THE HISTORICAL SCENE INVESTIGATION (HSI) PROJECT: EXAMINING THE USE OF CASE BASED HISTORICAL INSTRUCTION IN THE FIFTH GRADE SOCIAL STUDIES CLASSROOM.

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Introduction

The Historical Scene Investigation (HSI) project is designed to help teachers integrate historical investigations into their K-12 history instruction. The HSI project materials provide streamlined and aesthetically engaging Web-based historical investigation exercises. Each case exercise engages students in a historical investigation using rich and varied historical primary sources scaffolded by document-study prompts and activities requiring specific analytical skills and processes. The HSI project, originally developed in 2001 by the principal investigators of this study, has undergone numerous revisions in efforts to extend topical coverage and more explicitly align online materials with state content standards for history. In addition, revisions focused on matching the chronological sequence of cases to a sequence of historical thinking skills, and, finally, on ensuring that the technical aspects and functionality of the program more easily supported teacher and student use of each investigation.

In this study, we examine the historical evidentiary reasoning of fifth-grade students following HSI-based instruction. In particular, we wanted to know if discrete, short-term exposure to the HSI materials and activities strengthened the development of historical thinking such as historical causality and perspective.

Theoretical Framework

The conceptual framework for the HSI project and for the present study emerges from the literature advocating appropriate uses of technology within the social studies classroom, as well as the
literature endorsing historical inquiry in the classroom\textsuperscript{2}. The study is also built upon the acknowledgement that there are too many distinctions of purpose between historical practice and pedagogy to frame classroom activities as “authentic” in nature. Marzano\textsuperscript{3} and colleagues address the specialized modes of inquiry used by historians, and how these modes are often absent from instructional designs:

historians examine many primary sources to get a coherent interpretation of particular places, people, and periods. This specialized mode of inquiry involves, among other things, much deductive thinking, formulation of questions, and high inferential powers. Yet the results of historians’ work are commonly written into narratives, which are summarized and then presented as mere declarative information in textbooks. The student reading history is hard-pressed to infer the approaches the historian used.

Inviting students to ask questions of this declarative presentation of historical narrative is argued to be an important step on the \textit{trajectory} of authentic engagement, however. Through mediated activity that incorporates varied and divergent sources, young students are introduced to modes of inquiry upon which later historiographic pedagogy might be framed. While manifest learning objectives of such activities might center upon comparing sources to develop fuller understandings of specific events, the more salient latent objectives involve students moving from task-specific and content-based views of historical study to more process-oriented and decontextualized frames of thought about the past. In a discussion of elementary history instruction, Barton\textsuperscript{4} identified examples of these types of decontextualized inquiry skills; (1) the formulation of historical questions and skills (2) the gathering of relevant information (3) the evaluation of authenticity and reliability of sources (4) the comparison of conflicting accounts (5) the adoption of historical perspective and (6) the development of coherent historical narrative from disparate sources.

The pedagogical feasibility and developmental appropriateness of such skills was explored by VanSledright\textsuperscript{5} in a study which involved the researcher teaching a fifth-grade class on a daily basis for approximately one semester and incorporating extensive student manipulation of primary sources as part of the investigation(s). Despite the challenges inherent in such instruction, several benefits emerged. First,
students demonstrated notable enthusiasm in their approaches to reading and considering historical texts. VanSledright attributed this motivational benefit to the novelty of the primary-source based teaching and the intriguing nature of the investigatory metaphor. Moreover, students were indeed capable of relatively sophisticated historical reading skills. The development of intertextual comparison and acknowledgement of the importance of perspectives and documentary sub-text when evaluating sources as historical evidence were observed.

The design of the present study explores whether similar evidences of historiographic skills could be realized through more periodic incorporation of discrete historical thinking activities that involve fifth-grade students responding to prompting questions, completing writing activities, and engaging in focused classroom discussions on topics such as historical plausibility. Elementary classroom teachers face daunting time constraints, mandates of content coverage for accountability testing, and some pressures to curtail social studies teaching in order to maximize instruction in literacy and numeracy skills. It was recognized as imperative that instruction framed such mediated investigations be efficient in a manner consistent with the time constraints of the elementary social studies instruction. The HSI site is among several resources being developed to assist with the understanding and structuring of the historical analysis process; however, the applicability to classroom practice and the requisite time to “do history” in such a manner has been in need of further exploration. The potential that nascent facets of historiographic thought could be instilled through periodic exposure to primary sources could justify the periodic incorporation of sites like HSI into typical elementary history classrooms.

Methodology

Context

In three fifth-grade social studies classrooms at X elementary school, students explored the role of historical detective through three separate two-day HSI investigations. The school located in a mid-size city in the Upper South includes students pre-Kindergarten through fifth grade. The school draws a largely middle and upper SES, suburban population about five miles from the city center. The school has
a stable population of 645 students in grades K-5 including roughly twenty percent of the total population qualifying for special education services with Individual Education Plans (IEPs). The school incorporates special needs students in “regular” classrooms with support services provided in those classrooms as in brief “pull out” classes. For example, four of the students in the fifth grade were identified as having “sensory disorders” significant enough to require an interpreter in the classroom. The students were evenly distributed in terms of gender. The school reports its population as Caucasian (77%), African American (11%), Asian (11%), and Other (1%).

The HSI cases used in this study incorporated various historical thinking and process skills based on work by Barton9. These included the gathering of relevant information, the evaluation of authenticity and reliability of sources, the comparison of conflicting accounts, the adoption of historical perspective, and the development of coherent historical narratives from disparate sources. The three HSI investigations implemented in this study dealt with the “Starving Time” in the early Jamestown colony, the Battle of Lexington Green, and “Finding Aaron,” the story of a runaway slave. Each case focuses on a set of thinking and processing skills described earlier. For example, the Lexington case emphasizes the comparison of conflicting accounts, while the Jamestown case focuses on the gathering of relevant information and development of historical narrative. The historical thinking skills were scaffolded for students both through initial guided “unpacking” of sources by the instructor and the corresponding “Detective’s Log,” an organizer which prompts students on points to consider in exploring sources and questions to guide the synthesis of documents. Each case was taught by the principal investigators in this project and presented students with multiple primary and secondary source historical documents centered on an engaging question, framed as a mystery for students to solve (i.e. “Who fired the first shot at Lexington and Concord?”). Cases can be accessed online www.hsionline.org.

