance of initiating the intervention.

2) Although blogging may be a useful out-of-school reflective writing assignment, using a blog as a part of in-class activities may be advantageous. Chapter 4 discusses how students may be more motivated to blog in class and how discussion that develops as students blog about history texts as a whole class may strengthen connections between content learned in-class and students’ interpretations of text.

3) Teachers might create opportunities, such as introductory blog exchanges, class discussions to clarify main ideas in history texts being discussed, and provide reminders that everyone involved in a blog project is a learner. Doing so may help alleviate students’ self-consciousness. As addressed in Chapter 5, blogging with an online partner may heighten middle-school students’ awareness of their academic identity and make them self-conscious about their writing and the ideas they share in their blog postings.
4) It may be productive to consider the types of writing appropriate for blogging and allow students freedom to use informal writing methods when writing about history on a blog site. Chapters 4 and 5 discussed the benefits of allowing students freedom to write in an informal format appropriate to blogging, such as motivation to write and higher student awareness of the ideas and opinions they posted as opposed to formal mechanics of writing.

5) Seeking opportunities, outside of field experience, for pre-service teachers to engage in authentic practice working with students may strengthen connections between students in a history class and students in a course for pre-service teachers preparing to be social studies teachers. As discussed in the fifth iterative cycle in Chapter 4, pre-service teachers became aware of the realities of teaching, social studies about which they made unrealistic assumptions, including middle-school students’ difficulties in reading and understanding texts. Considering these obstacles prior to entering the teaching profession might increase pre-service teachers’ awareness of instruction that is accessible to all students.

6) Explicit guidance and strategies may be necessary for middle-school students to successfully engage in disciplinary literacy in history. Chapter 4 illustrated how instruction guided by disciplinary literacy allowed students who had difficulty reading and critically evaluating texts to engage actively in discussion and to think critically about texts. As this intervention suggested, these strategies can be integrated with the larger goals of social studies instruction.
Future Research

A consideration for future research would be to examine this intervention from the standpoint of research more detached from literacy or perhaps a team of researchers that included an expert in social studies education. Doing so would extend findings of this present dissertation study to consider how instruction grounded in disciplinary literacy may more realistically look when literacy is not at the forefront of the investigation and not as heavily promoted by the researcher.

A replication of the present study taking into account the recommendations specified in the previous section might move a researcher further into the background of the study. Doing so would present results relevant to a history teacher or methods instructors’ perspective of disciplinary literacy without the influence of a literacy specialist. In addition, to move a subsequent study closer to the authentic conditions of many schools and classrooms, a district literacy specialist might be included as a facilitator of the intervention who introduces the intervention to a middle-school teacher and university instructor and encourages them to make all decisions regarding implementation. Essentially, this type of study would consider the question: What role would literacy play in discipline-based instruction without the constant presence of a literacy specialist?

Research would also benefit from a replication of this study and intervention where a university instructor collaborated directly with a middle-school teacher to integrate disciplinary literacy into both settings, instead of using a literacy specialist as a go-between. The literacy specialist might serve as a consultant, but the social studies
instructors’ teaching methods and strategy use would be at their discretion. These results may capture an even more realistic portrayal of how disciplinary literacy functions in middle-school and pre-service teacher education.

Further, this formative experiment could be replicated in different contexts that might help clarify results. To consider whether this intervention might facilitate an investment in disciplinary literacy and instruction inspired by disciplinary literacy, student populations and classroom settings with different levels of academic achievement might be investigated. A comprehensive approach might be to conduct a large-scale study consisting of multiple middle-school social studies classrooms with at least one classroom of students of high academic achievement, one classroom with an average achievement student population, and one classroom of students of lower academic achievement. This approach may provide results that speak to the discrepancies between the types of instruction grounded in disciplinary literacy suitable for a range of middle-school classrooms and how approaches to integrating disciplinary literacy into social studies education might differ between these types of classrooms. These results might be particularly useful for social studies educators who teach a variety of classes that differ in student achievement levels and may fill multiple gaps in research on disciplinary literacy in middle-school social studies.

This study also provided insight into how a social studies teacher with 13 years of classroom experience reacted to and integrated disciplinary literacy into her history teaching. Pre-service teachers witnessed, through the strategies introduced in their methods course, Ms. Wells’ approaches to integrating disciplinary literacy into her
eighth-grade classroom, and this experience was influential in their consideration of disciplinary literacy in history. Another study might recruit a social studies teacher just entering the classroom or with less than two years of experience in the classroom to study this teacher’s reactions to and integration of disciplinary literacy in history. Recruiting a teacher with less teaching experience who had recently completed a teacher education program might also affect how pre-service teachers’ react to disciplinary literacy as they witness a teacher closer to their experience level integrate literacy-based instruction into history instruction.

A final consideration may be that although blogging with a middle-school student provided pre-service teacher with a type of experience integrating disciplinary literacy into instruction and many had positive reactions and their instructional techniques improved, the project was required and counted for a major grade in their coursework. This limitation must be considered and raises the question: How does experience engaging in instruction grounded in disciplinary literacy in coursework carry over into pre-service teachers’ future teaching methods? A longitudinal study that follows some of the pre-service teachers in the study into the field as they begin their teaching careers would provide valuable insight into the influence of integrating disciplinary literacy into teacher education and what school and classroom factors may influence these future social studies teachers’ decisions regarding literacy-based instruction in social studies. This type of research may provide information to enhance teacher education and bridge gaps between the university and the field.
Closing

This formative experiment examined how disciplinary literacy in history may be incorporated into middle-school and pre-service teacher education. Results indicated positive outcomes in both areas of education that suggested progress toward achieving the pedagogical goals. Literacy-based practices specific to the study of history aided middle-school students’ comprehension of history texts while encouraging critical thinking, and pre-service teachers were able to consider how literacy may become a part of history instruction and how literacy may affect students’ understandings of history. Both populations also provided insight into how blogging may support disciplinary literacy in history. Overall, this study suggested that literacy-based instruction that specifically addresses and supports the disciplinary study of history and enhances educators’ existing curricular goals may benefit social studies students and pre-service teachers. Certainly, disciplinary literacy is a promising new perspective. Yet, further consideration is necessary in providing a comprehensive definition of disciplinary literacy in history and the factors that may influence teachers’ decisions to integrate disciplinary literacy into history instruction. Promoting collaboration between literacy specialists and social studies educators may be a productive approach to enhancing the perspective of disciplinary literacy and connecting teacher education to the K-12 classroom.
APPENDICES
Appendix A

