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Fostering historical thinking: The use of document based instruction for students with learning differences☆

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ABSTRACT

Document-based history instruction (DBI) was implemented in a middle school special education setting to promote the development of disciplinary cognitive processing and higher order thinking using historical thinking as a framework for students with learning differences (ld). A convergent mixed methods action research design was utilized to explore a) how DBI influenced students' disciplinary cognitive processing and higherorder thinking when reading multiple historical documents b) the affordances and constraints of using DBI in a special education classroom. Using quantitative data sources (e.g., highlighted documents, reading comprehension responses, and an ondemand writing task) and additional qualitative data (e.g., interviews, fieldnotes, classroom artifacts, and audio recordings), we uncovered insightful evidence to support the potential of DBI for students with ld. In one academic year, when reading multiple historical sources, students learned how to efficiently highlight content knowledge and academic vocabulary, interrogate historical sources, and corroborate information from different sources.

History instruction in special education classrooms in the United States typically mirrors common instructional practices in general education classrooms; it relies strongly on the use of textbooks that privilege the role of rote memorization and the recall of historical facts (Berkeley et al., 2014; Swanson et al., 2014). This traditional way of teaching history does not prepare students to think critically when reading complex texts and using multiple sources (Bulgren et al., 2006; O'Connor et al., 2015). Scholars have called for teachers to rethink textbook-driven instruction and instead, use primary and secondary sources to develop critical understanding of complex historical narratives (VanSledright & Kelly, 1998; Wineburg, 2001). Using multiple historical sources can lead to students' critical engagement with historical content (Nokes et al., 2007).

When teaching students with learning differences (*ld*), teachers may perceive student's differences as barriers to accessing the meaning of complex historical materials, which limits their instructional moves in the classroom (Bulgren et al., 2006). Students with *ld* often experience challenges when performing tasks that require higher-order processing (Compton et al., 2012). They have difficulty processing and organizing information, making inferences, identifying main ideas, and understanding conceptual relationships (Brownell et al., 1993) - skills that are essential to understanding primary and secondary sources when studying history. However, we argue that these students, despite the challenges, have the potential to acquire

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historical thinking. We use the term learning differences, abbreviated with lower case letters, to encompass the diversity of learners in special education and pivot the instruction to a strength-based perspective.

Teachers often rely on textbooks due to limited pedagogical options or knowledge when teaching history in special education (McCoy, 2005). This limits the extent to which students with *ld* are exposed to high quality history curriculum such as document-based instruction (DBI); thereby limiting opportunities to learn to compare and contrast sources, examine the author's perspective and purpose for writing, and contextualize documents based on the author's milieu and the historical time period. The overall purpose of this study was to examine the influence of document-based instruction on students' historical thinking using modified historical sources in a 7th grade self-contained special education classroom. The first author, who was a scholar-practitioner for this research project, taught the lessons over a 9-month span. The second author assisted in the collection and the analysis of the data. We use the word *teacher* to refer to the first author's role as a classroom teacher – the primary teacher of record with a background in special education and literacy. Conversely, the word *we* refer to our collective work as researchers. We first discuss the theoretical framework and extant literature on DBI, which is followed by our research questions. Then, we proceed to describe in detail the curriculum and instructional sequence. Next, we describe the action research mixed methods design of this study and review the data analysis and results. Finally, we report implications for practice.

1. Historical thinking

Historical thinking is a unique set of specific disciplinary cognitive processes applied to the skilled reading of historical sources (Wineburg, 1991, 2001). It includes the evaluation of historical sources (sourcing). Sophisticated readers of historical texts examine the trustworthiness of the document by interrogating the author's position regarding the historical event and evaluating the author's purpose for producing the document (Barton, 2005; Wineburg,

2001). Students are taught to deeply immerse themselves in an investigation of historical events and controversies. Consequently, they are instructed to situate an event in its historical period and context by uncovering how people, places, and events affect a historical narrative through the process of contextualization (Reisman & Wineburg, 2008). Furthermore, historical interpretation involves comparing and contrasting multiple sources by identifying points of convergence and divergence among the documents, known as corroboration (Wineburg, 2001). Explicit and direct instruction of these three cognitive processes - sourcing, contextualization, and corroboration-is integral to the development of historical thinking (Wineburg, 1991).

Proximal to the development of historical thinking is the higher-order thinking necessary for comprehension of informational and expository texts. As students are trained to read and analyze primary and secondary historical documents with the eye of a historian, they mentally organize the information by identifying the main idea of the text, comparing and contrasting multiple sources, determining cause(s) and effect(s) of a particular historical event, and synthesizing historical information to create a narrative interpretation of history. This can be challenging for students receiving special education services who often require support in these aspects of reading comprehension (Bulgren et al., 2013). To access complex expository texts, students with learning differences need explicit and highly scaffolded instruction when reading expository texts (Dimino, 2007; Kaldenberg et al., 2015; Kennedy & Ihle, 2012). Gajria et al. (2007) conducted a research synthesis on expository text comprehension. They found that students with *ld* performed better when provided explicit instruction in two broad categories - content enhancement (i.e., advance and graphic organizers, visual displays, computer assisted instruction) and cognitive strategy instruction (i.e., text structure, main idea identification, summarization, and cognitive mapping). The use of graphic organizers, for instance, has proven to be an effective instructional strategy to improve reading comprehension of students with *ld* (Kim et al., 2004). Moreover, explicit instruction on how to highlight texts benefits students' strategic reading performance (Heyne et al., 2020; Leutner et al., 2007; Yue et al., 2015).

To develop students' historical thinking, DBI was used as a pedagogical framework for teaching 7th grade medieval history. DBI transforms traditional history instruction into a "predictable and repeatable sequence that engages students in the process of historical inquiry" (Reisman, 2012a, p. 235). Through this instruction, students are immersed in the development of historical reasoning and interpretive analysis of different historical sources. The disciplinary cognitive processing and higher-order thinking embedded in historical thinking were observed in the current study using cognitive artifacts produced by students: highlighting of texts, short reading comprehension responses, and short responses to an on-demand writing task.

2. Document-based instruction

A growing body of research has shown that DBI provides students, with and without *ld*, a deep and critical understanding of historical narratives (Ferretti et al., 2001; Hernández-Ramos & De la Paz, 2009; Reisman, 2012b). Students come to understand the past with greater historical accuracy and write persuasive essays based on historical documents (De la Paz et al., 2012; Monte-Sano & De La Paz, 2012). One study demonstrated that document-based instruction using digital primary sources lead to the development of students' ability to locate and evaluate usefulness of primary source documents, check information for biases, and engage in perspective-taking (Brown & Dotson, 2007). Likewise, when implementing multimedia lessons for a project-based learning experience using primary and secondary sources, middle school students' historical thinking skills improved (Hernández-Ramos & De la Paz, 2009).

Over the last decade, document-based instruction has been successfully implemented in history classrooms with adolescents who struggle to read (De la Paz, 2005; De La Paz et al., 2014; Ferretti et al., 2007). In an inclusive 5th grade classroom, students with *ld* and their typically achieving peers participated in an 8-week long investigation about 19th century U.S. westward migration (Ferretti et al., 2007). Results showed that both students with *ld* and their peers made significant improvement from pretest to posttest in historical knowledge (i.e., westward expansion), historical reasoning (e.g., what historians do, what does evidence show, what is the nature of bias in evidence, and why it is significant to provide a full and complete account of the past), and migration concepts (e.g., meaning of migration, reason for westward expansion, political and religious motivation). However, typically achieving peers, as expected, performed significantly better than the *ld* students.