Implementation

Prior to the first HSI exercise, one of the investigators led a discussion on how police detectives attempt to solve crimes, using the popular CSI: Crime Scene Investigation series as a starting point particularly focusing on types of evidence detectives might consider, how evidence can be evaluated and
weighed, and how a case is built, emphasizing the tentative nature of the process and that often detectives have insufficient evidence to build a “rock-solid” case. The instructor then connected this type of investigatory work and the work of historians in developing historical narratives using their history textbook as a case in point. Next, the instructor introduced the HSI program as a series of investigations of the past where students acted as detectives examining selected historical evidence and drawing their own conclusions on various events in American history.

It should be noted here that preliminary interviews with the classroom teacher indicated that she had provided no explicit instruction on how to analyze primary source documents or how to deal with conflicting sources. Further, the classroom teacher neither practiced the historical thinking skills introduced in the intervention, nor expanded her use of historical documents in the classroom during the length of the study. A description of each of the cases is presented below.

*Jamestown’s Starving Time.* The case of the Jamestown ‘starving time’ invited students to participate in the “student historian approach” endorsed by Kobrin and others\(^\text{10}\) by providing them with documents that clarified the challenges faced by settlers in the early Virginia settlement. The students’ investigation of these sources would center on the following overarching question: “What caused the collapse of the Jamestown colony in 1610?” Following exposure to the brief Jamestown summary in their class textbooks, students were asked to read and interpret six documents relating to Jamestown and the starving time, assessing the various perspectives of the documents' author(s) and compiling this information into a matrix of sources within their detective logs, (See Appendix A). The six documents included a *History Alive!* textbook account, two journal entries authored by John Smith and George Percy, census data from the ships’ logs and two contemporary articles related to on-going archeological excavation and forensic research being conducted at the settlement site. Documents that used archaic vocabulary and/or spelling were “modernized” to aid student comprehension (See Figure A).
Document D: Excerpted from “George Percy’s Account of the Voyage to Virginia and the Colony’s First Days”, 1607

[Original version] It pleased God after awhile, to send those people which were our mortal enemies to relieve us with such victuals, as Bread, Corne, Fish and Flesh in great plenty, which was the setting up of our feeble men, otherwise we had all perished. Also we were frequented by divers Kings in the country, bringing us store of provision to our great comfort.

[Modern Version] Thanks to God, our deadly enemies saved us by bringing food - great amounts of bread, corn, fish, and meat. This food saved all of us weak and starving men. Otherwise we would all have died. Leaders from other tribes also brought us food and supplies which made us comfortable.

Figure A: Document D from the Jamestown HSI Case File.

After spending two thirty-five-minute class periods unpacking the documents both independently and with teacher direction and recording their responses to a series of analytic prompts, students were asked to write a paragraph responding to the following prompt for homework the next day: “Using the documents we have read in class, come up with an explanation of what caused the failure of Jamestown colony in 1610.” These student responses were then coded according to the study’s student performance rubric.

Battle of Lexington Green. The case of the Battle of Lexington Green, based on Wineburg’s11 similar exercise, offered students an opportunity to read conflicting accounts about who fired the “shot heard round the world.” Approximately six weeks after the study of Jamestown, in the midst of their regular classroom study of the events leading up the American Revolution, the students were provided with an array of primary and secondary source documents relating to the April 19, 1775 battle. The eight sources included eyewitness accounts from both British and colonial military forces engaged in the battle, a newspaper report from the London Gazette, a textbook entry from an American History text, and an excerpt from the novel, April Morning, in which the author renders a vivid portrayal of the skirmish. Unlike the Jamestown case, in which the History Alive! text had provided students with a foundational understanding of the topic, the text coverage of the revolutionary era makes only a brief mention of the battles at Lexington and Concord. The students’ investigation of these sources would center on the
intriguing, but ultimately unanswerable question of who fired the first shot on the Lexington Green. For
this exercise, the documents were not modernized but rather kept in the original language of the time
period in which they were written (See Figure B).

To the best of my recollection about 4’oclock in the morning being the 19th of April, the five
front companies were ordered to load, which they did….It was at Lexington when we saw one of
their companies drawn up in regular order. Major Pitcairn of the Marines second in command
called them to disperse, but their not seeming willing, he desired us to mind our places which we
did when they gave us a fire, the run off to get behind a wall. We had one man wounded in our
company in the leg, his name was Johnson. Also, Major Pitcairn’s horse was shot in the flank;
we returned their salute, and before we proceeded on our march from Lexington, I believe we
killed and wounded either 7 or 8 men. Ensign Jeremy Lister, youngest of the British officers at
Lexington, in a personal narrative written in 1782.

Figure B: Document H from the Lexington Green HSI Case file.

After unpacking the documents both independently and with teacher direction during one forty-
five minute class period, students were asked to answer the following question in a paragraph for
homework the second day:

Based on your analysis of the eight documents and citing evidence to support your answer, please
write a paragraph answering the following question: Who fired the first shot at the Battle of
Lexington and Concord? Please indicate whether you were satisfied with the evidence and list
any additional questions that have been left unanswered through your investigation.

These responses were then coded according to the same student performance continuum rubric used with
the Jamestown detective’s logs.

Finding Aaron. In the Finding Aaron case, students were introduced to a runaway enslaved man named
Aaron who had escaped a number of times from a plantation in Chesterfield, Virginia. The presentation of
the Finding Aaron case occurred in the spring semester, approximately two months after the Battle of
Lexington Green exercise. In the case, students were not given a variety of sources but rather six
documents, all runaway slave advertisements which appeared in the Virginia Gazette, beginning in
December 1767 and ending January 1771. In the documents, the students were asked to describe Aaron
based on the evidence and then attempt to trace what happened to Aaron through the lens of these advertisements. Ultimately, after reading the last advertisement, the students were asked to come up with a plausible explanation of what happened to Aaron between these dates and after his last escape. For this exercise, the documents were not modernized but kept in the original language of the time period in which they were written (See Figure C). In addition to the transcription of the advertisements, students were also provided a copy of the original advertisement (See Figure D).