Structured Field Notes Guide: Middle-School

Guiding Questions:
1) What is the relationship between teacher and students?
2) What types of interactions are displayed between students?
3) What kind of instructional and social climate does the teacher establish in the classroom?
4) What routines govern the flow of classroom activities?
5) What school rules or routines influence classroom activities?
6) What types of social studies activities are utilized (teacher-centered, student-centered, etc)?
Appendix B
Southeastern University Blog Project Rubric

<table>
<thead>
<tr>
<th></th>
<th>1 Unacceptable</th>
<th>3 Acceptable</th>
<th>7 Exemplary (Target)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Participation</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[8 points]</td>
<td>Blog posts are not responded to within 3 days of posting and address few or none of the comments and questions posed by the blog partner.</td>
<td>All blog posts are responded to within 2 days of posting and sufficiently address most comments and questions posed by the blog partner.</td>
<td>All blog posts are responded to within 2 days of posting and sufficiently address all comments and questions posted by the blog partner.</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Evidence of Critical</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Thinking**</td>
<td>Responses include personal inquiry about the text and inquiry about students’ comments about the text.</td>
<td>Responses include personal inquiry about the text and inquiry about students’ comments about the text. Responses also challenge students to use one or two components of disciplinary literacy.</td>
<td>Responses include personal inquiry about the text and inquiry about students’ comments about the text. Responses also challenge students to use all components of disciplinary literacy.</td>
</tr>
<tr>
<td>[8 points]</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Content of Paper/ final reflection</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[9 points]</td>
<td>Reflection contains little description of experience with the critical thinking project. Fewer than two of the following three components are included and appropriately described: (1) analysis of preservice teacher/student dialogue, (2) discussion about personal strengths and weaknesses discovered while involved in this project, and (3) the influence of this project on future teaching.</td>
<td>Reflection contains descriptions of experience with the critical thinking project. Two of the following three components are included and appropriately described: (1) analysis of preservice teacher/student dialogue, (2) discussion about personal strengths and weaknesses discovered while involved in this project, and (3) the influence of this project on future teaching.</td>
<td>Reflection contains thoughtful descriptions of experience with the critical thinking project. The following three components are included and appropriately described: (1) analysis of preservice teacher/student dialogue, (2) discussion about personal strengths and weaknesses discovered while involved in this project, and (3) the influence of this project on future teaching.</td>
</tr>
</tbody>
</table>

Comments:
Appendix C

Structured Field Notes Guide: University

Guiding Questions:

1) What type of relationship is the instructor trying to build with students?
2) What types of student relationships are displayed?
3) What kind of instructional and social climate does the teacher establish in the classroom?
4) What routines govern the flow of classroom activities?
5) How does the instructor approach social studies instruction?
6) Does instruction seem to reflect instructor-centered or student-centered learning?
Appendix D

Graphic Organizer

<table>
<thead>
<tr>
<th>Think about</th>
<th>Questions I can ask myself</th>
<th>Thoughts/Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Author’s message</td>
<td>What is the author trying to tell me? Is the author’s message biased?</td>
<td></td>
</tr>
<tr>
<td>Author’s clarity</td>
<td>Is there anything in the text that I don’t understand? Does the author’s choice of words make sense to me?</td>
<td></td>
</tr>
<tr>
<td>Author’s reasons</td>
<td>Why is the author telling me this information? What is the purpose of this text?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Think about</th>
<th>Ask myself</th>
<th>Thoughts/Explanations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Links</td>
<td>What did I think about when I read the text? What prior knowledge can I connect to the text?</td>
<td></td>
</tr>
<tr>
<td>Broken or missing links</td>
<td>What do I still want to know about? What do I wonder after finishing the reading?</td>
<td></td>
</tr>
<tr>
<td>Extension</td>
<td>What can I do to find out more about what I’m still wondering?</td>
<td></td>
</tr>
</tbody>
</table>

**Negotiations/Conclusions**

Now that I’ve thought about the text from the author’s perspective and my own, what conclusions can I draw? What are my reactions?

**Conclusions:**
### Appendix E

**Note-Making Guide**

<table>
<thead>
<tr>
<th>Before Reading - Brainstorm</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What do I already know about what I’ve read in this text?</td>
<td></td>
</tr>
<tr>
<td>What do I already know about this topic?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>During Reading – Gather information</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>What does the author directly or specifically tell me in this text?</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>After Reading - Infer</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>How does the information I knew before reading connect to the information I learned during reading (or, does it)?</td>
<td></td>
</tr>
<tr>
<td>Can I draw any personal connections to this text? If so, what?</td>
<td></td>
</tr>
<tr>
<td>What inferences can I make?</td>
<td></td>
</tr>
<tr>
<td>Do my inferences agree with or disagree with what I already knew?</td>
<td></td>
</tr>
<tr>
<td>What do I still wonder after reading this text?</td>
<td></td>
</tr>
</tbody>
</table>
Appendix F

Discussion Web

Central Question

Position 1

What does the author say to support this claim?

What does the author not say OR what do we still wonder?

Position 2

What does the author say to support this claim?

What does the author not say OR what do we still wonder?

Conclusions:
Appendix G

*My Big Campus* Homepage
Appendix H

Sample Text from *Voices of Carolina Slave Children* (Rhyne, 1990)

*They Said I Was Worth $400*

My pappy was named Bob and my mammy was named Salina. They belonged to Marse Tom Starke before Marse Nick Peay bought them. My brothers were Bob and John, and I had a sister named Carrie. I was the youngest child. Marse Nick had nineteen plantations, with an overseer and African quarters on every place. Altogether, he owned 27,000 acres which were worked by a thousand Africans, more or less, too many to take a census of. Before the numerator could get around, some more would be born or bought and some would die.

Missus believed there were two classes of folks: the Africans and the poor white folks that didn’t own any land. She had a grand manner with the Africans; no patience with poor white folks. They couldn’t come in the front yard, and they knew to pass on by and hitch up their horse and come knock on the kitchen door and make their wants and wishes known to the butler.