Document-based history instruction has also been implemented in academically diverse middle school classrooms. De la Paz (2005) designed an integrated social studies and language arts unit that promoted historical understanding and developed argumentative writing skills of students in culturally and academically diverse 8th grade classrooms. Students with *ld* together with "average" and "talented" students were included in the experimental condition. Another 46 average and 17 talented students were randomly assigned to the control condition. Students in the experimental group out-performed the students in the control group in terms of essay length, persuasive quality, number of arguments, and historical accuracy. Furthermore, both students with and without *lds* appeared to gain more appreciation for the study of history after 22 days of instruction; although, general education students showed more awareness of historical concepts before and after instruction. De La Paz, Felton, and colleagues (2014) replicated these results with 13 8th-grade classrooms with teachers who were trained in the use of document-based history instruction. The 18-day intervention yielded a significant and meaningful growth of roughly 0.5 to 1 standard deviation in students' ability to write historical arguments and in the length of student's essays. Importantly, this improvement was for all students, including students with *ld*.

One dilemma teachers face when adopting this pedagogy for teaching students with *ld* receiving special education services lies within the nature of historical documents. The archaic phrasing, unconventional spelling, and obscure language that characterize many historical sources pose reading accessibility challenges, which often leads to a lack of motivation for students to engage with these texts (Wineburg & Martin, 2009). To address the issue of the inherent complexity of historical documents and students' potential reading limitations, Wineburg and Martin offer three guiding principles for teachers working with struggling readers when adapting primary and secondary sources: 1) create excerpts from historical documents, 2) selectively modify complex sentences and syntax, and 3) use a large font with ample white space on the page.

Overall, current DBI research suggests it is a promising instructional intervention to develop students' historical reasoning and expository reading comprehension. The use of multiple sources has been successfully implemented in third grade (Fillpot, 2012), fifth grade inclusive classrooms (Ferretti et al., 2001), culturally and academically diverse middle school classrooms (De la Paz, 2005), and urban high schools (Reisman, 2012a, 2012b). These studies demonstrate that when provided document-based instruction, students' higher-order thinking improves, as measured by their textual understanding and expository writing. Despite the promise of the document-based approach, there have been no studies published on the use of document-based instruction in self-contained middle school classrooms (De La Paz, personal communication, 2018) so it remains to be seen if these students benefit from this instruction. In addition, all the studies reviewed earlier focused on short-term instruction, between one and three months. Our study seeks to fill these gaps in the literature.

3. Purpose of the study

There is limited extant literature on the use and effect of using historical documents for developing historical thinking in a self-contained classroom. Thus, research is needed about how students with *ld* who struggle to read and write can access primary and secondary sources and articulate their understanding of polemical issues raised across multiple historical documents. We sought to add to the literature by exploring these questions:

1. How does DBI influence students' disciplinary cognitive processing and higher-order thinking when reading multiple historical documents?
2. What are the affordances and constraints of using DBI in a self-contained special education classroom?

The present study sought to capture the experience of students when they were exposed to DBI in a middle school social studies classroom and document their ability to access the meaning of complex historical sources when provided multiple scaffolds and explicit instruction.

4. 7th grade medieval history curriculum

The curriculum that we developed for this study has four components: (1) reading multiple historical documents, (2) digital resources, (3) graphic organizers, (4) responding to historical questions. We used the modified historical documents from the Stanford History Education Group's (SHEG) "Reading Like Historian" Medieval Period Curriculum (https://sheg.stanford.edu/rlh). We also created excerpted documents for the Renaissance and Feudalism units based on secondary sources. A total of 8 units were taught across 9 months. Each unit contained three to five excerpted versions of original

documents. These units correspond with the 7th grade California History-Social Science Standards. In addition to the two units mentioned, we covered other events in the medieval period such as the spread of the bubonic plague, the first crusade, the expansion of the Islamic Empire, the travels of Mansa Musa and Ibn Battuta, and the meeting of Moctezuma and Cortes. To develop students' background knowledge, we employed digital resources such as documentary film clips on YouTube and modified PowerPoint slides from SHEG containing bullet points, pictures, maps, and graphs. Graphic organizers were used to support students' understanding of the documents and develop organization skills when responding to historical questions. At the end of each unit, students wrote short responses to a historical question.

5. Instructional sequence

Students received 45 min of instruction, three times a week, and 90 min of instruction once a week. A gradual release of responsibility was implemented throughout the curriculum. In the first five units, sourcing, corroboration, and contextualization were explicitly taught and heavily scaffolded. Likewise, the teacher modeled and scaffolded highlighting in the documents and directly instructed students how to write annotations in the margins of each document. In the last three units, the teacher removed the scaffolds, so students independently completed their graphic organizers and responded to written prompts.

Each unit started with a PowerPoint presentation to develop background knowledge that contextualized the central historical question. This essential question framed the lesson and the analysis of the documents. Before reading each document, selected vocabulary words were discussed and contextualized within the historical narrative. Then, students had the opportunity to read each of the 3–5 excerpted documents twice – a close reading with teacher support and then independently. During the close reading, the teacher assisted students using guided reading principles (Morgan et al., 2013) to comprehend the context, the pretext, and the subtext surrounding the historical narrative. To ensure that students used historical reasoning as a tool to analyze historical documents we adapted the guide questions accompanying the modified documents found on the SHEG. After reading the documents, students responded to a writing prompt (e.g., Was the time period between 400 AD and 1400 AD a “Dark Age” for Europe? Was this a time of cultural decay and decline?).

6. Methodology

6.1. Research design

This study is part of a larger three phase multi-year research project that employed design-based research. The overall goal of this research was to develop a disciplinary literacy intervention in a self-contained social studies classroom for students with *ld* using multiple sources. The first phase featured the teacher's reflection on the use of a school district mandated history textbook and its impact on students' disciplinary literacy skills. Students' disengagement in reading the textbooks and the associated busy work that characterized typical history instruction led the teacher to seek different ways to teach historical concepts. The teacher's self-study on historical thinking led to the research collaboration with the second author. Integrating historical thinking as a pedagogical framework in a self-contained special education classroom became the impetus of the second phase of the study - the current study.

The goal of this current study was to develop a document-based instruction that addressed the needs of students with *ld*. We used a mixed-methods action research design (Ivankova & Wingo, 2018) to answer our research questions. We collected data from various sources, and simultaneously analyzed them quantitatively and qualitatively. Quantitative data were extracted from highlighted documents, short responses to reading comprehension questions, and an on-demand writing task. We used a paired *t*-test to analyze if there was a difference between pretest and posttest scores (Creswell & Creswell, 2018). Qualitative data sources included highlighted texts, short responses to reading comprehension, on-demand writing task, interview, fieldnotes, classroom artifacts, and audio recording of selected class discussion. These qualitative data were analyzed using inductive methods and in vivo coding (Saldaña, 2013). Fig. 1 shows the convergence of qualitative and quantitative data. This diagram shows the two levels of mixing. The first level depicts how some data are treated as mixed - quantitative and qualitative (e.g., highlighted documents, responses to reading comprehension questions, and responses to an on-demand writing task). The second level of mixing occurred during the interpretation of the data analysis. See Table 1 for additional information.

6.2. Participants

Twenty-five 7th grade demographically diverse middle school students - eight Latinos, seven Whites, seven Asians, and three Blacks - in the San Francisco Bay Area initially participated in this study. The mean age was 12.8 years. These students attended self-contained, special education classes for language arts and history. All students had an Individual Education Plan, with specific academic goals for reading and writing. These students had the eligibility classifications of specific learning disability, speech and language impairment, and other health impairment. The participants represented convenience sampling because the first author taught these students in two self-contained classrooms. Five students were removed from the final sample for the quantitative data analysis - one student was absent for a week during the administration of the post-test, three students were excluded due to missing data, and one student had significant challenges in written expression and was unable to produce an independently written product. However, their learning outputs were included in the qualitative analysis. All twenty-five students participated in the exit interview.