Virginia Gazette December 17, 1767

RUN away from the subscriber, a Mulatto fellow named AARON, about 5 feet 10 inches high, about 19 years old, and marked on each cheek IR. Whoever brings the said fellow to the subscriber, in Chesterfield, shall have Forty Shillings reward, besides what the law allows.
HENRY RANDOLPH

Figure C: Document A from the Finding Aaron Case File (Text).

Figure D: Document A from the Finding Aaron Case File (Image).

After spending two forty-five minute class periods reading through the documents and building a description of Aaron based on the evidence, the students were asked to answer the following question for homework the next day. The assignment read, “Using what you know of the time period, what do you think happened to the runaway enslaved man named Aaron? Why do you think this?” As part of the
second class, there was a discussion about the word “plausible” and students independently and with teacher guidance generated implausible and reasonable answers to the question. The responses that students eventually generated for homework were then coded according to the study’s sophistication scoring continuum.

Data Collection and Analysis

As they worked through each case, students completed “Detective Logs.” In addition to providing data on students’ thinking, the logs scaffolded students’ documentary analysis process, classroom observations, and two sets of student interviews. These three data sources provided both objective and subjective data on student response in the interventions.

The student detective logs were utilized to help determine the degree of students’ engagement in historical thinking processes during the exercises. Analysis of students’ responses on the detective logs was based upon a nine-level student performance continuum developed by the researchers and grounded in Vansledright’s findings relating to evidentiary reasoning (see Table 1). VanSledright employed a four-level coding scheme for analyzing the students’ vocalizations during performance tasks. In his model, students’ analysis fell into one of two major domains: global reading strategies and history-specific reading strategies. Essentially student responses’ were scored from levels one and two, which involved general reading comprehension strategies and intratextual evaluation to level three and four, in which students source and compare and contrast multiple primary sources with a critical lens.
Table 1: *Performance Continuum for Student Detective Logs*

<table>
<thead>
<tr>
<th>Level</th>
<th>Criterion</th>
</tr>
</thead>
<tbody>
<tr>
<td>0- Dismissive</td>
<td>Students do not formulate an answer or write “I don’t know”</td>
</tr>
<tr>
<td><strong>Global Reading and Interpretation</strong></td>
<td></td>
</tr>
<tr>
<td>1- Undeveloped</td>
<td>Student responses are exceedingly short and/or indicate a misinterpretation of the task.</td>
</tr>
<tr>
<td>2- Implausible</td>
<td>Student responses are built upon faulty or untenable assertions and/or may contain anachronistic elements</td>
</tr>
<tr>
<td>3- Unsupported</td>
<td>Student responses are plausible, but built upon assertions drawn outside of the scope of the documents or available text resources.</td>
</tr>
<tr>
<td>4- Entrenched</td>
<td>Student responses are plausible, but indicate reverting to material in the textbook without incorporating available sources.</td>
</tr>
<tr>
<td><strong>Historical Reading and Interpretation</strong></td>
<td></td>
</tr>
<tr>
<td>5- Evidential</td>
<td>Student responses are plausible and built upon documentary evidence, but limited to one or two documents. Responses may contain definitive assertions that ignore the existence of disconfirming evidence within the sources.</td>
</tr>
<tr>
<td>6- Integrative</td>
<td>Student responses are based upon the consideration of all/most relevant sources, including contradictory accounts. Responses may indicate a partiality that is inconsistent with dispassionate historical study.</td>
</tr>
<tr>
<td>7- Analytical</td>
<td>Student responses are well-reasoned and based upon the systematic and dispassionate scrutiny of all available sources. Evidence of tentativeness of interpretation is present. No reasoning beyond the scope of the documents is provided, however.</td>
</tr>
<tr>
<td>8- Methodical</td>
<td>Student responses are trenchant and explicitly tentative. Students recognize that evidence not currently available to them would potentially impact their assertions. Students may generalize on the tentative nature of historical study beyond the scope of the documents</td>
</tr>
</tbody>
</table>

In this study, the analysis was framed using VanSledright’s two domains; however, to adequately characterize the data, the researchers developed a nine-level rubric through a constant-comparative analysis of the student responses. The researchers collectively read a set of ten student responses and attempted to categorize the level of historical sophistication of each, including evidence of sourcing,
comparison of multiple documents, etc. With iterative examination of additional student responses, six categories initially emerged. Through further analysis and discussion, three additional categories were developed to further delineate the coded data. Then, the three researchers examined each of the student responses in the detective logs and assigned them to one of the levels on the student performance continuum. The researchers initially performed these analyses individually, coding each of the responses independently. Although most of the student responses clearly corresponded to a particular level in the rubric and agreement among the three independent assessments was high (92%), other responses were more difficult to assign. To achieve consensus and to increase the reliability of the scoring, the researchers examined each discrepancy in the coding and then assigned a score based on the consensus of the group. Through this rubric-based analysis, the researchers were able to ascertain various kinds of evidentiary reasoning elicited by instructional use of HSI-based materials.