There were classes among the Africans. The first class were the house Africans that included the butler, maids, nurses, chambermaids, and the cooks. The second class consisted of the carriage drivers, gardeners and carpenters, the barber, and the stableman. Then came the wheelwright, wagoners, blacksmiths, and foremen. The next class were the men who minded the cows and dogs. All had good houses and never had to work hard. They never got a beating. Then came the cradlers of the wheat, the threshers and the millers of the corn and the wheat, and the feeders of cotton to the gin. The lowest class was the field man.

Marse Nick died the year before the war for freedom, and my family left the home place and went to Melrose Plantation, where Marse Nick, Jr. was the master. And what a place that was! Twas on a hill, overlooking a fish pond. A flower yard stretched clear down the hill to the big gate, hanging on granite pillars. On the east side of the mansion were the gardens and terraces, acres of sweet potatoes, water-
melons, strawberries, and two long rows of beehives.

The house had thirty rooms, 365 windows and doors, one for every day of the year, and the entire house was filled with Marseilles carpets. Linen tablecloths were spread in the dining room where everything was silver, including four wine decanters, four nut crackers, coffee pots, castors for salt and pepper, and silver vinegar bottles. If one counted, there were ninety-eight silver forks, knives, teaspoons and tablespoons, four silver ladles, six silver sugar tongs, silver goblets, a silver mustard pot, and two silver fruit stands. There were silver candlesticks in every room. All fireplaces had brass firedogs and marble mantelpieces. Paintings were of oil, and they hung in the hall. Marse Nick said he paid $100 for each painting. They were of his mammy, pappy, and Uncle Austin and Colonel Lamar.

The smokehouse had four rooms and a cellar. One room every year was filled with brown sugar, just shoveled in with spades. In winter they would drive up a drove of hogs from each plantation, kill them, scald the hair off them, and pack the meat away in salt. They hung up the hams and shoulders in the smokehouse. Most of the rum and wine was kept in barrels in the cellar, but there was a closet in the house where brandy was kept for quick use.

When Marse died, the appraisers for the state came and figured that his enslaved Africans, mules, cows, hogs and things were worth $288,168.78. The land and house were worth over a million dollars. They put a price of $1,800.00 on my mammy and $1,800.00 on my pappy. They said I was worth $400.00. When the Yankees came they loaded up all the meat, took some of the sugar and shoveled some over the yard. They took all the wine, rum, and liquor and took away all the silver and other valuables in the house. Then they set the house afire. They left the Marse and his family in a misery way, and I wept when I saw them so poor. Africans were cold and hungry, but free.

Rose Starke
Melrose Plantation
Fairfield County, S. C.
Appendix I

Sample Text from *South Carolina Women* (Bodie, 1991)

The following passage is from the book *South Carolina Women* by Idella Bodie, pgs. 2-3.

_Affra Harleston Coming_

LANDHOLDER  
*CIRCA 1649-1669*

Affra’s heart pounded under the cape drawn to protect her from the dampness of the sea air. She clutched her baggage and addressed the captain of the Carolina, which was anchored close by the Port Royal and the Albemarle.

“I want to go to Carolina with you, Sir,” she said.

Judging from Affra’s appearance, the captain determined she was “lady-born.”

“Why, Miss,” he said, “the trip is not for the likes of you.”

_If he only knew_, thought Affra, _that I have only four shillings in my pocket._

Since her father had lost everything by siding with the King of England against Cromwell, she and her brother felt compelled to go on the Port Royal expedition to mend their family fortune.

At her insistence in going, the captain asked his mate, John Coming, to arrange a male sponsor for her. “He will receive money for bringing you over,” John said, “and after two years of employment with this sponsor you will be given one hundred acres.”

With her family in Ireland left penniless, Affra had no choice. The crudeness of the women’s quarters on board ship and the strange talk of some of the men did not deter her. She found that carrying her Bible helped with the latter problem. Too, she worried that her brother Charles was not aboard the Carolina.

Mate Coming helped to ease her fears by telling her Charles was probably a passenger on another of the ships, and often the two met at the bow to talk. Other passengers with whom she felt a kindred spirit were Joseph West, who was to become governor, and Stephen Bull and his brother.

After a long journey, a storm drove the Carolina into the island of Nevis, where Henry Woodward, a ship’s surgeon and one of the earliest English settlers, joined them for a return trip to Carolina. There Affra learned that her brother Charles had sailed on another ship.

When Affra’s servitude was completed in 1672, she and John Coming were married. The couple had a home, Comingeet, on the Cooper River. John became captain of the Blessing and continued to work for many years. While he was away, Affra managed the plantation.

John, now a member of the Grand Council and owner of much property, gave land for Oyster Point. After John’s death Affra built a home in Charleston on the corner of Wentworth and Saint Philip Street. By her own resolution Affra willed seventeen acres of land to Saint Philip’s Church. This transaction marked the beginning of parsonage property in South Carolina. Other property went to John H. and Isaac Bull.

Affra died December 28, 1698, and is buried at Comingeet beside John.
The following excerpt is from *The Thirteen Colonies: South Carolina* by Craig A. Doherty & Katherine M. Doherty. Please read the excerpt and answer the questions that follow. If there are any vocabulary words you do not know or understand in the excerpt, please circle those words.

“Lady of Cofitachequi”

De Soto found a strong confederation of Native American tribes in South Carolina known as the Cofitachequi. It is believed that their confederation extended from the coast to the foothills of the Appalachians. When de Soto did not find an gold or silver, he forced the Cofitachequi to provide him with food and people to carry it. De Soto wrote about the Lady of Cofitachequi, who was one of the leaders of the group. When he left the area, he kidnapped the woman and forced her to accompany his expedition. When de Soto was crossing the mountains, the Lady of Cofitachequi managed to escape. Within 150 years, the strong Cofitachequi Confederation had completely disappeared.

Directions: Now that you’ve listened to and read the excerpt, answer the following questions as best you can in complete sentences.

1. How does what you read in the passage connect with what you already know about European explorers and Native Americans in South Carolina?

2. What questions would you ask the authors who wrote this?

3. Do you think the authors left any information out of this passage? If so, what do you think they left out? Explain why you think this.

