DISCUSSION AND DEMOCRACY:
SUPPORTING STUDENTS WITH DISABILITIES
IN HISTORICAL THINKING AND ONLINE CIVIC REASONING
THROUGH SMALL GROUP DISCUSSION

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ABSTRACT

In the past decade, misinformation has become more challenging to decipher. While separating

fact from fiction has always been difficult, it has only grown more difficult with the increasing

ubiquity of social media and ongoing political polarization. This is especially the case for

students with disabilities, who have traditionally struggled with evaluating written texts. This

cross-case analysis, a qualitative review of student experiences, examined how three students

responded to an intervention developed to improve their historical thinking skills, including

lateral reading, to help them identify misinformation. Grounded in sociocultural theory and

shaped by the Universal Design for Learning framework, the intervention consisted of lessons on

historical thinking and lateral reading and participation in a structured, peer-mediated small

group discussion. Findings showed that while small group discussion may hold promise for

supporting students with disabilities to learn lateral reading and historical thinking, it requires

further development to help students with the most significant challenges. UDL-informed lessons

and associated educational technologies were also evaluated in classroom settings with the case

studies students. Results suggest that students with disabilities were aided by the lessons and

associated technologies, however, students with more significant disabilities were much less

impacted. Finally, this study was conducted during teaching conditions influenced by the

COVID-19 pandemic. Findings suggest that certain case study students benefitted from learning

in these conditions, but others struggled due to a lack of interpersonal communication with

teachers or peers. Overall implications included considerations for how small group discussion is

developed and used by teachers in high school social studies and how historical thinking skills

and lateral reading are introduced and shared for students with disabilities. Implications for

researchers and theorists of sociocultural theory and cultural-historical activity theory are also presented.

For Cadie Daley, who encouraged me to
answer that Craigslist ad back in 2010.

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After my second child was born, I remember sharing with some colleagues at Jesuit High School that I wanted to pursue a Ph.D. A history teacher, Paul, chortled that it was "too late" for that. Now that I had kids, the time to pursue a Ph.D. was over. He had been so adamant that for the next seven years, I didn't give it another thought. It wasn't until I was at my second school, Gresham High School, that I realized that Paul had no idea what he was talking about, and I should reconsider. I mention this story for my children. Don't automatically believe that the Pauls of the world know anything.

My advisor, Dr. Cindy Okolo, deserves special mention at the forefront of this dissertation. I was not initially assigned to Cindy, but I appreciated her candor when she came and spoke to my cohort back in the summer of 2016. "I want to work with her," I thought, because she was refreshingly honest about the state of education. She has patiently supported me through all challenges in this program and my professional life, even after she retired. I realize that she could have dropped me like the Red Sox dropped the Yankees back in 2004, but she didn't, and for that, I'm grateful. I have high hopes of getting to Cape Cod to visit her family and to personally deliver chocolate cake in a bag for all her efforts.

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CHAPTER ONE: INTRODUCTION

In the past two decades, the number of information sources has expanded rapidly, stretching far beyond newspapers and television due to the extraordinary growth of the internet. That expansion has concerned social studies education scholars and teachers, who have watched as the public has struggled to identify objective information sources (Wineburg & Martin 2004). Since an educated and well-informed citizenry is critical for a functioning democracy (Dewey, 1916), those educators have been concerned with properly teaching young citizens how to evaluate media and glean factual content (McGrew et al., 2019; Wineburg & McGrew, 2018). However, the challenges to doing this became even more pronounced in the past six years, when President Donald Trump regularly leveraged the online micro-blogging platform, Twitter, to communicate directly with the American public. A president's being innovative with media was not unprecedented, as others, like President Franklin Roosevelt, had used new media, in his case, the radio, to directly reach citizens. However, President Trump repeatedly claimed that certain traditional news sources, namely those that disagreed with his policies and perspective, were "fake news," an approach that called into doubt many news sources as trustworthy at all (Journell, 2017, p.8). In turn, and complicating matters further, the president's claims had, throughout his presidency, been called into doubt by Twitter site itself, leaving the public more uncertain as to who was presenting objective facts. These concerns became more prominent with the COVID-19 pandemic, the Presidential election of 2020, and the riot at the U.S. Capitol Building on January 6, 2021, to the extent that President Trump was eventually banned from the Twitter platform (Delkic, 2022). Other political figures were also banned from posting on certain social media sites for spreading purported misinformation, although many citizens grew angry at

the sites for suspending these figures. They saw these acts as censorship of what they felt was true, and the act of banning has cast those sites as also being fake (Dias & Headley, 2022).