Additional data were gathered during two sets of student interviews; one following the first case and one following the third. The student interviews were conducted in multiple focus groups of approximately four students by two of the researchers and two graduate assistants familiar with the study. The purpose of these interviews was to probe student thinking, particularly to further our understanding of the students’ historical understandings. Upon completion of the study, the regular classroom teacher of these students was also interviewed to gain her perspective of the students’ progress in employing historical thinking skills. The interviews were recorded, transcribed, and analyzed using a qualitative approach. This method, based in Erickson’s analytic induction, allowed the researchers to generate four empirical assertions based on the collected data. Assertions varied in scope and their level of inference, and were initially generated during field work. They were tested and retested during analysis via a thorough review of all data—field notes, interview transcriptions and student work. Assertions that were not supported by the data were eliminated or modified.
Findings

**Historical Plausibility: Starving Time in Jamestown**

Over half of the students were able to use sources as historical evidence to formulate plausible historical narratives in the Jamestown colony case. As shown in table 2, roughly one-third of fifth-grade students (23 students; 32%) reverted to “pre-digested” content found in their *History Alive!* textbooks when responding to writing prompts relating to factors precipitating the Jamestown “starving time.” This form of “entrenched” response was considered plausible and well-reasoned within the scheme of analysis, but did not provide any indication that the student had incorporated information from any of the other sources. An example of an entrenched response to the Jamestown prompt follows:

*Response 10a: “I think a lot of things caused the failure of the Jamestown colony. But I think the main thing was Captain John Smith leaving the colony. One of the minor things was the land they built on was a marsh, which was bad for people (breathing, sitting on, etc.) and bad for farming. I think when Captain John Smith left it really affected Jamestown because he was a powerful leader, and he kept everyone working. Another thing was that he was good friends with the Powhatan Indians, and when he left, the citizens stopped providing for them.”*

The response repeats several of the points emphasized in the text, which similarly emphasizes the critical importance of the leadership vacuum created by Smith’s departure for England in 1609.

A majority of fifth-grade students (37 students; 53%) were able to provide evidence in their “detective logs” of having interpreted a portion of the historical evidence contained within the various documents and incorporated these interpretations into their summaries. An exemplary response of “evidential” sophistication on the scoring rubric is shown below:

*14a: “One explanation of what caused the failure of the Jamestown colony in 1610 is the cruelty of the Powtans. Another reason is the stupidity of there leaders who didn’t plan how to get food for themselves and also the loss of the ships. They had caused 440 of the 500 people in Jamestown to die. They had called it the starving time. A couple of reasons that Jamestown was a bad place to settle was because the area was bad for farming. The water was salty and dirty and the mosquitos carried bad diseases like malaria. That is some explanation of what caused the failure in Jamestown.”*

This response, while containing several spelling and grammatical errors, is considered evidential due to the number of sources the student incorporates into their response. For example, while the student does not formally cite the sources, the student does use the exact phrasing found in one of the documents,
including, “Cruelty of the Powhatans” “Stupidity of the leaders” and “440 of the 550 people” were all drawn from the second document, a journal entry written by John Smith in 1610.

The discrimination of responses beyond the evidential level on the student performance continuum rubric was based upon several attributes of student responses. The number of sources that were incorporated became the primary determinant of the “integrative” level. The most sophisticated coding levels were based upon students’ presentation of a sound hypothesis amid an air of tentative uncertainty. The quote that follows is indicative of the four “analytical” student responses to the Jamestown prompt is the following:

42a: “This is my theory: I have taken on the investigation of the failure of Jamestown. There are very many theories for Jamestown. One of them by Frank Hancock. He thought maybe that the colonist had gotten arsenic poisoning from the food on the ship. Although he wasn’t there, he had a very logical theory. Another, by History Alive. These 7 authors believe that it was the settlement. They have settled in a marsh mostly wetlands. Not good for farming. Mosquitos carrying malaria. Salty and dirty water. We may never know of the true facts of Jamestown.

The student has internalized the investigatory process and has presented his response as a brief meta-analysis, comparing the theories of Frank Hancock, a contemporary forensic pathologist, and those presented in the classroom text. The fact that this response never actually “takes a stand,” leads to the hesitancy to consider such analytical responses as “better” than other more positivistic summarizations, but the response is indicative of a rudimentary form of historiographic weighing of sources.

Table 2: Classification of Student Response Logs from Jamestown Colony Case

<table>
<thead>
<tr>
<th></th>
<th>Number of Logs (n=71)</th>
<th>Percentages of Logs</th>
<th>Domain Specific Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dismissive</td>
<td>5</td>
<td>7%</td>
<td>7%</td>
</tr>
<tr>
<td>Undeveloped</td>
<td>3</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>Implausible</td>
<td>1</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Unsupported</td>
<td>2</td>
<td>3%</td>
<td></td>
</tr>
<tr>
<td>Entrenched</td>
<td>23</td>
<td>32%</td>
<td></td>
</tr>
<tr>
<td>Evidential</td>
<td>24</td>
<td>34%</td>
<td></td>
</tr>
<tr>
<td>Integrative</td>
<td>9</td>
<td>13%</td>
<td></td>
</tr>
<tr>
<td>Analytical</td>
<td>4</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>Methodological</td>
<td>0</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>

13
In introducing students to their role as historical detectives, the case of the “Starving Time” also built a richer understanding of the historical context of the early years of the Jamestown settlement. Through the juxtaposition of varied primary documents against a comprehensive textbook account, students also wrestled with the difficulties inherent in determining causality. While it appeared that most students benefited from the additional attention to the historical context and wrote responses indicative of an understanding of what the starving time was, only about half of the students appeared to expand their understanding of causality through the documents. These students did not revert solely to the authoritative account presented in their texts, but rather provided more integrated responses based upon multiple causal chains. Some were moved toward contemplative but tentative responses by the credence they gave to various causes.

*Historical Sourcing: The Battle at Lexington Green*

Less than half of the students were able to consider various attributes of sources as factors influencing the reliability of accounts and the usefulness of these sources in the development of narratives in the Lexington Green case. As evidenced in Table 3, roughly one-fifth of the students (13 students; 22%) were unable to use the evidence provided in the case to support their answer to the writing prompt. This form of “unsupported” response was considered plausible, but built upon assertions drawn from outside of the scope of the documents as well as available text resources. An example of an unsupported response to the Battle of Lexington Green prompt follows:

*Response 49c:  I think the British fired the first shot because the colonists were angry with the British and the British were angry with the colonists. So I think that they both shot at each other and fought and shot them with everything they got.*

While astutely acknowledging the growing tension between the British and Colonists, the student speaks only generally about their encounter and does not use any specific sources within the case nor the textbook to support the response.
In contrast, the following responses were considered “entrenched,” a characterization assigned to six student responses (10%). In these responses, the students were able to devise plausible answers but support those answers with prior knowledge and understanding of the American Revolution as described in their textbook.