4. What conclusions did you draw about European explorers and Native Americans from reading this passage?
Appendix K

Pre-Intervention University SCLA

Directions: Please read the following scenario and answer the three questions on the following page.

Scenario: As a part of the European explorers in South Carolina unit in an eighth-grade history class, students are given the following excerpt from The Thirteen Colonies: South Carolina by Craig A. Doherty & Katherine M. Doherty to read.

“Lady of Cofitachequi”

De Soto found a strong confederation of Native American tribes in South Carolina known as the Cofitachequi. It is believed that their confederation extended from the coast to the foothills of the Appalachians. When de Soto did not find any gold or silver, he forced the Cofitachequi to provide him with food and people to carry it. De Soto wrote about the Lady of Cofitachequi, who was one of the leaders of the group. When he left the area, he kidnapped the woman and forced her to accompany his expedition. When de Soto was crossing the mountains, the Lady of Cofitachequi managed to escape. Within 150 years, the strong Cofitachequi Confederation had completely disappeared.

After students read the excerpt, they are then asked to respond to four critical-thinking questions. Below are the questions and one student’s, Lisa’s, responses to questions.

1. How does what you read in the passage connect with what you already know about European explorers and Native Americans in South Carolina?

Lisa’s response: That European explorers forced the Native Americans to work for them.

2. What questions would you ask the authors who wrote this?

Lisa’s response: Why did he take the Lady of Cofitachequi?

3. Do you think the authors left any information out of this passage? If so, what do you think they left out? Explain why you think this.

Lisa’s response: Who is deSoto?!

4. What conclusions did you draw, or what did you learn, from reading this passage?

Lisa’s response: That De Soto took the Lady and never found what he was looking for.

Please answer the following questions:

1. If you were Lisa’s teacher, how would you use her prior knowledge about European explorers and Native Americans in South Carolina (found in her response to Question 1) to scaffold her response to Question 4 to make connections and draw conclusions?
2. What types of teaching strategies would you suggest to help Lisa question the author more critically in her responses to Questions 2-3? What might you suggest to help Lisa find more information about the questions she asked?

3. If you were Lisa’s teacher, how would you respond to the conclusions she drew from reading “The Lady of Cofitachequi” passage? What would you do to help her “dig deeper” into the passage?
The following excerpt is from *The Thirteen Colonies: South Carolina* by Craig A. Doherty & Katherine M. Doherty. Please read the excerpt and answer the questions that follow. If there are any vocabulary words you do not know or understand in the excerpt, please circle those words.

**African Americans and Religion in Carolina**

Many slaves worshipped the spirits of their ancestors in the African tradition. They brought with them a rich heritage of music and dancing, of wood carving, and of folk medicine. They knew the wisdom of their tribes, which had been passed down to them in the form of stories. Some had been converted to Islam and worshiped according to the Koran. Many slave companies had the slaves baptized as Christians before they went on board the ships in Africa. But the ceremony meant little to the slaves at the time.

Later in Carolina some slaves went to church and became Christians. At first, white masters did not approve of slaves’ going to church. In the Bible the masters read the words of Jesus: “You shall know the truth, and the truth shall make you free.” Masters were afraid that they might have to free the slaves who became Christians. Before long, however, the slave owners believed that the Bible was talking about the freedom of the soul, not the body. They allowed their slaves to be baptized. Many slaves were not convinced. They thought they were meant to be free – soul and in body.

1. How does what you read in the passage connect with what you already know about African Americans in Carolina?

2. What questions would you ask the authors who wrote this passage?

3. Do you think the authors left any information out of this passage that would help you understand it better? If so, what do you think they left out? **Explain why you think this.**
4. What conclusions did you draw about African Americans in Carolina from reading this passage?
Appendix M

Mid-Intervention University SCLA

Directions: Please read the following scenario and answer the three questions on the following page.

Scenario: As a part of the European explorers in South Carolina unit in an eighth-grade history class, students are given the following excerpt from *The Thirteen Colonies: South Carolina* by Craig A. Doherty & Katherine M. Doherty to read.

“African Americans and Religion in Carolina”

Many slaves worshipped the spirits of their ancestors in the African tradition. They brought with them a rich heritage of music and dancing, of wood carving, and of folk medicine. They knew the wisdom of their tribes, which had been passed down to them in the form of stories. Some had been converted to Islam and worshiped according to the Koran. Many slave companies had the slaves baptized as Christians before they went on board the ships in Africa. But the ceremony meant little to the slaves at the time.

Later in Carolina some slaves went to church and became Christians. At first, white masters did not approve of slaves’ going to church. In the Bible the masters read the words of Jesus: “You shall know the truth, and the truth shall make you free.” Masters were afraid that they might have to free the slaves who became Christians. Before long, however, the slave owners believed that the Bible was talking about the freedom of the soul, not the body. They allowed their slaves to be baptized. Many slaves were not convinced. They thought they were meant to be free – soul and in body.

After students read the excerpt, they are then asked to respond to four critical thinking questions. Below are the questions and one student’s, Lisa’s, responses to the questions.

1. How does what you read in the passage connect with what you already know about African Americans in Carolina?

   **Lisa’s response:** I know that African Americans were religious but didn’t understand a lot of religion because they couldn’t read or speak good English when they got here.

2. What questions would you ask the authors who wrote this?

   **Lisa’s response:** Why did they baptize the slaves before they went on board ships in Africa?

3. Do you think the authors left any information out of this passage that would help you understand it better? If so, what do you think they left out? Explain why you think this.

   **Lisa’s response:** If white masters did not approve of slaves’ going to church how did some go to church and become Christians?

4. What conclusions did you draw, or what did you learn, from reading this passage?

   **Lisa’s response:** Many slaves in Carolina became Christian even though their traditions were very different before slavery.
Please answer the following questions:

1. If you were Lisa’s teacher, how would you use her prior knowledge about African Americans in Carolina (found in her response to Question 1) to scaffold her response to Question 4 to make connections and draw conclusions?

2. What types of teaching strategies would you suggest to help Lisa question the author more critically in her responses to Questions 2-3? What might you suggest to help Lisa find more information about the questions she asked?