Yet surveys indicate that approximately half of young Americans (aged 18-24) get their news primarily from similar online sites (Pew Research, 2020; CommonSense, 2019). If one believes that being well-informed is necessary for preserving American democracy, an adage attributed to Thomas Jefferson, then social studies scholars are correct that learners need help to sift information from online sources. This requires teachers to address with students how quickly and effectively misinformation spreads. Facebook, the world's most popular social network, allows users to publish digital artifacts that are designed to seem like factual content. Studies have shown that those individuals who mostly rely on online sources like social media for their news tend to be those most likely to be misinformed about key facts, such as information regarding political positions of different national parties or whether specific conspiracy theories were already debunked (Pew Research, 2020). The nature of sharing on social media also suggests that misinformation can be spread quickly and with significant negative impact among individuals who privilege social media over other news organizations that utilize fact-checkers and abide by norms of journalistic integrity like the Associated Press.

Recent studies confirmed that students in secondary school through college have challenges determining the reliability of digital information (McGrew et al., 2019; Wineburg et al., 2016). For example, in one study, students were given explicit instruction in evaluating online materials and were partly successful in analyzing primary sources to determine whether their claims were true (McGrew, 2020). However, many students remained unable to identify the variations between objective materials and sponsored commercial content. Researchers argued this was because the broader educational community still relies on outdated methods for

evaluating online materials, such as the early 2010s curriculum centered on digital citizenship, which has not kept pace with rapid media evolutions nor how people learn on the web. (DeSchryver, 2014; Wineburg, 2020). Those same scholars contend that educators and curriculum have not accounted for how quickly adjustments are made to social media sites, where algorithms are constantly enhanced for marketing purposes (Wineburg, 2020).

The advent of the COVID-19 pandemic further complicated issues as learners experienced several concurrent challenges. First was the fact that the adult population itself struggled to separate fact from misinformation, as states, municipalities, businesses, and federal organizations like the Centers for Disease Control were often in disagreement regarding the COVID-19 virus and appropriate countermeasures to it (Nelson et al., 2020). These disagreements were exacerbated as COVID-19 was politicized during the 2020 presidential election. Since many students were required to complete their school years online in 2020, their time spent with teachers, who might help them learn evaluation methods, was limited. Even their time with classmates who could discuss issues with them was curtailed, limiting even informal conversation with peers that might have helped with processing conflicting information.

Additional Challenges for Students with Disabilities

After an exhaustive literature search on social studies education and misinformation, I could not locate any accounting by social studies scholars for the challenges experienced by students with disabilities (SWD) in this space. On the National Assessment of Education Progress (NAEP), only 7% of SWD, for instance, earned a proficient mark in civics, compared to 25% of students without disabilities (NAEP, 2014). This suggests that these students' skills in engaging within the country's political systems may be more limited. The NAEP measures competence in understanding the foundations of U.S. government and the ability of a learner to

participate in civic life. Earning a lower score on the civics portion of the NAEP suggests that a learner may struggle with being able to understand the structures of the government and to take, evaluate or defend specific intellectual arguments (Wissinger & De La Paz, 2015). As the means for spreading misinformation increase (Dubner, 2020), the chances of these students struggling to effectively function in civic life grow, since they might be confused as to who to trust or how to analyze information. This means that those students possibly run a higher risk of being manipulated and put at a disadvantage, as is occurring economically or socially to a part of the American population today (Bursztyn et al., 2020; Carson, 2018; Pew Research 2017). Broadly speaking, SWD may be more likely to misunderstand information than other students and might need more support more quickly to address increasing amounts of misinformation.