*Response 55c:* Who I think fired the first shot? Well, I believe the colonist fired the first shot. Because when Paul Revere came saying the British was coming, the British are coming. The colonist were to fight. So they got their weapons and fired the first shot.

*Response 23c:* I think that the colonists fired the first shot. I think that the colonists fired the first shot because they wanted revenge on the Britain. Britain taxed them and did many more things.

In response 55c, the student is specific about the role of Paul Revere in the encounter; however, the warning rides of Revere and others were not a part of the documents presented to students. In response 23c, the student relies on pre-existing notions about the American Revolution as evidenced by the student’s understanding of retribution for the taxation placed upon the colonists by the British. While valid, this represents another response outside of the scope of the documents provided.

The majority of students (28 students: 46.5%) were able to construct responses to the writing prompt which incorporated information from the documents provided. Of this group, 23 students (38%) were able to use at least one of the documents but provided definitive assertions as to who fired the first shot, which, at least within their narrative, excluded the existence of disconfirming sources within the case. A typical response coded as evidential follows:

*10c:* I think that the British fired the shot because the colonists were probably just standing there but the British might have wanted to start a fight. Also because John Barker wrote about this incident in his diary on the same day it happened.

Here the student relies solely on a diary entry from the journal of Lieutenant John Barker, an officer in the British army dated April 19th 1775, the same day of the battle. The student astutely considers the veracity of this source and incorporates his explanation into the account. In contrast, the student in the following response (1c) recognizes the entire corpus of documents, including contradictory accounts, with the phrase, “out of the eight documents”. Additionally, the student purposefully vetted two specific types of
documents including the diary entries and the newspaper account. As a result, the narrative was characterized as integrative.

1c: I think the colonists fired the first shot at the Battle of Lexington Green. This is because, out of the eight documents, all of the diary entries said that the colonists started. And in diaries you would usually write the truth, because you would think no one would read it. Also, on the newspaper it said the colonists did it and everybody reads the newspaper so you would want to write the truth. I was satisfied with the evidence on the eight documents about who shot the first shot at the battle of Lexington Green.

Unlike the integrative response, the two students who were able to produce an analytical response incorporated statements that considered the tentativeness of historical interpretation. An example of an analytic response follows:

8c: We have been talking about who fired the first shot, and with the evidence and information, I think that the British fired the first shot. I think this because in many of the documents such as Document A, the information was stated clearly and included many details. In Document A, it states that the town of Lexington was alarmed which in my case meant that they were shocked and surprised about the British coming, but also careful. Also in Document C, it stated that Major Pitcairn was yelling impoliet words so that must have meant that the British troops were mean and cruel to the colonists/peasants so they probably fired the first shot.

While subtle, the student’s purposeful use of the word “probably” intimates the students understanding that the opinion she holds might be tentative at best.

Table 3: Classification of Student Response Logs from Lexington Green Case

<table>
<thead>
<tr>
<th>Domain</th>
<th>Number of Logs (n=60)</th>
<th>Percentages of Logs</th>
<th>Domain Specific Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Reading and Interpretation</td>
<td>Dismissive</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Undeveloped</td>
<td>5</td>
<td>8.5%</td>
</tr>
<tr>
<td></td>
<td>Implausible</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td></td>
<td>Unsupported</td>
<td>13</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td>Entrenched</td>
<td>6</td>
<td>10%</td>
</tr>
<tr>
<td>Historical Reading and Interpretation</td>
<td>Evidential</td>
<td>23</td>
<td>38%</td>
</tr>
<tr>
<td></td>
<td>Integrative</td>
<td>3</td>
<td>5%</td>
</tr>
<tr>
<td></td>
<td>Analytical</td>
<td>2</td>
<td>3.5%</td>
</tr>
<tr>
<td></td>
<td>Methodological</td>
<td>0</td>
<td>0</td>
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</tbody>
</table>

Having received little prior exposure to the battle scene at Lexington Green, the documents are again used to establish meaningful historical context for these fifth-grade students. The Lexington case
also introduces students to the formidable task of reading documents for subtextual meaning, but in a manner that appropriately scaffolds the task of sourcing by using documents with clearly distinguishable perspectives. Utilizing sources that include a sworn testimony, a London newspaper account, a letter (written with clearly notable indignation), an excerpt of historical fiction, a textbook account, and several personal accounts written with varying proximity to the event, the Lexington case is used here as a primer in the reading of subtexts. Of these, students clearly found the diary entries to be the most accessible and convincing, perhaps because it is the form of writing with which they have some familiarity (the classes had read *The Diary of Anne Frank* earlier in the school year). The presumption that a diarist would have no reason to intentionally lie because there was no intended audience was made by numerous students, however it was not generally accompanied by the acknowledgement that a diarist’s version of a story would still be limited by their vantage point, they may still have an agenda, or that the diarist’s writing may be imbued with unintentional bias.

*Reconciling Discrepant Historical Sources: Finding Aaron*

Less than half of the students were able to develop historical narratives that reconcile discrepant sources and/or accommodate for paucity of sources in the Finding Aaron case. As shown in Table 4, the majority of student responses fell into two categories, unsupported (25 students; 40%) or evidential (18 students; 29%). Not surprisingly, the students who drafted unsupported answers seemed to rely on “wishful thinking” and created romantic accounts of what happened to Aaron following his last escape. Examples of unsupported responses are as follows:

3d: *I think that based on the story Aaron will go back north and He will live in an old place that has no electricity or nothing. I think this will happen because He keeps running so He better find a home to live in and he could have a good life or die. Also I think that the Native Americans found him.*

29d: *I think Aaron snuk out of the country on a vessel and moved somewhere else. I think he found a good job and lived a good life. I think this because he believes in freedom and he’ll do anything to have it.*
While in some ways it is plausible that Aaron went North, was found by Native Americans or that he moved somewhere else after sneaking out on a vessel, these students appear to struggle with the realities of the time period and create a Hollywood ending for Aaron. In contrast, students responses coded “evidential”, relied more heavily on the patterns within the documents to craft their responses.