3. If you were Lisa’s teacher, how would you respond to the conclusions she drew from reading “African Americans and Religion in Carolina” passage? What would you do to help her “dig deeper” into the passage?
Appendix N

Post-Intervention Middle-School SCLA

The following excerpt is from *The Thirteen Colonies: South Carolina* by Craig A. Doherty & Katherine M. Doherty. Please read the excerpt and answer the questions that follow. If there are any vocabulary words you do not know or understand in the excerpt, please circle those words.

The Tea Crisis and Revolution

The final crisis that led to the Revolution in America was the Tea Act of 1773. On December 2, just as the Boston patriots were planning a tea party, the H.M.S. London arrived in Charles Town harbor with 257 chests of East India tea. Handbills were passed out in the streets calling people to a General Meeting in the Exchange. The next day the meeting adopted the Association. It was a boycott on all English goods. To avoid a riot, customs officials unloaded the tea and put it in the basement of the exchange. It stayed there until 1776 when it was sold to arm the Patriot forces.

The General Meeting met once a month to decide what to do. Then it chose a General Committee of forty-five planters, merchants, and artisans to handle business from day to day. Many members of the General Committee had been members of the Commons House that no longer met. The General Committee sent a load of rice to Boston when the Coercive Acts closed the port. It also called for the people to elect delegates to a General Meeting on July 6, 1774. This General Meeting had members from the Back Country for the first time. It chose a new General Committee and delegates from South Carolina to the First Continental Congress. These new groups were, in effect, the government of South Carolina. They took the place of the royal rule.

1. How does what you read in the passage connect with what you already know about the Tea Crisis and Revolution?

2. What questions would you ask the authors who wrote this?

3. Do you think the authors left any information out of this passage? If so, what do you think they left out? *Explain why you think this.*
4. What conclusions can you draw about the Tea Crisis and Revolution from reading this passage?
Appendix O

Post-Intervention University SCLA

Directions: Please read the following scenario and answer the three questions on the following page.

Scenario: As a part of the European explorers in South Carolina unit in an eighth-grade history class, students are given the following excerpt from *The Thirteen Colonies: South Carolina* by Craig A. Doherty & Katherine M. Doherty to read.

The Tea Crisis and Revolution

The final crisis that led to the Revolution in America was the Tea Act of 1773. On December 2, just as the Boston patriots were planning a tea party, the *H.M.S. London* arrived in Charles Town harbor with 257 chests of East India tea. Handbills were passed out in the streets calling people to a General Meeting in the Exchange. The next day the meeting adopted the Association. It was a boycott on all English goods. To avoid a riot, customs officials unloaded the tea and put it in the basement of the exchange. It stayed there until 1776 when it was sold to arm the Patriot forces.

The General Meeting met once a month to decide what to do. Then it chose a General Committee of forty-five planters, merchants, and artisans to handle business from day to day. Many members of the General Committee had been members of the Commons House that no longer met. The General Committee sent a load of rice to Boston when the Coercive Acts closed the port. It also called for the people to elect delegates to a General Meeting on July 6, 1774. This General Meeting had members from the Back Country for the first time. It chose a new General Committee and delegates from South Carolina to the First Continental Congress. These new groups were, in effect, the government of South Carolina. They took the place of the royal rule.

After students read the excerpt, they are then asked to respond to four critical thinking questions. Below are the questions and one student’s, Lisa’s, responses to the questions.

1. How does what you read in the passage connect with what you already know about the Tea Crisis and Revolution?

   *Lisa’s response: I know that the Colonists were angry about England’s control and the Boston tea party was a result of that anger.*

2. What questions would you ask the authors who wrote this?

   *Lisa’s response: Why did the General Committee send a load of rice to Boston? Why was this important for forming the government in South Carolina?*

3. Do you think the authors left any information out of this passage? If so, what do you think they left out? **Explain why you think this.**

   *Lisa’s response: I wanted to know what the Coercive Acts were. I think the authors left out a lot of information in the second paragraph because I had a hard time connecting each event to the forming of a government.*

4. What conclusions can you draw about the Tea Crisis and Revolution from reading this passage?
Lisa’s response: *South Carolina formed a government because of the American Revolution.*

Please answer the following questions:

1. If you were Lisa’s teacher, how would you use her prior knowledge about the Tea Crisis and Revolution (found in her response to Question 1) to scaffold her response to Question 4 to make connections and draw conclusions?

2. What types of teaching strategies would you suggest to help Lisa question the author more critically in her responses to Questions 2-3? What might you suggest to help Lisa find more information about the questions she asked?

3. If you were Lisa’s teacher, how would you respond to the conclusions she drew from reading “The Tea Crisis and Revolution” passage? What would you do to help her “dig deeper” into the passage?
### Middle-School:

**Targeted Disciplinary-Literacy Skills**

<table>
<thead>
<tr>
<th>Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making connections</td>
</tr>
<tr>
<td>Questioning the author</td>
</tr>
<tr>
<td>Questioning text</td>
</tr>
<tr>
<td>Making inferences/ drawing conclusions</td>
</tr>
</tbody>
</table>

*Notes:*

### University:

**Targeted Disciplinary-Literacy Instructional Strategy**

<table>
<thead>
<tr>
<th>Strategy</th>
</tr>
</thead>
<tbody>
<tr>
<td>Using student’s prior knowledge to help students question the author/text</td>
</tr>
<tr>
<td>Helping students question the author or text</td>
</tr>
<tr>
<td>Using instructional strategies to help a student critically evaluate text</td>
</tr>
</tbody>
</table>

*Notes:*
Appendix Q

Sample Scored SCLA

Sample SCLA Evaluation for Jack, a Middle-School Student

<table>
<thead>
<tr>
<th>Disciplinary literacy skill</th>
<th>Skill not identified</th>
<th>Skill identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Making connections</td>
<td></td>
<td>“I know that European explorers were some of the first people who came to America who started to push Native Americans off of their land, and I know they stole from them.”</td>
</tr>
</tbody>
</table>

| Questioning text/author     | “Where did the Cofitachequi live?” |                      |
| Evaluating text             | “The Cofitachequi had disappeared within 150 years.” |                      |

**Notes:** Jack was able to form connections from his knowledge of how European explorers treated Native Americans – he understood general relationships between the N.A. and European explorers, and he provided an example of what he knew about those relationships. He was able to superficially question the author/text by questioning where the Cofitachequi tribe lived, but this question does not indicate critical thought about the author’s sources, knowledge, or textual information. Seems like this is the type of questioning he is used to from class. Jack summarized the final sentence of the text when asked to draw conclusions, which does not provide evidence that he was able to evaluate the text.