There have been relatively few studies of SWD working with online media, although those that exist highlight important concerns. One case study (Holmes & O'Loughlin, 2012) tracked three individuals with learning disabilities, and each experienced abuse and cyberbullying. They ended up being financially defrauded, as they could not apprehend the risks of social media, particularly with people identified as friends in online spaces. Nevertheless, other researchers have reported positive results in helping SWD to navigate safely and productively online (Siegel, 2017). Educators need to both develop instructional methods that support SWD in ways that improve upon currently existing curriculum and digital media, including social media, online video, podcasts, audiobooks, and digital art. This would be helpful for all students, but specifically for SWD. Some research has started in this direction. A series of studies demonstrated how training in small groups about social media used allowed students with dyslexia to improve executive functioning, increase control over when their learning happened, and develop awareness of literacy processes and demands (Barden, 2012; 2014). Other efforts

have demonstrated that interventions that teach historical reasoning to SWD can help increase

students' historical knowledge (De La Paz & Wissinger, 2017), but extending that knowledge

outside of the classroom requires additional consideration and planning. These studies are a good

beginning, but their relatively small scale suggests that more work needs to be done to support

SWD to develop these faculties.

Reconsidering the Social Studies

Social studies in many K-12 environments consists of an array of disciplinary content

stretching from anthropology to microeconomics. Two principal subjects within social studies

curriculum in the United States are history and civics. Both of those subjects have evolved in

their primary focus over the years. History education, for instance, has been a center for public

debate in past years. In the "social studies wars" of the 1990s (Evans, 2006, p.317), ideological

disputes raged about the specific content matter taught in history curricula. Those debates left

little resolved, but by the end of the 1990s more effort was directed toward increasing skill

acquisition, specifically around what became known as historical thinking (Seixas & Morton,

2013; Thorp & Persson, 2020). Historical thinking proponents contend that a greater emphasis

on skills acquisition equips students to not only learn historical content but have useful

competence outside of the social studies classrooms (De La Paz, 2013).

For the purposes of addressing misinformation, though, teachers have been asked to

consider the development an additional aptitude, civic online reasoning, or the ability to sort out

accurate, reasonable, and independently produced information from biased materials (Flanagan,

2018). Wineburg and McGrew (2018) argue that this ability is predicated on using an emergent

skill called lateral reading. Lateral reading is a technique used by fact-checkers in traditional

news organizations like the *New York Times* (Wineburg, 2020). By learning this skill, students

may better navigate the challenges of misinformation in online materials and discourse. In lateral reading, individuals, upon being presented digital content, such as a specific website, move laterally to examine adjacent resources, such as additional websites or written materials, other than the site itself. When students learn lateral reading, they develop a mental framework that builds a healthy skepticism toward all digital content, which may be necessary to navigate today's information terrain (DeSchryver & Spiro, 2008; McGrew et al. 2019; McGrew & Byrne, 2020; Wineburg & McGrew, 2018; Wineburg et al., 2020).

A student's ability to develop effective online reasoning, however, might require that a social studies teacher helps the student build a base of historical thinking skills, such as sourcing or contextualization. These skills are based on distinct competencies that historians use in their disciplinary work (SHEG, 2020; Wineburg, 2001). Learning these foundational skills could help students better conceptualize the value of lateral reading (McGrew et al., 2019; Wineburg & McGrew, 2018). For example, the stronger a student's aptitude in sourcing, the more likely that they question materials presented to them. By learning sourcing, the student develops the competence to question the origins of posted material and evaluate its trustworthiness (Wineburg & McGrew, 2018). Teachers would have to overtly scaffold what is learned in a particular historical lesson about sourcing to what might happen in a contemporary life situation, so that students can transfer their experience. They might also have to construct a clear path from that historical thinking skill to civic online reasoning and lateral reading, so that students are able to use all skills in becoming critical appraisers of content.