47d: Unfortunatly, I think that Aaron was killed by either his owner that was upset at him. Or either the law that killed him, Because he was found in John Randolph’s Dad’s favor named Henry Randolph, and if he was found guilty he was probably hung.

59d: I think that Aaron tried to run away after the case and someone saw him that someone took him to Jhon Randolph and Jhon cut off Aaron’s head. So now Aaron is dead. May he rest in peace.

In these two responses, the students called upon the documents in the case with references to the slave owners, John and Henry Randolph, and also the fate spelled out in the documents; if Aaron was caught, he would be killed. Admittedly, this ending was difficult for some students.

Table 4: Classification of Student Response Logs from Finding Aaron Case

<table>
<thead>
<tr>
<th>Domain Specific Distribution</th>
<th>Number of Logs (n=71)</th>
<th>Percentages of Logs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Reading and Interpretation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Dismissive</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Undeveloped</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Implausible</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Unsupported</td>
<td>25</td>
<td>40%</td>
</tr>
<tr>
<td>Entrenched</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Historical Reading and Interpretation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Evidential</td>
<td>18</td>
<td>29%</td>
</tr>
<tr>
<td>Integrative</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>Analytical</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Methodological</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Finding Aaron moved students away from the sourcing they had done in the earlier Lexington case and asked them to account for the absence of evidence as historians would. This case also invited students to use their energetic imaginations to develop a plausible ending to the story of an individual slave. Shemilt draws a distinction between historical study that identifies “what happened” from that which tells “what was going on,” emphasizing the importance of the construction of coherent and
meaningful accounts that attribute significance to events and trends by how these are explicitly and implicitly folded into the narrative. The class was asked to carry the narrative beyond the sources, offering plausible explanations for the gaps between the sources in a manner that was consistent with the social structure of 18th century Virginia. The introduction to the class of the word “plausible” helped ground the imaginative responses of approximately half the class in the documents. Typically, students who wrote less-than-plausible accounts gave Aaron heroic qualities through which he successfully stood up to his white oppressors or returned to rescue other slaves. Beyond the development of plausible accounts, a concluding question in students’ “Finding Aaron” detective logs asked them to summarize the challenges historians face when reconstructing the past. Unfortunately, only one of the three classes had sufficient time to answer this question, resulting in data gathered from only twenty students. However, among these twenty students, it was apparent that they were able to appreciate the tentative nature of historical study and the inherent limitations of the “inquiry and revision” processes through which history is developed and evolves.

**Historical Thinking Skills**

Throughout the three cases, a comparable percentage of students' responses were coded as being in the historical reading and interpretation range comprised of the evidential, integrative, and analytical (52% in Jamestown, 47% in Lexington, and 48% in Finding Aaron). In all three cases, the remaining half of the class provided responses that were implausible, unsupported by the documents, or entrenched in secondary sources without clear comprehension of the primary sources. Within a heterogeneous class of students, such a balanced distribution would likely be expected. The hope would be that the students who have evidenced the ability to incorporate multiple sources into a prompted response could not only be brought to demonstrate similar (or more advanced) historical reading skills across cases, but also that they would be a fecundity of this instruction, with students bringing their developing perspectives on history into the class outside the scope of these discrete cases. The HSI design is built upon the premise that facets of historical thinking can be efficiently introduced into typical text-based, chronological elementary
history teaching, but also that the critical thinking skills embedded in the structure of the materials and
prompts can be authentically transferred to other units of study in history class.

Some evidence of this “direct application” theory of learning transfer was provided by the teacher
of this class when interviewed upon completion of the study.

I think the biggest thing that I like in all my groups is that they don't see history as. I
mean, they are seeing better that the textbook is written from an American perspective. I
think my students are better about not just reading and accepting it. I love that they say,
'Well, like in Jamestown, we don't really know what happened' so they are referring to
these exercises as we move through the text.

The teacher’s observations were also supported in the data from the student case logs. In different ways,
students were able to articulate an understanding of historical processes, even when their written
responses were not as fluent. For example, although 32% of the student responses in the Jamestown Case
were coded “entrenched”, students were surprisingly lucid with the processes that under gird historical
investigation. When asked “How do historians know what they know?” during the Jamestown
investigation, these students responded with the following in their detective’s logs:

Response 3a: Historians know what happened in Jamestown from mabey a jornal
entry that Captain John Smith wrote and, since he is a primary sores he would have the most
accurate information. So historians use this to become secondary sorses. (at least they ain't
making up stuff).

Response 4a: They know because they could get information from archeologist that have or are
studing Jamestown. You know how archeologist dug up Jamestown, well historians could ask
them about the disseses and poison and the marsh where Jamestown was located in.

Response 10a: They know what happened because they found journal entries and corpses with
bullets. They would find the notes and they would say something like "August 23, 1607--today we
15 troops to the Indians. We hope we can become friends with them." Also they might have
found guns, tools, or pottery/kitchen supplies. They might have notes on/in them. That what I
think historians found out about Jamestown.

During the interviews immediately following the Jamestown case, students were asked how
historians determine what happened in the past, particularly with the failure of the Jamestown colony. A
number of students were able to address this question with perceptive insight into conflicting historical
interpretation. Taken from the transcriptions, a sample of the students’ answers follow:
“Like, one guy thought it was poisoning and another thought it was because of too many gentlemen and another thought it was because of murder.”

“We don’t think history is a fact because they all have different guesses and there’s much that we have to have, like a witness that tells the truth and witness who saw it all. But it was too long ago, so we just study the artifacts and journals and stuff.”

“I don’t think they would include everyone’s theory because, like, some theories might not fit together. Like if some people might say it was just unlucky for the location. Some might say that it was arsenic poisoning and that might fit very well together.”

“People have so many different ideas about what caused the failure in Jamestown.”