Sample SCLA Evaluation for Christy, a Pre-Service Teacher

<table>
<thead>
<tr>
<th>Disciplinary literacy instructional technique</th>
<th>Technique not identified</th>
<th>Technique identified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping students draw connections using prior knowledge</td>
<td></td>
<td>“I would show the student that she knows the Europeans forced the Native Americans to do things they did not want to do, and I would raise the question, “why would DeSoto want to take one of the Native American leaders?”</td>
</tr>
<tr>
<td>Using effective scaffolding to help students question the author or text</td>
<td>“I would use a series of questioning to help her think about what the author was trying to say or if the info was biased.”</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td></td>
</tr>
<tr>
<td>Utilizing instructional strategies to help students critically evaluate text and draw conclusions</td>
<td>“I would ask her to think about why she thinks that.” happened.”</td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** Christy was able to use Lisa’s prior knowledge to build her understanding of the relationships between Native Americans and European explorers using a specific, but also thought-provoking question to ask when reading. Using a series of questioning to help the student think about what the author was trying to say may be highly effective, but this response does not indicate what types of questions Christy would use, which may affect the way the student questions the author (i.e., surface-level questioning vs. critical questioning). Christy’s answer to the last question indicated that she knew she needed to ask “Why” type questions but her technique does not scaffold student thought to critically evaluate text.
Appendix R

University Mid-Intervention Reflection Questionnaire

Name ______________________________

1. What do you think is going well at this point in the blog project?

2. What aspects of the blog project could use improvement?

3. What components of the project do you think your blog buddy is struggling with so far?

4. What has been difficult about this project for you?

5. What have you enjoyed about this project?

6. What have you learned so far in this project?

7. Anything else you’d like to tell me about the project?
Appendix S

Sample Blog Exchange Excerpts from Talia and Jill

**First Reading Response Blog Post Exchange:**

<table>
<thead>
<tr>
<th>Talia, a middle-school student</th>
<th>Jill, a pre-service teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hi Jill, What I thought was interesting about this article was she was helped with her fear being ease. Another interesting part is when he became captain and they got married on the boat. I wondered how are they life going? Is he still captain? Are they still married? (Blog post, 9/21)</td>
<td>Hi Talia, I really enjoyed this passage. I especially liked how it connected European history with South Carolina history, with elements of romance, drama, and suffering. It would definitely be something Hollywood could make a movie of! You mentioned that you liked the part where Affra and John Coming were married, and I have to agree. John was kind enough to ‘ease her fears’ on the boat about whether [her] brother managed to get on a different boat. . . I also really enjoyed reading about Affra as a person. She left Ireland penniless and was heading to America to repay her debts. . . Throughout the passage, I got the sense Affra was a strong and kind woman. This got me to thinking about women during the time period. Do you think Affra was typical of women in the 1600s, or was she special? (Blog post, 9/22)</td>
</tr>
</tbody>
</table>
### Final Reading Response Blog Exchange:

<table>
<thead>
<tr>
<th>Talia</th>
<th>Jill</th>
</tr>
</thead>
<tbody>
<tr>
<td>I think the article was great what about you? I like that the battle was in [an area close to Townley] but I just moved to [the town where Townley was located] about a year ago before I came down here I lived in a place called Sumter. So I’m just starting to know the area and couldn’t really see where the battle was. <strong>I could think about it tho and it seemed like a lot of other battles we read about in class with people killing their own family members because the war divided them.</strong> I think Thomas was a great man before his brother died but after that he was very sad and angry when his brother died. I would be too so I can understand his feeling. (Blog post, 11/3)</td>
<td>I thought [the memoir] was really interesting considering you are from [the town where Townley was located]. I bet it is easier to reading knowing the whole story took place in your backyard! You’re right, Thomas was tore up about the death of his brother. In fact he said, “I do not believe I had ever used an oath before that day, but then I tore up open my bosom, and swore that I would never rest till I had avenged his death.” <strong>What did you think about the next few lines when he talks about the Tories? How do you think his feelings of revenge affected how he fought in the battle? Can you imagine what it would look like?</strong> (Blog post, 11/9)</td>
</tr>
</tbody>
</table>
Appendix T

Sample Blog Exchange Excerpts from Jacob and Charles

**First Reading Response Blog Exchange:**

<table>
<thead>
<tr>
<th>Jacob, a middle-school student</th>
<th>Charles, a pre-service teacher</th>
</tr>
</thead>
<tbody>
<tr>
<td>Well in my opinion it is insensitive not to take into account the feelings of the women. It was interesting that Affra would risk the journey, but I understand her reason and perseverance. I think that she was fortunate to be able to have this experience. Affra was also lucky to marry the captain and get the acres of land. . . <em>I wished there could have been more description or information about Affra’s life after her voyage and marriage. What I specifically wondered was if she have more than one ship journey that they excluded.</em> . . (Blog post, 9/22)</td>
<td>My take on this assignment is that it’s a very interesting passage because you don’t hear many stories about women during this time period. Men are typically the ones that are talkd about the most so it’s kind of cool to see this type of story from a woman’s perspective. I was really impressed with your take on the story, especially your questioning of if there was more than one ship journey. . . I think this story is a good example of risking everything to help your family. Affra is portrayed as being very ladylike and proper, so her taking this journey is definitely out of her comfort zone, but just like you, it was very interesting to me that she would do this. . . (Blog post, 9/22)</td>
</tr>
</tbody>
</table>
Final Reading Response Blog Exchange:

<table>
<thead>
<tr>
<th>Jacob</th>
<th>Charles</th>
<th>Jacob</th>
</tr>
</thead>
<tbody>
<tr>
<td>Now we work on the Battle at Stallions...I thought that it was sad and I felt angry with Thomas Young when his brother was killed and also when stallions’ wife was killed by a ball shot. The story was sad because of this, but I enjoyed the main character’s bravery in joining the war at such a young age. This was interesting and also the fact that amid all of the violence the main character was able to act calmly and get things done, like other Rev. War soldiers we’ve read about. <strong>Resilient was a good trait I thought these men possessed.</strong> I still wonder who would be considered the winner of this battle because stallions’ wife was killed and she was also the sister of Love, who was on the other side. (Blog post, 11/3)</td>
<td>. . . I thought the Battle at Stallions was very interesting because you don’t hear much about the smaller battles that took place during the American Revolution. I also admired Thomas Young’s bravery in joining the war at only 16 years old! I believe his brother being murdered was the motivating factor for him to join... Resilient is a great word to use when describing Thomas Young! Even after his brother’s recent death and joining at such a young age, he has a good head on his shoulders and stays alive during the first skirmish. <strong>What do you think happened to Thomas Young after the war based on his account of bravery?</strong> (Blog post, 11/9)</td>
<td>. . . I wonder if the main character of this passage ever became a captain or a general and led in another battle, because of his resilience. <strong>But, it was written from his point of view, so I don’t know if everything he said is accurate.</strong> (Blog post, 11/15)</td>
</tr>
</tbody>
</table>
Appendix U

Representative Open and Axial Coding Sample from Iterative Data Analysis

<table>
<thead>
<tr>
<th>Code</th>
<th>Example</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher using models</td>
<td>Wells briefly introduces salamander project and gives students 20 minutes to look through past students’ finished projects as guides (MS field notes, 9/19).</td>
<td>Preference of model-based instruction</td>
</tr>
<tr>
<td></td>
<td>Students are creating advertisement for English to come to Carolina. Wells uses past students’ finished projects as guides (MS field notes, 9/22).</td>
<td></td>
</tr>
<tr>
<td>Teacher resistance to explicit strategy instruction</td>
<td>“This is one thing [i.e., reading comprehension] that concerns me. I have multiple students who struggle with reading and I worry that this project may be too hard for them. I think it might be good for them, but I’m worried that the strategies are going to overwhelm them, like the primary source activity. They just seemed so discouraged, and I want them to enjoy studying history” (Wells informal interview, 9/19).</td>
<td>Discomfort with explicit strategies</td>
</tr>
<tr>
<td>Value of student appeal in instruction</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Student use of models</td>
<td>“I’m going to do something like this [points to the picture drawing on a student work sample] in my advertisement. I think it makes the ad look better and make sense” (Dax, Participant observation, 9/22).</td>
<td>Models as guides for learning</td>
</tr>
<tr>
<td></td>
<td>“Hand me that [student work sample of salamander project]. I want to see how they described the soil in this area to compare what I wrote” (Zan, Participant observation, 9/19).</td>
<td></td>
</tr>
</tbody>
</table>
Appendix V

Representative Summary and Coding from Retrospective Analysis

<table>
<thead>
<tr>
<th>Data Summary Excerpt</th>
<th>Code</th>
<th>Category</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Middle-School Setting:</strong></td>
<td>Shift in beliefs</td>
<td>Conflict between beliefs and practice</td>
</tr>
<tr>
<td>Wells’ shift in methods seems to reflect a shift in beliefs based on interviews. She said she was on board with disciplinary literacy at the beginning of the intervention but actions proved otherwise. Experience seemed to change this. She began to use content area literacy strategies (Frayer model, etc.) and adapting those strategies to integrate disciplinary literacy by the end of the intervention. Data indicates she was resistant to content area literacy at the beginning of intervention (ex., she mentioned workshops, PD, and filing cabinet full of strategies but she never used most of them) but then her use of content area literacy strategies and interview data concerning those strategies by the end of the intervention provides evidence that she started to value them. (Also note that I did not verbally encourage her to use any strategies outside of the intervention.) Wells noted she had little time for content area literacy strategies and she seemed to value transmission methods at the beginning of the intervention. Yet, by the end of the intervention time did not seem to be an issue and she became more interested in disciplinary literacy as she watched her students engage in it.</td>
<td>Shift in ideas and practice concerning content area literacy</td>
<td>Experience as catalyst</td>
</tr>
<tr>
<td></td>
<td>Experience observing students</td>
<td>Shift in actions and beliefs</td>
</tr>
<tr>
<td></td>
<td>Conflict between statements and actions</td>
<td></td>
</tr>
<tr>
<td><strong>University Setting:</strong></td>
<td>Shift in resistance to literacy</td>
<td>Experience as influential</td>
</tr>
<tr>
<td>Pre-service teachers (PT) were resistant to the idea of literacy at the beginning of the intervention. They seemed wary of my presence in the classroom until they learned more about disciplinary literacy. They all seemed to approve of disciplinary literacy but questioned, throughout the intervention, how feasible it was. Knowing Wells was using it in her class alleviated some concern. There also seemed to be some resistance at the beginning of the intervention, to the content area literacy course</td>
<td>Approval of disciplinary literacy</td>
<td>Shift in ideas and beliefs about literacy</td>
</tr>
<tr>
<td></td>
<td>Emphasis on content at beginning of intervention</td>
<td></td>
</tr>
</tbody>
</table>
they were taking. Data indicated that many felt that literacy was forced on them and they were not responsible for literacy instruction because they were in social studies. Many provided evidence from their field experiences about practicum teachers highlighting content and transmission models of learning. During the intervention, experience blogging seemed to shift those ideas about literacy as they experienced struggling readers and learners. Some remained resistant while many asked for advice to enhance their students’ literacy skills. 

Influence of field experience

Experience blogging with students as catalyst for consideration of literacy
Appendix W

Introductory Blog Prompt

For your first blog entry, write an introduction post (5-8 sentences) to your blog buddy telling them about yourself. Below are some questions you may use to guide your writing. Remember, these are just guide questions. You do not have to answer them all or keep them in order. You can also ask your buddy general questions about themselves since they’ll be reading your post and responding to it next week.