Scholars are starting to address the concerns raised by the increasing confusion learners face with misinformation (McGrew & Byrne, 2020; Wineburg et al., 2019), but given the extent

of the issue, more research is necessary to assure that teachers are equipped with methodology to support school-aged citizens.

Collective and Peer-mediated Action

While historical thinking skills can improve social studies curriculum, teachers should also consider classroom practices that integrate peer-mediated activity. Initial studies that aimed to improve historical thinking or online civic reasoning used pedagogical methods that were teacher centered. When discussion is used in these studies, it has tended to be a whole class discussion facilitated by the teacher (Reisman et al, 2018). Due to the nascent state of lateral reading instruction, this has been a practical approach. However, both sociocultural theory (Vygotsky, 1978) and intervention research (De La Paz & Wissinger, 2017; Mercer & Littleton, 2007; Mercer & Littleton, 2013; Okolo et al 2007; Wexler et al, 2015; Wissinger & De La Paz, 2015), suggest that when students, particularly SWD, are allowed to mediate their work collaboratively, they might achieve stronger results. That is because the students have greater opportunities to participate, and they are often more likely to take risks in talking more informally with a smaller group of classmates. Prior researchers have highlighted that for students, discussion might allow them to glean or clarify information, learn new viewpoints on a topic, and find a potential and lower-impact way to contribute to classroom learning (Okolo et al., 2007).

Vygotsky referred to this as operating intermentally with peers. Through the vocalization of their thoughts, learners can test mental models about concepts. And their peers can help them to frame and reframe those models. This practice is critical to operating in a democratic society - people can voice their perspectives, learn to debate with their peers, and rejigger their ideas in the face of intelligent discourse. If they do not learn to do this with each other, and instead only

learn to do it with their instructor, then they potentially will always be waiting for someone in authority to pass them wisdom, as opposed to developing critical analytical faculties to operate independently.

Overview of the Study and its Results

I introduced a structured, peer-mediated small group discussion protocol with a group of students from a 9th-grade social studies class. These students were also taught both historical thinking and lateral reading through lessons informed by the Universal Design for Learning (UDL) framework (Rose & Meyer, 2002; CAST, 2018) during their regular class period. I introduced foundational concepts in historical thinking and reinforced them through the preparations for the structured discussion over a ten-week term. Given that traditionally, teachers and students have concerns with utilizing small group discussions to evaluate historical materials (DeFrance & Fahrenbruck, 2016; Okolo et al., 2007; Reisman, 2015) it was important to iteratively test how to best prepare and support students in this process.

Six students, including two diagnosed with disabilities and one that was being monitored for disabilities, engaged in the four structured peer-mediated discussions based on world history topics – the Russian Revolution, the Jewish experience in Germany during World War II, the formation of the state of Israel, and American CIA intervention in Guatemala – emanating from their class curriculum. The discussions were arranged to reinforce the students' nascent historical thinking skills. Students were provided with regular feedback, something critical for success in peer-mediated interventions (Calhoon, 2005: Calhoon & Fuchs, 2003; Mastropieri et al., 2003; Wexler et al., 2015). The study was based on the belief that systematic and continual collaborative discourse from peers could provoke student learning and in turn, skill development for SWD.

The results of this study showed that while SWD improved with their historical thinking, potentially through the experiences with the structured, peer-mediated discussion and the UDL-informed lessons, that improvement was minor. Further, one case study student, who had more significant disabilities, showed almost no improvement and did not pass his world history course. However, all case study students were able to recall important operational details of the lateral reading skill. That fact might point to opportunities for further investigation. As a qualitative cross-case study, the overall results should provide future researchers insights and guidance for ongoing work in social studies education.