Time ran short in the Battle of Lexington Green case, so the students were unable to finish their detective logs. At the end of the log, students would have responded to the following question(s): “How did you decide what happened at Lexington Green? How do historians know who to believe?” Instead, students were asked whether they were satisfied with the evidence in the case and what questions were still lingering. Of the total 60 student logs, 17 students wrote that they were satisfied with the evidence. Of these students, six listed additional questions that were unanswered. An example of such student questions follows:

Response 54c: “Yes I was satisfied. Except for one thing. It would have been nice to see colonists diarys. So we would see it from another point of view.”

Twenty-eight students wrote that they were unsatisfied with the evidence and listed additional questions that were unanswered. An example of this type of response follows:

Response 16c: “I just wish I knew the answer and the truth. Why did colonists just suddenly fire a shot?”

Response 46c: “Even though I have evidence the colonist fired the first shot, I don’t have enough evidence to be sure. A few questions I still have is who won the Battle, British or Colonists? Who really fired the first shot? How do they know? If the people who fired the first shot was a colonist, was it a minuetman or pedestrian?”

The remaining fifteen students did not respond to this part of the question. However, the majority of the students wrestled with the untenable nature of the case. Many students, like the one who wrote response
16c, simply wanted to know “the answer and the truth” but as the student in response 46c so aptly noted, “I don’t have enough evidence to be sure.”

Time was also a factor at the time of the Finding Aaron case for the first two class periods. However, the third class period finished the first parts of the log quickly and found the time to answer the last question in the detective log related to historiography: “Based on this investigation and the other two that we have done, what are some difficulties that historians face when reconstructing the past?” These twenty students tended to score higher than the other two classes on their responses to the Finding Aaron case (See Table 5). However, while weighted towards the higher end, there was a scattered distribution along the student performance continuum connoting a normal bell curve for the heterogeneous group.

Table 5: Classification of Student Responses from Finding Aaron Case

<table>
<thead>
<tr>
<th></th>
<th>Entire Fifth Grade</th>
<th>One class of fifth graders</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Number of Logs</td>
<td>% of Logs</td>
</tr>
<tr>
<td></td>
<td>(n=71)</td>
<td></td>
</tr>
<tr>
<td>Dismissive</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Undeveloped</td>
<td>2</td>
<td>3%</td>
</tr>
<tr>
<td>Implausible</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Unsupported</td>
<td>25</td>
<td>40%</td>
</tr>
<tr>
<td>Entrenched</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Evidential</td>
<td>18</td>
<td>29%</td>
</tr>
<tr>
<td>Integrative</td>
<td>8</td>
<td>13%</td>
</tr>
<tr>
<td>Analytical</td>
<td>4</td>
<td>6%</td>
</tr>
<tr>
<td>Methodological</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

A content analysis was performed on the answers to the historiography question. Several patterns emerged from the analysis. Fifteen of the twenty students explained that historians often faced a lack of evidence or sources. Students responded with phrases, such as, “You don’t have a lot of information” (Detective log 53d) or “Maybe we don’t have proof…maybe we don’t have an article, a letter, or a picture…maybe we don’t have an artifact” (Detective log 58d) or as this student put it, it’s “hard to come up with all of the evidence” (Detective log 63d). Another pattern that emerged among seven of the students was the difficulty in wrestling with historical uncertainty. A student writes that there is “no
consistent evidence showing one idea is correct” (Detective log 48d) and another student put it this way, “it would be hard to have an open mind to all the possibilities of what could happen and not just stick to one idea.” (Detective log 59d). A third pattern was the difficulty in vetting or checking the veracity of the sources used during a historical investigation. The six students who addressed this issue, stated their beliefs as follows: “Historians may not know if the evidence is really true…they could have false evidence” (Detective log 56d). “Another difficulty is that another tribe could move to a place where another tribe died and mixes the artifacts, so the historian may have to problem solve” (Detective log 47d). And simply, “Artifacts tell different things…it gets confusing” (Detective log 51d). Finally, several students expressed frustration about not seeing the past with their own eyes. One student said the following, “Historians weren’t there to experience it by flesh and blood” (Detective log 47d).

“All three cases appeared to spur students, at least incrementally, from what Levstik and Barton refer to as the “single, finished story” toward a more sophisticated understanding of the role of perspective in developing historical thinking and the tentative nature of historical study. While time was a factor in the last two cases, the data from the detectives’ logs and interviews indicate that the fifth grader’s understanding of history now includes inquiry, doubt, reason and revision. As one student summarized, “Cases are fun because you actually get to put all of the information together…like you get to investigate…otherwise, it’s just reading from a textbook”.

Discussion

Kobrin concedes that the skills embedded in historical study are formidable. Research done prior to the 1980’s widely concluded that the cognitive development of young students was not sufficient for developing and using historical understandings. Downey and Levstik argue that despite young students not having developed comprehensive understandings of chronological time and causation, these students can still benefit from instruction that explicitly focuses upon the characteristics of historical study that are within their grasp. “We cannot begin with the most sophisticated kinds of understanding
and expect students to grasp them.”20 This research endeavored to explore what young students can grasp in such early exposures to historical thinking through the intermittent use of HSI cases.

In examining characteristics of student learning, the present study is the first research done with HSI cases presented to students in “hard-copy” so that the web-based platform of the cases could be removed as a variable potentially impacting student learning. While the school had sufficient technology to allow students to access the HSI Web site in the computer lab, it was considered more important to explore the manner in which the students processed the cognitive tasks embedded within the three cases.