Participants' average IQ, as measured by the Wechsler Scale, was 88.33 (SD = 11.3). The data were taken from the students' triennial psychoeducational evaluation report prepared by the school psychologist. Due to the Larry P. vs. Riles case, formal standardized testing to assess aptitude or intelligence could not be used on African American students. Therefore, the three African American students in this study were not included in the reported mean IQ. The students' average Stanine reading level, as measured by the Gates-MacGinitie Reading Comprehension subtest was 2.41 (SD = 1.59). In general, 86% of the general population of students who took this test performed better than the participants in this study (average percentile rank of 16; SD = 16). Thus, participants in this study represented the typical profile of students with *ld* (Compton et al., 2012).

6.3. Data sources

As mentioned earlier, highlighted documents, short responses to reading comprehension questions, and a response to an on-demand writing task were collected before and after DBI was provided. These data sources were subjected to quantitative and qualitative analysis. Students read a set of three excerpted historical documents about the spread of Christianity in the Roman world. Personal communication with the 6th grade special education teacher who taught

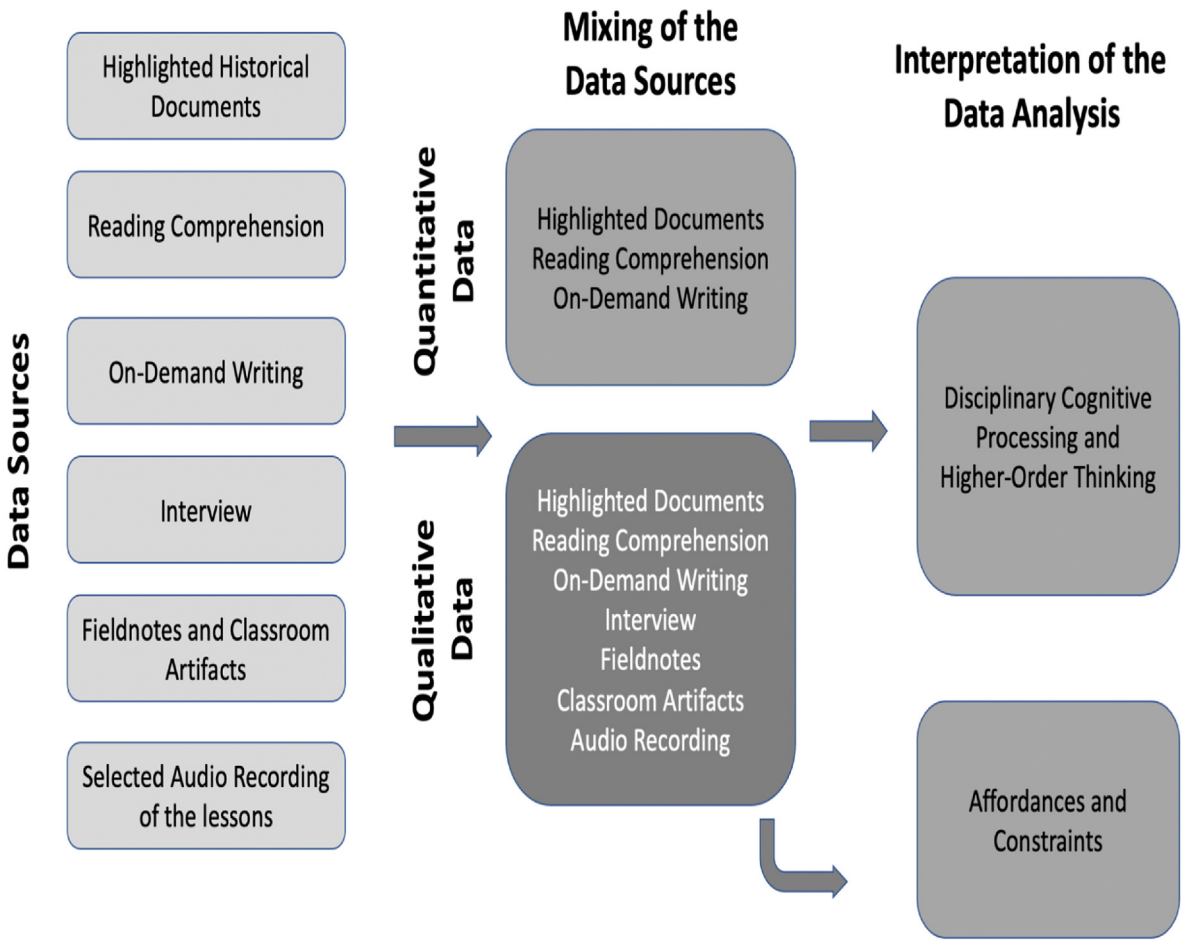


Fig. 1. Mixed methods design.

the same group of students the year prior indicated they received textbook based instruction and had not been formally taught using historical documents. As students read each document, they were asked to highlight the documents for important information. Highlighting texts is a cognitive artifact of students' strategic reading performance (Caverly et al., 2000; Heyne et al., 2020; Kobayashi, 2005; Leutner et al., 2007). Thus, highlighting texts represents students' perception of important and relevant ideas (Yue et al., 2015). In the context of this study, these highlighted ideas were related to historical thinking. Then students answered three to five open-ended comprehension questions about each document - a total of 13 questions for three documents. These questions required students to make inferences (e.g., *According to this account, why did the Roman Empire persecute Christians?*), evaluate and compare documents (e.g., *Do you think this is a trustworthy document for trying to figure out why the Roman Empire persecuted Christians? Why or why not?*), and identify sources (e.g., *Who wrote this document?*). Participants were given 60 min to complete these two tasks. The following day, the students took an on-demand writing task during which they were allowed to refer back to the documents and their previous answers to the reading comprehension questions. Using a word processing device, students responded to the central historical question "*Why did the Roman Empire persecute the Christians?*" Students were given 60 min to complete this task (for rubric and scoring, see Appendix A). It is important to note that for the on-demand writing task, we were not focused on students' composition skills; rather, we treated the written responses as students' artifacts of historical thinking (Monte-Sano & De La Paz, 2012). Therefore, we focused on how students articulated their understanding of sourcing, corroboration, and contextualization.

To control for background knowledge, text complexity, and question difficulty level we opted to use the same set of documents for posttest. The same measures were administered nine months after the pretest. Although this timing could indicate a retest effect, it has been documented that practice effect in intervention studies is minimal for children with disabilities (Cirino et al., 2002). Furthermore, when these measures were re-administered to the students, none of them alluded to remembering previously having read the documents nine months earlier.

Additional qualitative data were collected such as individual interviews, fieldnotes, and classroom artifacts. All students participated in an exit interview in May. The goal of this interview was to elicit students' overall thinking related to DBI and learning history; thereby triangulating with the qualitative data mentioned earlier. Students were individually asked the following questions: (1) What is your understanding of history? (2) How does reading primary and secondary sources help you understand world history? and (3) What are the most important concepts or ideas you have learned while studying world history? To capture classroom instruction from multiple angles, the first author kept weekly fieldnotes about instruction and student learning and later transformed these into data memos. Additionally, once a month classroom discussions were audio recorded. Interviews and recorded discussions were transcribed for qualitative analysis.

6.4. Data analysis

Quantitative data analysis consisted of a comparison between pretest and posttest scores. To determine if the change in scores was statistically significant, paired *t*-tests were run comparing the means of the pretest and posttest scores for the aspects of historical thinking represented by highlighting of texts, the

Table 1
Convergence of qualitative and quantitative data.