An important complication to address is that this study was originally designed to be used in a physical classroom with a high school world history class. The ongoing effects of COVID-19 changed the nature of the planned approach, and I adjusted the study for students that were learning online and for a more limited timeframe than in a traditional face-to-face high school social studies class. Because of this, my approach shifted from a mixed methods pre-/post-test to a cross-case study. I applied my intervention in a naturalistic environment and gathered data that would help my understanding of student behavior. This did allow me to observe and analyze the impact that COVID-19 and the mandated online learning played on the students, both in the case study intervention group and the class. This pivot produced additional findings, specifically insights and reflections on elements of sociocultural theory and cultural historical activity theory (CHAT), and their interaction with digitization in educational settings.

The Rationale for this Study

The dangers of misinformation, particularly in the wake of the 2021 U.S. Capitol riot and the COVID-19 pandemic, suggest that students need more skills to evaluate what is presented to them through varied forms of media. Without mental heuristics to assess misinformation, they

could misunderstand the value of tools like vaccines. Since initial studies have been partially successful at teaching important skills like lateral reading (McGrew, 2020) this study tried to extend that work in two distinct ways. First, the study investigated the effects of the inclusion of a structured, peer-mediated small-group discussion to support these efforts, continuing important efforts by previous scholars (Chinn & Anderson, 1998; Chinn et al., 2001; Clark et al., 2003; MacArthur et al., 2002; Okolo et al., 1998; Okolo, et al., 2007; De La Paz & Wissinger, 2017; Wissinger & De La Paz, 2015). This exploration of the use of peer-mediated activity was grounded in the understandings reached by sociocultural theory about the process of students' learning and development. Secondly, the study wanted to test lessons and methods informed by the UDL framework to support SWD who struggled with social studies and for whom research about lateral reading is presently limited. Supporting SWD is critical as SWD have historically struggled in acquiring social studies competencies (Barton & Levstik, 2004; De La Paz & MacArthur, 2003; Garwood et al 2020; Graham, et al, 1998).

The stakes of this research for a democratic society are significant. If students, particularly SWD, are not supported in honing their online reasoning skills, they might continue to struggle to engage in civic responsibilities, as evidence by the NAEP (2020; 2014). Both the developments of the past twenty years of internet expansion as well as the last six years of public conflict around information have been challenging for teachers and students. Given that both the aftereffects of the pandemic and the political strife that has not abated in the past two years, students will have to develop skills to analyze and assess conflicting information. Teachers will need to find and test instructional methods that help them do so. This research tried to provide those educators with a new tool for that work, so by extension, they could support students to navigate misinformation in their everyday life.

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CHAPTER TWO: LITERATURE REVIEW

In this chapter I provide a literature review that surveys the constructs of historical thinking, online civic reasoning, and the teaching of social studies to SWD. Then I examine studies of peer-mediated activity for SWD before exploring research on discussion within social studies teaching. I then offer a theoretical framework, grounding this study in aspects of sociocultural theory and cultural historical activity theory. The chapter concludes with a short examination of two design frames I also used while completing the study. The first is the UDL framework that was used to develop the structured discussion protocol, lessons, and assignments for the intervention. The second is the research on online learning for SWD, which was analyzed in response to how the COVID-19 pandemic affected and altered the study.

A Foundation of Historical Thinking

Since 2002, scholars at the Stanford History Education Group (SHEG) have examined the pedagogy surrounding historical thinking skills (Wineburg, 2001). Conversation on historical thinking emanated from disciplinary discussions in the 1970s (Lee, 1983; Thorp & Persson, 2019), but SHEG's contributions added insights from cognitive science. Ongoing debates about the value of history education in American political discourse led scholar Sam Wineburg to argue that historical thinking was not a natural process (Wineburg, 1999). Instead, students grasping the work of professional historians required careful study of skills not ordinarily taught in K-12 schools (Donovan & Bransford, 2005; Okolo & Ferretti, 2013). SHEG then developed materials to help teachers show students how to function like historians (Wineburg et al., 2011). The importance of this practice became more significant with the ubiquity of online search engines like Google since information became more accessible than ever before. Technological evolutions like these made the need for training in skills like historical thinking even more

pressing, since students needed the skills to evaluate rapidly flowing information (DeSchryver, 2014; DeSchryver & Spiro, 2008; Wineburg & Martin, 2004).