The findings of the present study suggest that there are potential benefits to the design employed, in that some fifth-grade students were shown to demonstrate deeper historical context through periodic instruction that focuses on primary sources examined and considered through an investigatory instructional model. When prompted to do so, a consistent percentage of students demonstrated skills in evidentiary reading, sourcing, and other historical process and thinking skills across the three cases. Skills in evidentiary reading are critical to at least four of the five categories of historical thinking in the National Standards for History,21 and they have consequently been emphasized as foundational. This modest incorporation of evidentiary reading activities does mirror VanSledright’s22 previous finding that strategically-selected sources and prompts can be presented through an investigatory metaphor in a manner that encourages both enthusiasm and increasing sophistication of historical thought, although the assertion relating to the growth of this skill set cannot be made in the present study. The findings presented here do suggest that students were engaged and many were able to capably consider historical causality and perspective. In considering the constellation of causes for the starving time, for example, students weighed the accounts and determined an interpretation that was their own. They had, in the words of Kobrin and his colleagues23 taken “the same control over definition and interpretation that professional historians have always claimed for themselves.”

While there were encouraging responses presented by these students, the academic diversity of these participating classes was apparent throughout the investigations. As noted above, most of the assessments found students split virtually 50-50, with half of the class exhibiting some form evidentiary
reasoning while the other half presented mostly unsupported or text-based responses to prompts. As would be expected, the same students demonstrating evidentiary reasoning consistently provided more sophisticated responses to prompts within their detective logs. Equally important, the fifth-grade teacher reported that some students had begun applying critical reading processes to their other units of study suggesting that transfer of these skills.

Implications

HSI resources have been developed with the goals of instructional functionality, feasibility, fidelity, and fecundity. The present study sought implications for the revision of the HSI project in order to move the site toward these goals. The ultimate success of the project will depend upon the degree to which teachers find the Web resources navigable. For this study, however, the technological functionality was removed as a variable in order to examine the other developmental goals. Within the current educational climate, an instructional approach is feasible when it can efficiently elicit meaningful student work within a limited allocation of instructional time and a modest degree of teacher expertise. One implication of the present study concerns the degree to which the structure and the novelty of the case activities fostered student responses that were moving toward increased sophistication. While these cases were presented to students by the principal investigator of the study, there was nothing so extraordinary about the presentation that classroom teachers could not conduct these lessons themselves. It is the intention of the researchers to follow up this study with other that investigate the feasibility or the resources and instructional design in this manner.

Relating to the pedagogical fidelity of the activities, there is a need to develop the materials and cases in a manner consistent with a sequential development of increasingly sophisticated historiographic skills. Recent research articulating hierarchical components of historical thinking and process skills provide the basis of a logical sequence of instructional goals that could be embedded within the various cases. Pedagogically sequencing the HSI cases could be done with some degree of assuredness that teachers would be using the sequence because most history instruction is conducted chronologically. This would theoretically maximize the efficiency of HSI-based instruction to elicit historical thinking, an
important consideration in a content area being squeezed for instructional time. When students are
developing skills in a developmentally appropriate sequence, this would also theoretically maximize the
likelihood that students would extend their understandings to historical study beyond the scope of the HSI
cases.

Also relating to instructional fidelity and fecundity within the context of academically diverse
classrooms, the consistent distribution of student performance noted above encourages the development
of some differentiated elements of the cases and embed these into the case modules on the HSI site. This
could be done most easily with varying prompts toward varying levels of abstractness or open-endedness,
an approach consistent with recommendations emerging from the gifted education field. Also
approach could be to utilize hypertext to prompt some students at particular stages, while giving the
teacher the option removing some or all these prompts for high-ability students.

Limitations

There are several limitations to this study that restrict the generalizability of the findings. First,
because no baseline data was collected prior to the intervention, it is not possible to conclude that a causal
relationship exists between the intervention and the findings. Roughly half of the students in the
classroom demonstrated aspects of “historical thinking” when they were prompted to do so, but it is
unteleable to assert that the cases themselves advanced these abilities. Furthermore, being that the cases
 incorporated primary sources, an investigatory model of historical examination, an explicit instructional
attention toward tentative construction of historical narrative, and other novel instructional aspects (i.e.
movement beyond the textbook, student interviews, visitors to the classroom, etc.), it would be impossible
to fully disaggregate the aspects of the instructional design that fostered these abilities. Finally, because
researchers with advanced degrees in social studies education actually taught the lessons described, it is
difficult to remove the “PhD effect” and argue that the results would be similar if taught by the classroom
teacher, or any other “fresh face” that would bring a level of novelty to the instruction. With all these
limitations noted, however, the findings presented below constitute a contribution to the literature and
may provide future direction for continued inquiry into efforts to enhance students’ historical thinking skills.

Conclusion

The theme of the National Council of the Social Studies 2006 annual conference reads “Promise and Practice”. The HSI model seeks to bridge these two ideas; the promise of Web-based historical documents and the realities of a standards-based, history classroom. This study along with others in the field are attempts to take mission statements set forth by history and teaching organizations along with the research conducted by theorists in the field and push practice forward with usable models of curricula that scaffold both teachers and students in their work as historians in a K-12 teaching context. While bridging theory and practice is a daunting challenge to all social studies educators, it is undoubtedly a worthy endeavor. As Vansledright eloquently wrote in the last chapter of his book, In Search of America’s Past:

*Engaging students in historical investigations puts them largely in charge of their own learning. They become responsible for crafting interpretations and arguments about the past that reside along side those created by others. In this way, they are connected directly to what may once have seemed to them a remote and meaningless set of events. The process also insists that in constructing their evidence based versions—no matter how far-fetched—they draw on who they are because they cannot help to impose their assumptions and identities (i.e. historical personalities) on the inferences they derive.*

NOTES


8. Ibid., 152.


18. Levstik and Barton, *Doing History*.

19. Kobrin, *Beyond the Textbook*.


26. Levstik and Barton, *Doing History*; National Center for History in the Schools, 1996; Shemilt, “The Caliph’s Coin.”


Appendix A: Reading scaffold for primary source collection, Jamestown Detective Log

<table>
<thead>
<tr>
<th>Document</th>
<th>Who is the author of this document? What was his role in the colony?</th>
<th>When was this document written?</th>
<th>What kind of document is this?</th>
<th>According to this document, what factors caused the hardships in Jamestown?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Document A</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Document B</td>
<td></td>
<td></td>
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<tr>
<td>Document C</td>
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<td>Document D</td>
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<td>Document E</td>
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<tr>
<td>Document F</td>
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