Research Questions	Data Sources	Data Analysis
How does DBI influence students' disciplinary cognitive processing and higher-order thinking when reading multiple historical documents?	Highlighted Historical Documents	Pre and post-test comparison of student's highlighting behavior
	Short Written Responses to Comprehension Questions	Qualitative analysis of students' writing and highlighting behavior
	Responses to an On-demand Writing Task	Pre and post-test comparison of students' responses to comprehension questions
	Exit interview/Audio Recorded Classroom Discussion/ Fieldnotes	Qualitative analysis of students' responses to comprehension questions
		Pre and post-test comparison of students' on-demand writing using rubric scores
		Qualitative analysis of students' writing
		Qualitative analysis
What are the affordances and constraints of using DBI in a self-contained special education classroom?	Audio-recorded classroom discussion	Qualitative analysis
	Field notes and Exit interview	Qualitative analysis
	Students' Artifacts (highlighted texts, short written responses to comprehension questions, and responses to an on-demand writing task	Qualitative analysis

reading comprehension measure, and on-demand writing task. Students' highlighted texts were quantified using frequency count of sources, presence and absence of vocabulary/disciplinary concepts. Changes from pretest to posttest in highlighting behavior were analyzed, and effect sizes using Cohen's d were computed to determine practical significance. Reading comprehension was measured by the total number of correct responses to 13 questions. These questions are related to historical thinking. The two researchers independently evaluated the students' responses to the on-demand writing task using a researcher-developed rubric focused on historical thinking (see Appendix A). Interobserver agreement started at 90% and discrepancy was discussed until 100% agreement was reached.

Fieldnotes and interview/audio recording transcripts were analyzed using NVivo. Qualitative analysis involved two cycles of coding. During the first coding cycle, the research questions framed the preliminary assignments of codes. As texts were read, the researchers highlighted important ideas and frequently occurring concepts that were relevant to historical thinking. In the second cycle, in-vivo coding was applied (Saldaña, 2013).

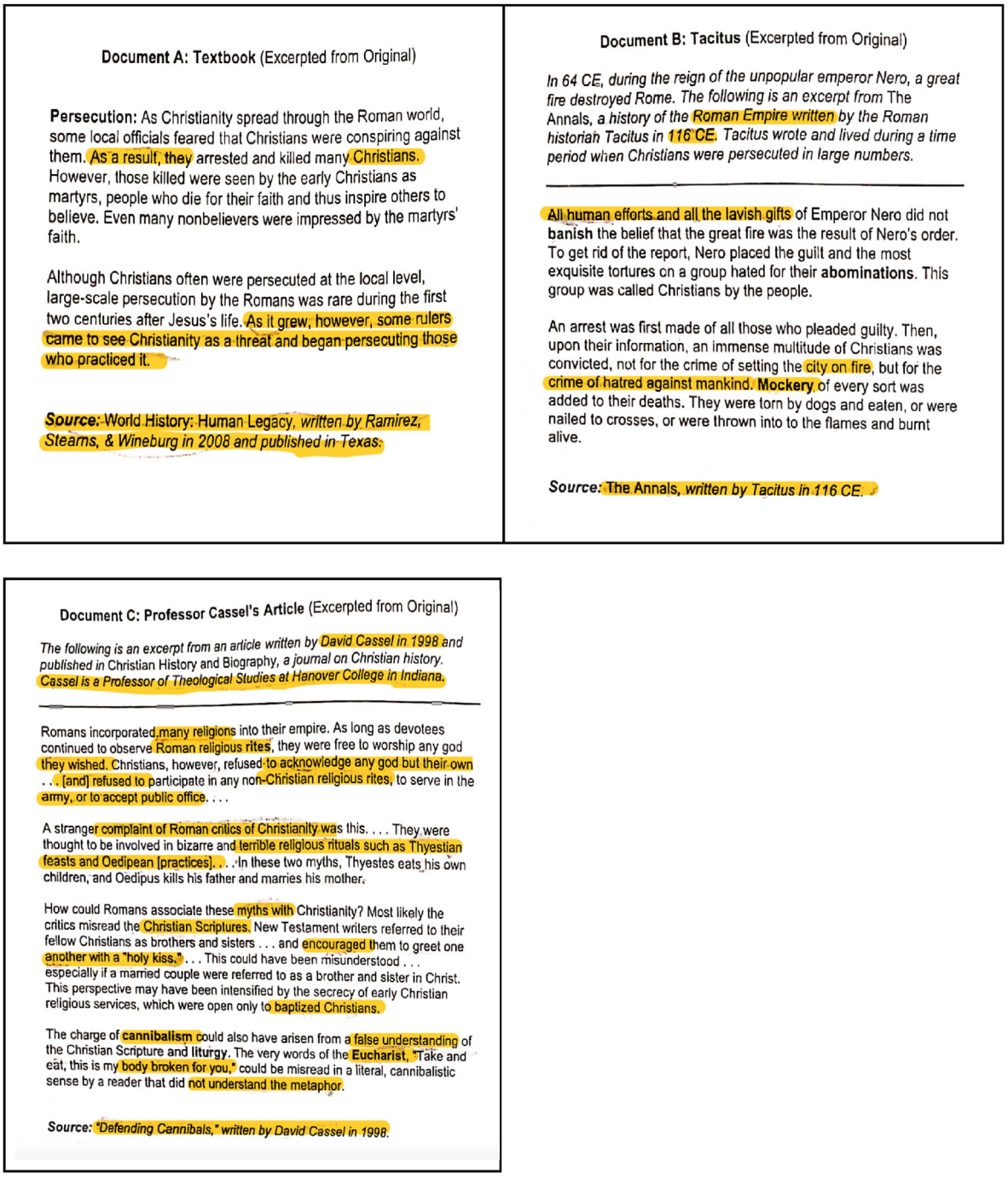
7. Findings

Our first research question addresses the influence of DBI on students' disciplinary cognitive processing and higher-order thinking when reading multiple historical documents. Students' critical understanding of historical narratives improved after exposure to explicit and repetitive instruction using historical documents. We selected three representative cognitive artifacts to examine how students processed and understood the historical documents - highlighting of the texts, reading comprehension responses to historical questions, and written responses to an on-demand writing task. Highlighting is used to draw attention to important information that relates to the main idea or supporting details and recognition of sources. This is an important strategy when close reading historical documents. Descriptive statistics for pretest and posttest highlighting are shown in Table 2. Using paired *t*-tests, a significant difference was observed between the two testing occasions, pretest and posttest, (t (20) = 9.82, $p < .001$). Also, using this variable, the DBI yielded a large effect size (Cohen's $d = 2.81$). We expected this large effect size due to students' prior lack of exposure to historical thinking and unfamiliarity with strategic highlighting of concepts before DBI. Prior to instruction only two students highlighted some of the sources and all participants' highlighting behavior on the text was nonstrategic and perfunctory. It is also interesting to note that none of the students highlighted vocabulary words on the pretest.

At posttest, ninety-five percent (20 out of 21) of students highlighted all the sources on the three documents they read. See Fig. 2 for representative student artifacts showing highlighted texts. We found that 90% of the students highlighted important information related to the author of the documents. For example, in Document B, students highlighted "The following is an excerpt from The Annals, a history of the Roman Empire written by the Roman historian Tacitus in 116 CE." In Document C, students highlighted "Cassel is a Professor of Theological Studies at Hanover College in Indiana." After nine months of DBI, all students highlighted disciplinary related vocabulary words. Qualitative analysis of students' posttest highlights reveals an

Table 2
Descriptive statistics for highlighting and reading comprehension.