- What is your name? Age? Do you go by any nicknames?
- Do you have any siblings? If so, how many?
- What sports/extracurricular activities are you involved in?
- What are your favorite sports teams?
- What do you do for fun?
- Do you have any hobbies?
- Do you like to watch television or movies? If so, what are your favorite shows or films?
- Where is the most interesting place you have ever visited?
- If you could visit any country or place, where would you go?
- What are your favorite subjects? Why?
- What subject(s) do you dislike? Why?
- Are you excited about blogging with your buddy? Tell them why.
Appendix X

Primary Source Guide

1. What is the date, and what was going on at the time?

2. What type of source is this?

3. Is there anything unique about its appearance?

4. What do you notice about the font, language, symbols, and other features about the document?

5. Who is the intended audience? What do we know about them?

6. Who is the author? What do we know about them?

7. How did we get the primary source document? What meaning does that have?

8. Where was or how was the original published or displayed?

9. Why was the document written? Is there anything in the text to help you determine this?

10. What is the purpose and motivation of the source?

11. What was life like before and after the source was written?

12. Who does this affect?

13. How does this document compare to other documents created in this time period?

14. How does this document affect South Carolina history?
Appendix Y

Disciplinary Literacy Handout

*Adapted from Beck, McKeown, Hamilton, & Kucan (1997) and Beyer (2008)

Readers should think about:

1) Author’s message (What is the author trying to say? Is the message biased?)

2) Author’s reasons (Why is the author providing this information? What is the purpose of the text?)

3) Links (What connections can be made to prior knowledge or personal experience?)

4) Broken or missing links (What is missing from the text? What do I still wonder?)

5) Extension (What can be done to find more information about what I’m still wondering?)

Instruction should:

1) Help students form connections between prior knowledge and text

2) Help students consider perspective and question authors and texts

3) Provide students with methods to critically evaluate texts based on evidence

Resources:


Appendix Z

Model Blog Activity

Model Response Post

8th Grade Student Response to Affra Harleston Coming:

Hey!! How’s it going? Did you see the Clemson game Saturday? Awesome!! Ok, so when I read about Affra I wondered why she was important to South Carolina history and what made her so special to be included in a book about South Carolina Women. I THINK the author wanted me to understand how difficult it must have been for people to come over to South Carolina from Ireland because Affra was very poor and was just looking for SOMETHING better than where she was from. I’m not sure if the text is biased or not, but I think the author definitely wants you to feel sorry for Affra by the way she describes her as penniless and worried about her brother, Charles. All I could think about was how I would feel if I had to get on a boat with no money and no idea of what the place I was going to was really like. I would be scared silly! It kind of makes me think about the people who come to America now to escape wherever they are from and to make money and how they must be really scared too. I liked the reading, but I guess I still wonder (or was surprised) that they would give a lady 100 acres of land. Were women allowed to have land back then??? Later!

Blog Buddy Response:

Hi! Yes, how ‘bout them TIGERS!!! I was at the game and it was crazy! Anyway, I really enjoyed reading your response to the Affra passage. I, too, think it must have been incredibly difficult to just leave the country I was from and where my family was to go to another country that you had never been before. Also, did you catch where the captain determined Affra was “lady born”? That means that Affra was from an upper class in society, probably nobility and was probably not used to living in poor conditions, much less working in servitude. What do you think that was like for Affra? I also agree with you that the author wants us to feel sorry for Affra, but I think she also wants us to really understand the differences between the rich life that Affra was used to and the poor, servant-like life she was now entering in Carolina. I’m like you – I would have been scared silly as well to do what Affra did! That was a great connection you made when you thought about current immigrants coming to America. They must also feel scared and sad to leave their homes. Since America no longer offers people land in return for a few years of work, why is it still appealing to move to America? Do you think today’s immigrants are as fortunate as the ones like Affra? I’m not certain that women could own land back then by themselves, but maybe they could own it under the watch of their sponsor (who Affra ended up marrying!) You
should look on the Internet or ask your teacher for more information about women owning land in the 1600s in Carolina. That brings me to the thing I wondered more about – wasn’t this a love story? Where were the details? Why did the author leave out that information? Any ideas? Those were the things I was curious about after reading. Great job with your response!

8th Grade Student Response:

I did notice “lady born” but I didn’t know what it meant so I kind of skipped over it – oops, I guess I missed some important info there😊 Thanks for helping me out! I think since Affra was so used to being rich, it must have been TERRIBLE to work like a servant. I mean I’m not rich but I don’t even like doing chores or yard work with my dad. I hate yard work! I can’t imagine doing that for a few years straight. I think that people like to move to America even though we’re not giving away land anymore because we do have a lot of freedom that other countries don’t have. I mean, women can do a lot here that they can’t in other places. Yeah, I’m not too interested in the love story but I will ask my teacher about women owning land back then. Talk to ya soon!

Model Response Activity

1. Underline text where the buddies talk about what the author wanted them to learn from the text.

2. Circle text where the buddies discuss bias.

3. Place a star by text where the buddies talk about what they thought about when they read the text.

4. Draw two lines under text where the buddies made connections to other similar topics.

5. Strike through text where the buddies talked about what interested them.

6. Draw a box around text where the buddies discussed what they still wondered.

7. Lightly shade text where the buddies answered each others’ questions.

8. Draw a smiley face next to text where the buddies reacted to each others’ opinions.
Appendix AA

Reflective Blog Writing Guide

Read the text carefully. Write an 8-10 sentence blog response by considering the following questions:

5. What is the author trying to tell me or what do you think the author wants you to learn from this text?

6. Is the text biased? In other words, does it sound like the author includes their opinions in the text?

7. Explain why you think the text is biased.

8. What did you think about when you read the text? (For example, did you think about any current events, the news, movies, or books you may have read?)

9. What do you already know about this topic that you can connect to this text?

10. What interested you about this text?

11. What do you still wonder about after finishing the reading?

Responding to Your Blog Buddy’s Posts

Read your buddy’s response post carefully. Write an 8-10 sentence blog response by:

1. Thoughtfully answering the questions that your buddy asked you in their post.

2. Reading your buddy’s opinions about the text and reacting to their opinions. (For example, if they said they agreed with or were interested in a certain part of the text, tell them your opinion about that part of the text.)
Appendix BB

Sample Primary Sources

Gadsden Flag
Appendix BB Continued

Political cartoon created by Benjamin Franklin (1754).
Appendix CC

Frayer Model Example

<table>
<thead>
<tr>
<th>What was it?</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Regulator Movement

<table>
<thead>
<tr>
<th>Reactions &amp; Connections</th>
<th>What questions do you still have after reading?</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES


Columbia, SC: University of South Carolina Press.

New York: Guilford.

Pressley, M. (2000). What should comprehension instruction be the instruction of? In M.