SHEG recommends teaching the following four historical thinking skills: contextualization, corroboration, sourcing, and close reading (SHEG, 2020; Wineburg, 2001). Researchers have shown that these skills help learners to understand the process of "doing history" (Luis & Rapanta, 2020, p.4). The list of skills recommended by SHEG, plus associated questions and the expectations that teachers should have for student attainment, are included in Figure 1. Sourcing is the process of inquiring about the origins of any piece of historical information, while contextualization asks students to consider the history and culture of the time in which a source was created. Corroboration is where students learn to examine multiple sources to determine if the original source could have its argument validated. Close reading, in the historical thinking context, asks students to deeply examine a source for latent assumptions, specific language used, and clear claims. The application of these four skills should help students to evaluate information and arguments in other disciplines and to assess relevant contemporary concerns. (SHEG, 2020). Other scholars have produced variants of the SHEG model, and some tie historical thinking to wider competencies such as historical literacy (Levesque & Clark, 2018: Seixas, 2017).

SHEG's belief that well-constructed history teaching held value outside of disciplinary practice was echoed by Gersten & Okolo (2007), who in a special issue of the *Journal of Learning Disabilities*, suggested history should be taught in a way that "students see the concerns faced by others in the past" and learn that these are "variants of problems we all encounter" (Gersten & Okolo, 2007, p. 98). Even so, the field of history teaching has been divided when it comes to what the core of the discipline should be, with many social studies

Figure 1

SHEG Historical Thinking Skills

HISTORICAL THINKING CHART

Historical Reading Skills	Questions	Students should be able to . . .	Prompts
Sourcing	• Who wrote this? • What is the author's perspective? • When was it written? • Where was it written? • Why was it written? • Is it reliable? Why? Why not?	• Identify the author's position on the historical event • Identify and evaluate the author's purpose in producing the document • Hypothesize what the author will say before reading the document • Evaluate the source's trustworthiness by considering genre, audience, and purpose	• The author probably believes . . . • I think the audience is . . . • Based on the source information, I think the author might . . . • I do/don't trust this document because . . .
Contextualization	• When and where was the document created? • What was different then? What was the same? • How might the circumstances in which the document was created affect its content?	• Understand how context/background information influences the content of the document • Recognize that documents are products of particular points in time	• Based on the background information, I understand this document differently because . . . • The author might have been influenced by _____ (historical context) . . . • This document might not give me the whole picture because . . .
Corroboration	• What do other documents say? • Do the documents agree? If not, why? • What are other possible documents? • What documents are most reliable?	• Establish what is probable by comparing documents to each other • Recognize disparities between accounts	• The author agrees/disagrees with . . . • These documents all agree/disagree about . . . • Another document to consider might be . . .
Close Reading	• What claims does the author make? • What evidence does the author use? • What language (words, phrases, images, symbols) does the author use to persuade the document's audience? • How does the document's language indicate the author's perspective?	• Identify the author's claims about an event • Evaluate the evidence and reasoning the author uses to support claims • Evaluate author's word choice; understand that language is used deliberately	• I think the author chose these words in order to . . . • The author is trying to convince me . . . • The author claims . . . • The evidence used to support the author's claims is . . .

STANFORD HISTORY EDUCATION GROUP   SHEG.STANFORD.EDU

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educators prioritizing content acquisition over historical thinking skills (Saye et al., 2018; Saye & SSIRC, 2013). While substantive research has been conducted on implementing historical thinking skills pedagogy (De La Paz et al., 2005; De La Paz, 2013; Reisman, 2015; Seixas, 2015) it is not pervasive across schools and districts (Saye et al., 2018). Some scholars argue that the historical thinking approach is not comprehensive enough to use in classrooms. They assert that a doing history method bypasses critical epistemological tasks of creating and defending interpretations of the past (Luis & Rapanta, 2020). Instead, these scholars encourage a similar

but distinct approach, historical reasoning, which had been articulated by other researchers (van Drie & van Boxtel, 2008; VanSledright, 2013).