	Pre-Test			Post Test		
	M	SD	Range	M	SD	Range
Highlighting Main Ideas and Supporting Details	0.62	1.02	0–3	2.86	0.48	1–3
Reading Comprehension Questions	3.18	0.96	0–4	3.77	0.53	2–4



Document A: Textbook (Excerpted from Original)

Persecution: As Christianity spread through the Roman world, some local officials feared that Christians were conspiring against them. As a result, they arrested and killed many Christians. However, those killed were seen by the early Christians as martyrs, people who die for their faith and thus inspire others to believe. Even many nonbelievers were impressed by the martyrs' faith.

Although Christians often were persecuted at the local level, large-scale persecution by the Romans was rare during the first two centuries after Jesus's life. As it grew, however, some rulers came to see Christianity as a threat and began persecuting those who practiced it.

Source: World History: Human Legacy, *written by Ramirez, Stearns, & Wineburg in 2008 and published in Texas.*

Document B: Tacitus (Excerpted from Original)

In 64 CE, during the reign of the unpopular emperor Nero, a great fire destroyed Rome. The following is an excerpt from The Annals, *a history of the Roman Empire written by the Roman historian Tacitus in 116 CE. Tacitus wrote and lived during a time period when Christians were persecuted in large numbers.*

All human efforts and all the lavish gifts of Emperor Nero did not **banish** the belief that the great fire was the result of Nero's order. To get rid of the report, Nero placed the guilt and the most exquisite tortures on a group hated for their **abominations**. This group was called Christians by the people.

An arrest was first made of all those who pleaded guilty. Then, upon their information, an immense multitude of Christians was convicted, not for the crime of setting the city on fire, but for the crime of hatred against mankind. **Mockery** of every sort was added to their deaths. They were torn by dogs and eaten, or were nailed to crosses, or were thrown into to the flames and burnt alive.

Source: The Annals, *written by Tacitus in 116 CE.*

Document C: Professor Cassel's Article (Excerpted from Original)

The following is an excerpt from an article written by David Cassel in 1998 and published in Christian History and Biography, *a journal on Christian history. Cassel is a Professor of Theological Studies at Hanover College in Indiana.*

Romans incorporated many religions into their empire. As long as devotees continued to observe Roman religious rites, they were free to worship any god they wished. Christians, however, refused to acknowledge any god but their own . . . [and] refused to participate in any non-Christian religious rites, to serve in the army, or to accept public office. . . .

A stranger complaint of Roman critics of Christianity was this. . . . They were thought to be involved in bizarre and terrible religious rituals such as Thyestian feasts and Oedipean [practices]. . . . In these two myths, Thyestes eats his own children, and Oedipus kills his father and marries his mother.

How could Romans associate these myths with Christianity? Most likely the critics misread the Christian Scriptures. New Testament writers referred to their fellow Christians as brothers and sisters . . . and encouraged them to greet one another with a "holy kiss." . . . This could have been misunderstood . . . especially if a married couple were referred to as a brother and sister in Christ. This perspective may have been intensified by the secrecy of early Christian religious services, which were open only to baptized Christians.

The charge of **cannibalism** could also have arisen from a false understanding of the Christian Scripture and liturgy. The very words of the **Eucharist**, "Take and eat, this is my body broken for you," could be misread in a literal, cannibalistic sense by a reader that did not understand the metaphor.

Source: *"Defending Cannibals," written by David Cassel in 1998.*

Fig. 2. Representative Student Artifacts on Highlighted Texts (excerpted documents take from www.sheg.stanford.edu).

emerging pattern: Students' burgeoning idea of contextualization. All students highlighted important disciplinary information contained in sentences, sentence fragments (i.e., two or more words), and single words. Three-fourths of students highlighted sentences and sentence fragments. One-third of students highlighted vocabulary words. Table 3 shows examples of sentences, sentence fragments, and vocabulary/academic words students highlighted in the texts.

Students' responses on the reading comprehension measure improved both quantitatively and qualitatively. See Table 2 for descriptive statistics. The increase from pretest to posttest for questions about sourcing was statistically significant ($t(21) = 2.53$, $p < .01$) and the effect size was moderately large (Cohen's $d = 0.76$). Again, we expected this large effect size due to students' lack of exposure to DBI. Qualitatively, there was an observed improvement in the quality of the answers to

Table 3
Examples of highlighted texts from the documents.

Document	Sentences	Sentence Fragments	Academic/ Content Vocabulary
Document A	Some local officials feared that Christians were conspiring against them. They arrested and killed many Christians. Christians often were persecuted at the local level.	Spread through Roman world People who died for their faith Arrested and killed As a result	However Persecution
Document B	Nero placed the guilt and the most exquisite tortures on a group hated for their abominations. All human efforts and all the lavish gifts of Emperor Nerodid not banish the belief that the great fire was the result of Nero's Order. Then, upon their information, an immense multitude of Christians was convicted, not for the crime of setting the city on fire, but for the crime of hatred against mankind.	A group hated for their abomination But for the crime of hatred against mankind Nailed to crosses Thrown into the flames and burnt alive	Mockery Abomination Banish
Document C	Romans incorporated many religions into their empire. They were free to worship any god they wanted. They were thought to be involved in bizarre and terrible religious rituals such as Thyestian feasts and Oedipean..	Worship any god Terrible religious rituals False understanding	Cannibalism Liturgy Eucharist Acknowledge Incorporated

inferential, evaluative, and comparative questions (see Table 4 for representative samples of students' responses). When evaluating the trustworthiness of the document, one student alluded to the importance of corroboration of information, pointing out “Yes, it is because it tells all the information clearly and even if you search about Christians it will give you the exact same information.” Another student noted the importance of how much information you need to say that the document is trustworthy – “No, I don't think this is a trustworthy document because the document is not telling us enough information of what happened in the 64 CE – 116 CE. But if Tacitus was in the 116 CE then he would have told more details and more information about what happened in 64–116 CE.”

Qualitative data gathered from student interviews further show students’ use of precise academic vocabulary related to historical thinking (e.g., corroborate, argue, trustworthy, reliable) and understanding of how historians treat evidence. This is illustrated in one of the interviews conducted by the second author:

Robin: What is evidence
Student A: When you show proof about something. And it corroborates with other documents.
Robin: Great. And what kind of evidence do historians use?

Table 4
Examples of student responses to short answer reading comprehension questions demonstrating historical thinking.

	Pretest	Posttest
Sourcing: *Who is the author of this document?*	“Persecution” “He is a writer.” “He is one of the leaders.”	“The author is David Cassel and he wrote it during or in 1998.” “Tacitus was a Roman historian, he wrote The Annal. He wrote and lived during the time period when Christians were persecuted. He wrote this document in 116 CE.” “The writer of this document is named David Cassel. He is a professor of theological studies at Hanover College in Indiana. It was written in 1998.”
Contextualization *According to this account, why did the Roman Empire persecute Christians?*	“We need to know the past.” “They keep killing one another Christians.”	“The Romens thought that there acts were shamefull. and discusting. Also they thought that the Christions st the city on fire then every mockery of every sort was added to there death.” “The roman empire persecuted the Christians because the Christians tried setting the city on fire. They also persecuted the Christians because the Christians had a group of “shameful discuting habits and actions” that people found disturbing.” “According to this account the Roman Empire persecute the Christiains because they where torn by dogs or eaten or also nailed to crosses.”
Corroboration *Do you think this is a trustworthy document for trying to figure out why the Roman Empire persecuted Christians? Why or why not?*	-no student responses mentioned aspects related to corroboration at pretest	“I think it is a trustworthy document because I've read other documents about why the roman empire persecuted the Christians and the other documetns said the same thing. Just in different words.” “It tells us clearly about what happened to them and you can search this on the internet. And this document is reliable because it was written by Tacitus and he wrote this when he was alive in that time so obviously it's probably true.” “Yes, it is because it tells all the information clearly and even if you search about Christians it will give you the exact same information.”

Student A: Documents and sources.
Robin: Okay. What does it mean to say that a piece of evidence is biased?
Student A: Like (inaudible) … Like it's.. I don't really know.
Robin: Do you know what the word biased means?
Student A: No.
Robin: It's kind of a tricky one, right? So it's about, so I'll give you an example.

If there's two different political parties, and then something comes out that's biased towards one of them, it kind of represents their feelings more than the other ones, then it's biased towards that political party. So it could be kind of representing one side's point of view a little bit more, or in favor of them.

Student A: Oh, when people agree with it, and it corroborates with other documents, and it's reliable.

Furthermore, students gained critical thinking skills and confidence in critiquing historical documents, as demonstrated in the following interview transcript:

Robin: When would you feel pretty sure that a historian's opinion is correct?
Student B: You can see if they did corroboration if they have different documents that agree with them. And if there are some people who say that it's false.
Robin: Okay, And what would you do if you saw that people said it was false?
Student B: Then I would look at different documents and see if that was, they also say it's false.
Robin: Okay.
Student B: And if more documents say that it's correct, then I would go with that. But if they, their opinion was different, then I would go with the other one.

In both interviews, students showed understanding of corroboration and the process of verifying which document holds gravitas.

Students' responses to an on-demand writing task reflected a higher level of critical disciplinary thinking as demonstrated by improved scores for sourcing, contextualization, and corroboration on a researcher-designed rubric. Sample size for this analysis was limited to the 20 students for whom we had both pretest and posttest data (see Table 5 for descriptive statistics). The difference between pretest and posttest scores for sourcing was statistically significant ($t(18) = 2.35$, $p < .05$) and yielded a moderate effect size (Cohen's $d = 0.58$). For contextualization, the difference between pretest and posttest scores was statistically significant ($t(18) = 2.04$, $p < .05$) and had a moderate effect size (Cohen's $d = 0.51$). The difference between pretest and posttest scores for corroboration was statistically significant ($t(18) = 2.88$, $p < .001$). The effect size for corroboration was large (Cohen's $d = 0.90$). Overall, students showed improvement in representing historical thinking through written response. Table 6 shows examples of how students integrated sentences in their writing that indicate understanding of sourcing, contextualization, and corroboration.

The aforementioned findings provided insights on how students with *ld* performed and developed historical thinking when exposed to DBI. To understand the affordances and constraints of using DBI in a self-contained special education classroom, we drew on evidence from the qualitative data we collected using fieldnotes, artifacts, and audio recordings of classroom discussions. Our analysis generated three themes related to affordances: The cyclical nature of teaching historical thinking, the use of modified historical documents, and students' multiple exposures to diverse historical sources.

Teaching the concept and the process of sourcing, corroboration, and contextualization across eight units in nine months led to student agency and self-directed work. Early in January of 2017, after four months of instruction, the students were less dependent on teacher scaffolds, and many attempted to answer the guide questions for the historical documents they were working on independently. This observation was evident in this excerpt from the teacher's fieldnotes:

Yesterday, we close read together three documents related to the expansion of the early caliphates. Today, they reread document A, and the students independently answered the 3 guide questions posted on Google Classroom. These questions were related to sourcing and corroboration. The only support I gave to my students was reading the questions aloud to them and rephrasing the question to make sure that they understood what the expectations are on these questions (Fieldnotes; January 9, 2017).

The use of excerpted and modified historical documents made it less intimidating and overwhelming for students to read independently, especially when the teacher introduced the idea of corroboration. The brevity of the documents (see Fig. 3 for

Table 5
Descriptive statistics for on-demand writing task.

	Pre-Test			Post Test		
	M	SD	Range	M	SD	Range
Sourcing	1.32	0.58	0–2	1.68	0.67	1–2
Contextualization	1.63	0.60	1–2	1.90	0.46	1–3
Corroboration	0.73	0.45	0–1	1.05	0.23	1–3

Table 6
Samples of students sentences capturing historical thinking.

Historical Thinking	Sample Sentences
Sourcing	Student A: According to David Cassel, Christians were harmed by the Romans …
	Student B: Document A does not talk so much about why they got persecuted.
	Student C: According to the Roman historical Tacitus, who lived during the time when Christians were persecuted …
Contextualization	Student A: But I think that when the Romans killed off all the Christians...which is kind of unfair.
	Student B: Christians believe in one god and they were persecuted because of this.
	Student C: During the Roman period, many Christians were persecuted because of many of the Christian practices were misinterpreted by Roman critics.
Corroboration	Student A: According to documents A and B ...
	Student B: In all these documents, they talk about one thing …
	Students C: Tacitus' written document agrees with what Cassel's argument about… However, this was not mentioned in the textbook.

example) made it easier for students to locate evidence. During the scaffolded instruction, students placed two or three documents side by side as they examined divergent and convergent information across documents. This process is exemplified in this fieldnote:

> We then compared Documents A and B, textbook excerpts, from a Cyclopedia Americana entry (i.e., what is similar and different about this account and the American Cyclopaedia entry?). Some students were able to differentiate the two documents from the Cyclopedia Americana entry… We then discussed the next prompt (i.e., How does this textbook compare to textbook A and the American Cyclopaedia?). I instructed the students to go back to the text and highlight a word or phrases to support their answers. All the students were able to locate at least two pieces of evidence in the text and highlighted them (Fieldnotes; September 21, 2016).

Implementing DBI in a self-contained special education classroom provides multiple exposures to different historical sources which allows students to consider the source and interrogate the reliability and trustworthiness of the documents. During the nine months of instruction, students read modified primary sources, excerpted secondary sources, old maps, and letters. They also analyzed historical artifacts (e.g., a picture of an archeological dig, census data, and art work). In the following class discussion (Transcript; January 24, 2017), the teacher discussed Ibn Battuta's pilgrimage to Mecca. The students read two excerpts from Battuta's travel account prior to this discussion.

Teacher: Who is “I” in this document?
All Student: Ibn Battuta
Teacher: What is the purpose of his trip?
Student 1: He was going to see Mecca. He was on a pilgrimage.
Teacher: Why did he choose Mecca?
Student 1: It was the holy city.
Student 2: That was where Mohammad was born.
Student 3: It was a pilgrimage, so that was what he was doing.

Three recurring themes emerged related to the constraints implementing DBI: a limited knowledge of disciplinary vocabulary, difficulty with perspective taking, and limited background knowledge to develop contextualization. Given the nature of the students' difficulty in the meaning making process, many struggled to access the meaning of the historical narratives because of the complexity of the disciplinary vocabulary and the sophisticated syntax used in the text. This effect persisted even though these texts had been excerpted (Fieldnotes; March 9, February 28, April 11, 2017). For example, even with the presence of a glossary on the margin of the text, many students had difficulty understanding the target vocabulary words (e.g., religious, rituals) that were bolded in the document:

> “A stranger complaint of Roman critics of Christianity was this. . . . They were thought to be involved in bizarre and terrible **religious rituals** such as Thyestian feasts and Oedipean [practices]. . . .In these two myths, Thyestes eats his own children, and Oedipus kills his father and marries his mother.” (excerpted text from the document: Professor Cassel's article)

In the reading comprehension question that refers to this text - *according to the author, what are the “strange complaints” Roman critics had of Christians?* - some students responded:

> “According to Daivd Cassel the roman christis were trying to say christians were terrible.”

> “I am thinking that the romans didn't have an open mind about what others thought and belived and did to worslip there god.”

Document A: Textbook (Excerpt)

During the early Middle Ages much of Europe passed through a time of turmoil and confusion, of ignorance and lawlessness . . . The early Middle Ages may justly be called the Dark Age . . .

During the early Middle Ages, from 476 to about 1100, European civilization slipped back into semi-barbarism. The chief cause of this decline was lack of a government which could keep order. The Germanic Kingdoms which had been set up by 476 were unable to suppress violence. There were so many highway robbers that travel became dangerous. Europe suffered a decline in commerce and manufacturing, in education, in literature and the arts, and in almost all that makes possible a high civilization. Cities grew smaller and in some cases practically disappeared, and western Europe became a region of poverty-stricken farming communities, each virtually isolated from the rest of the world.

Source: Roehm, A., Buske, M., Webster, H. & Wesley, E,. (1954). *The Record of Mankind.* Heath and Company.

Document B: Textbook B (Excerpt)

From 1000 to 1300, the economy of Europe developed and prospered. Available farmland tripled, and the food supply increased notably, bringing up the population. Europeans re-settled lands that had been depopulated by the ninth- and tenth-century invasions and also opened new lands for farming . . . Technological improvements like the heavy plow, the shoulder collar for horses, metal horshoes, and more efficient water and windmills contributed to the jump in food supply. Between 500 and 1300 Europe's population grew from 25 million to more than 70 million.

Source: Cassar, G.H., Goff, R.D., Holoka, J.P., Terry, J.J., Upshur, Jiu-Hwa (Eds.). (2002). *World History Before 1600: The Development of Early Civilization*. Stamford, CT: Cengage Learning.

Fig. 3. Examples of excerpted documents (www.sheg.stanford.edu).

> "Some Roman officials fear that the Christian were conspiring against them so they started killing and persecuting the Christians."

Perspective taking and layering points of view were two other challenges students grappled with when reading primary sources. For instance, when reading the letter written by Hernan Cortes to King Charles about Moctezuma all students thought that this document was from Moctezuma's point of view (Fieldnotes; May 2, 2017). Furthermore, during the first four units, students had a difficult time identifying the main idea of each document (Data Memo 4). The teacher had to explicitly show students how to identify the key information in the text. Lastly, reading historical documents met with occasional "whines and grunts" from the students early in the instruction (Data Memo 2). Despite early reluctance, all the students indicated a favorable perception of studying world history through document-based instruction when they were interviewed toward the end of the school year. All of them mentioned the value of examining corroborating information from different sources when evaluating the truthfulness or believability of a historical narrative.

Despite the extensiveness of scaffolds and explicit instructions the teacher provided to the students throughout the implementation of the eight units, many students exhibited difficulties situating the event in its historical period and limited knowledge on contextualizing historical events. For example, in the reading comprehension measure, when presented with the question, "According to the author, what are the 'strange complaints' Roman critics had of Christians?" one student responded, "The Christians would not partisipate in an non-Christian event and also feasts. Also they eat there children. Also they kill there father and mery there mother." Another student responded, "They had weird myths. IN one myth their was someone named Thyestian and he eats his own children, the Christians hava a sister to care brother it." See Table 4 for additional evidence on contextualization.

Using mixed qualitative and quantitative data sources, we uncovered insightful evidence to support the potential of DBI in special education. DBI influenced students' disciplinary cognitive process and higher-order thinking as observed in their highlighting of texts, responses to reading comprehension questions, and performance in an on-demand writing task. Our data also provided evidence to inform the next phase of the design-based research by looking at the affordances and challenges when implementing DBI in special education.

8. Discussion

The use of document-based instruction as a pedagogical framework to develop disciplinary cognitive processing and higher-order thinking has been shown to be effective within the context of this study - a self-contained classroom for students with *ld*. In one academic year, when reading multiple historical sources, these students learned how to efficiently highlight content knowledge and academic vocabulary, interrogate historical sources, and corroborate information from different sources.

Highlighting behavior and its relevance to students' cognitive processing is seldom addressed in literacy research. Yeu and colleagues (2015) argue that highlighting is a form of metacognition. Many students with *ld* have difficulty articulating their thoughts in both written and spoken form. Therefore, we argue that highlighting can be a useful distal measure used to understand students' historical thinking because it represents a cognitive artifact that does not require an oral or written product (Caverly et al., 2000; Heyne et al., 2020; Kobayashi, 2005; Leutner et al., 2007). When students with *ld* are taught a strategic way of highlighting texts, they demonstrate understanding of the historical narrative in terms of what is important and relevant in the historical documents they read. Students' highlighting behavior also demonstrated awareness of sourcing and the ability to identify important key ideas and sources or other relevant information in the texts. Furthermore, when students responded to the on-demand writing task, they used sophisticated academic vocabulary that was consistent with the words they had highlighted (e.g., cannibalism, ritual, sources).

Students' ability to identify sources and to evaluate the credibility of the authors, and their account of a given historical event were further observed in students' short responses to the reading comprehension questions. Examining students' work revealed growth in the importance they assign to determining the trustworthiness of the sources as well as recognition of the corroborative aspect of historical reasoning. Before the implementation of the document-based instruction, students' knowledge of corroboration was nonexistent. However, after nine months of instruction, their skills significantly improved. This finding is consistent with Reisman's (2012a; 2012b) study in which struggling readers performed significantly higher on a pre/post assessment of historical thinking and factual knowledge. Similarly, teaching historical thinking encouraged our students to question the veracity and credibility of sources and find corroborating facts to support their argument. Although the struggling readers' in Reisman's study were not formally receiving special education services and they were instructed in inclusive general education classrooms, the findings in the current study, nonetheless, affirmed what Reisman argued: DBI is a viable way to develop literacy skills and higher-order thinking in middle school. Our study provides an extension of this argument, suggesting that students with *ld* can benefit from this pedagogy as well.

Reading historical sources is a problem-solving process (Wineburg, 1991). As students read multiple historical documents, they use different heuristics to evaluate the trustworthiness and reliability of the information. First, we observed that students would look at who wrote the documents or would search the bottom of the document and highlight the source. Then, when responding to short written prompts, students made explicit reference to the documents they read. Our students also demonstrated understanding of the process of corroborating information by comparing two or more documents. Finally, as they interpreted the historical narrative, most of them contextualized the historical events within the time and space the

event happened when provided with teacher support. This unfolding of prototypical historical thinking is consistent with Rouet and colleagues' (2017) model of mental representation when reading multiple documents in a contextualized and purposeful fashion.

Beyond historical thinking, the extended use of document-based instruction in special education social studies classrooms is beneficial to students' development of higher-order thinking. Explicit and scaffolded teaching of historical thinking incorporated into the eight units taught over one academic year, led to students' development of higher-order thinking such as synthesizing varied information, generating inferences from the documents, and comparing and contrasting perspectives from different sources. These metacognitive skills are underdeveloped in many students with *ld* (Bulgren et al., 2007; Gajria et al., 2007), and thus they benefit from an intervention targeting these skills. The results of this study suggest document-based instruction in history can support students' critical reading of different sources and articulation of thoughts through written responses.

Teaching historical thinking and the use of document-based instruction is appropriate for students with *ld* and in fact we argue, should be reviewed and built upon for multiple academic years. Despite the significant improvements in students' disciplinary cognitive processing and higher-order thinking when reading multiple historical documents, it must be noted that the development of historical thinking requires years of ongoing practice to learn the fundamentals of sourcing, contextualization, and corroboration. What we observed in this study was a burgeoning set of skills that requires further practice and application to reach generalized use. This brings us to a broader understanding that teaching historical thinking using DBI over one school year is not enough for students to fully develop historical thinking skills.

Perspective taking is a cognitive process that we observed needs more emphasis when teaching historical thinking to fully develop students' ability to use source information and understand how to contextualize historical artifacts. Historical perspective-taking can be a daunting cognitive task for students with *ld* who often struggle with these aspects of comprehension. Further complicating this, Seixas (2017) argued that historical perspective-taking is intertwined with the contextualization of people's world view at that time. Thus, the pedagogical challenge is how to teach and scaffold students' understanding of how people in the *past* thought, felt, and behaved. Although this seems a difficult task, with scaffolded, explicit instruction, and opportunities to practice applying this skill, we believe students with *ld* can achieve this. Prior to this study, historical thinking seemed an improbable concept to teach in a self-contained classroom. However, considering what the participants in this study achieved after nine months of DBI, we are confident that historical perspective taking is achievable if explicit instruction is provided.

Aligned with perspective taking and contextualization, background knowledge is essential to the development of historical thinking (Britt & Aglinskas, 2002). A long lineage of scholarly work implicates the role of background knowledge on text comprehension (Alexander et al., 1994; Bransford & Johnson, 1972; Dochy et al., 1999; McNeil, 2011; Stanovich, 1986; Tobias, 1994). To attend to a detailed sequence of events and understand how people behaved in the past, readers need extensive knowledge of the past (Van Boxtel & van Drie, 2012; Britt & Aglinskas, 2002; Wineburg, 1994). Students in this study found contextualization the most challenging cognitive skills to learn due to their limited historical and conceptual background knowledge. In addition, the limited contexts provided in the excerpted historical documents created challenges for students to create a cohesive historical narrative. This is inconsistent with Britt and Aglinskas (2002) where students trained on sourcing had better connected essays. We interpreted this as part of the challenges many students with *ld* confront when reading excerpted multiple sources. This gave us insights to the next iteration of the curriculum.

Research on the teaching of DBI and the use of multiple sources for struggling readers are still scarce (Salmerón et al., 2016; Stadtler et al., 2016). Studies on historical thinking and the use of DBI for students with *ld* are limited and previously were only conducted in inclusive classroom contexts (e.g., De la Paz, 2005; Ferretti et al., 2001; Reisman, 2012b). The overall findings of this study suggest that delivering document-based instruction fosters disciplinary cognitive processing and higher-order thinking for students in a self-contained 7th grade special education classroom.

9. Limitations

Despite our efforts to collect rigorous data to address the research gap in the use of DBI to teach historical thinking to students with *ld*, we identified three factors that limit a broader discussion of the results. Due to the lack of a control group, we cannot make a generalization about the effect of DBI on historical thinking and students' disciplinary cognitive processing and higher order thinking. While the knowledge gained in this study is insightful and important to a wider context, care should be given when interpreting the results.

When we set our goals for this study, we were cognizant about the additional issue of generalizability of the results due to the small number of participants ($n = 25$). We do not assume that what we discovered in this study holds true when applied to other special education classrooms. However, the ecological validity in this study - the small number of students receiving an intervention per class period, the variability of learners in typical self-contained classrooms, and the teacher-directed inquiry - tamper this limitation.

Finally, we acknowledge the unique characteristics of the teacher's contribution to the learning trajectory of students who participated in this study. The teacher has deep knowledge of and rich background in literacy instruction, committed to changing the practice of disciplinary literacy in social studies using DBI, and has years of experience working with students receiving special education services. Given this level of commitment to research and practice, the teacher, who was also the

researcher, could have been vulnerable to confirmation bias. To mitigate this problem, the second author provided the check-and-balance when interpreting the results and played the role of a devil's advocate.

10. Implications

DBI and historical thinking address three important implications for teaching history in special education. Foremost, the disciplinary literacy instruction embedded in the teaching of historical thinking provides students with cognitive strategies to understand complex and rigorous texts (De la Paz et al., 2016). In the current study, many students learned content knowledge in history and academic vocabulary through document-based instruction. Being able to use academic words like *corroboration, trustworthiness,* and *reliability* in both oral and written form are noteworthy. Second, students expanded their cognitive processing skills and higher-order thinking when reading multiple historical documents. They learned to interrogate the epistemology of historical narratives by referring to the sources. Third, historical thinking and the use of document-based instruction engender civic understanding and democratic participation in the era of fake news. Students need to be critical consumers of on-line and off-line information. Teaching students ways to interrogate historical sources and identify corroborating ideas equips them with the tools needed to judge the reliability and trustworthiness of the information they read.

The current study informed the next phase of our design-based research. Foremost, the students' improvement in their short-written responses encouraged us to expand this learning outcome to a formal writing task featured in each lesson. During the third phase of the study, a mini-writing workshop was included as a component of the DBI and each lesson culminated with writing an expository/argumentative essay. Consequently, we needed to develop a nuance writing rubric to avoid basal and ceiling effects. This rubric was based on the Common Core writing standards and historical thinking construct. To further develop students' contextualization skills, developing historical background knowledge using digital/online sources were used.

The findings of this study seek to address Moje's (2007) call to develop adolescent disciplinary literacy by designing socially just and equitable subject-matter instruction. Our study provides evidence that students with *ld* in a self-contained social study classroom have the capacity to critically interpret and interrogate excerpted historical documents when provided with explicit, highly scaffolded historical reasoning instruction. While we do not have evidence from the current study to generalize to other self-contained or inclusive general education classrooms, the demographic and cognitive profiles of students in this study are typical of those found in other self-contained classrooms in urban and suburban areas, suggesting it would likely benefit students in other contexts, although further research is warranted. This new instructional model of DBI for students with *ld* has the potential to transform the practice of disciplinary literacy in history for students receiving special education services, helping to develop higher order thinking of students who struggle to read and write. However, the efficacy of DBI for students with *ld,* or all students for that matter, depends on the teacher's level of pedagogical content knowledge (Shulman, 1987). Teaching pre-service teachers the components of the DBI framework and providing sustained professional development for special education and general education teachers has the potential to change instructional practices in social studies/history classrooms.

11. Conclusion

This study represents the first extended curriculum intervention in the topic of world history conducted in a self-contained special education classroom and a first look at how students with *ld* can access complex historical documents to develop disciplinary cognitive skills and higher-order thinking when reading multiple historical documents. Based on our extant knowledge of the literature and personal experience, historical disciplinary literacy skills are not currently explicitly taught in many special education classrooms. When provided with explicit scaffolded instruction and multiple opportunities to apply historical thinking skills over the course of the year, students with *ld* evaluated the trustworthiness of the historical documents and consolidated divergent/convergent information from different historical sources. Although historical thinking may pose consequential hardship to many students with *ld*, the regularity and the routine of teaching its components ease the burden. Providing students the cognitive tools - sourcing, corroboration, and contextualization - to understand historical events using primary and secondary sources may help address the long-standing issue of instructional inequity and low expectations when teaching history to students with *ld*.

Appendix A. Historical Thinking Rubric

Historical Thinking Skill	Description	Scoring
Sourcing	Identify the author's position on the historical event Identify and evaluate the author's purpose in producing the document	0 - Absence of any sourcing. 1 - Reference source by mentioning the author (no critical evaluation). 2 - Implicit discussion of the author, purpose in producing the document, evaluating the trustworthiness of the document.

(*continued*)

Historical Thinking Skill	Description	Scoring
Contextualization	Evaluate the source's trustworthiness by considering genre, audience, and purpose Understand how context/background information influences the content of the document Recognize that documents are products of particular points in time	3 - Explicit discussion of the author, purpose in producing the document, evaluating the trustworthiness of the document. 0 - Absence of contextualization of historical events. 1 - Reference the context of the event. 2 - Implicit discussion of how the context/information influences the content of the document or how the documents are products of particular points in time. 3 - Explicit discussion of how the context/information influences the content of the document or how the documents are products of particular points in time.
Corroboration	Establish what is probable by comparing documents to each other Recognizing disparities between accounts.	0 - References information found in one of the documents. 1 - References the information found in more than one document but makes no explicit comparison/contrast. 2 - Explicit comparison and/or contrast among different documents. 3 - Explicit comparison and or contrast among different documents and recognizes disparities between accounts.

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