Online Civic Reasoning and Lateral Reading

Recent events prompted SHEG researchers to build on the original set of historical thinking skills to navigate online information. They had noticed that learners were being exposed to misinformation that was becoming easily confused with facts (Breakstone et al., 2019; Wineburg & McGrew, 2019). They were worried that the educational community was not moving quickly enough to provide pedagogical responses for the children who were being exposed to these materials (McGrew et al., 2019). Arguably, the need to think more deeply about this content is even more complicated. Research has noted that social studies educators themselves have difficulty establishing the credibility of sources and presenting materials to students (Clark et al., 2020)

SHEG scholars conducted a study that examined the work of professional fact-checkers working for companies like *The New York Times* to understand how they recognized problematic materials published online. The study led to the formulation of what SHEG termed online civic reasoning; this was a discipline of digital literacy for which proficiency was necessary to make informed political choices (Wineburg & McGrew, 2019). The researchers claimed that three key questions should undergird competence in online civic reasoning: being able to ask (1) who is behind the information, (2) what's the evidence and (3) what do other sources say? To answer these questions, SHEG researchers suggested teaching a new skill, lateral reading, derived from their work with fact-checkers (Wineburg & McGrew, 2019).

Lateral reading is the technique of leaving an initial online source and looking at another source to confirm or reject the original's veracity (McGrew et al., 2019). This contrasts with

vertical reading, or maintaining focus on a singular website, like one would do when reading traditional text (Wineburg & McGrew, 2019). The fact checkers had explained that they were always skeptical about online sources, and they used that skepticism to quickly look elsewhere for clarification. Interestingly, when the researchers studied other groups' reactions to faulty online materials (groups that included professors and undergraduate students), those groups were prone to trust the inaccurate information. They would often look only at the original source and not attempt to verify it further. This misplaced trust was also detected in a study that looked at K-12 social studies teachers' perceptions of credible sources. In that study, which examined what teachers presented to students on similar topics, the teachers' presentations ranged widely in content and focus because of the teachers' biases and trust of varying news sources (Clark et al., 2020). Wineburg and McGrew (2019) also found that, when reading web sources, most participants were inclined toward "fluttering" (Kirschner & van Merriënboer, 2013, p. 171), a practice of moving around on a single web page, instead of looking for corroborating evidence elsewhere.

The researchers felt these behaviors were indicative of outdated training that teachers had received toward evaluating online materials (Wineburg & McGrew, 2019). It appeared that teachers were also not being trained to understand the cognitive evolutions or the sophisticated means that are used to disseminate misinformation (Wineburg, 2020). This is in line with other scholarship that has contended that learning on the web requires additional guidance and training, as the web and its tools have redefined the task of reading (DeSchryver, 2012; DeSchyrver & Spiro, 2008; DeSchyrver, 2014). Spiro (2006) has frequently referenced this as the post-Gutenberg mindset, and without careful training for students, it is possible that they find

and reinforce specific learning at a pace and with a depth that educators have not been ready to address.

A recent intervention was conducted with undergraduate students in which the treatment group was trained to use a series of guiding questions over two 75-minute intervention sessions, trying to see if students' ability to evaluate online content improved relative to a control group (McGrew et al., 2019). The intervention consisted of teacher-led discussions and video demonstrations of the variations between vertical reading and lateral reading, followed by testing how students might use lateral reading as a strategy for comparing different websites. Specifically, the students were asked to assess news segments from the Pew Research Center, a non-partisan think tank, and then the Institute for Historical Research, a Holocaust denial website. Students were led through the process of looking laterally for information to affirm or challenge what was on the site. In the second session, the students examined varied internet posts provided by the instructors and practiced evaluating them. They had to assess sources and see if they could find source validation through lateral reading (McGrew et al., 2019). The students were then tested on their lateral reading a few weeks after the two sessions.

The study's results indicated that the students in treatment groups outperformed the control groups, generating more critical appraisals of content. This was useful due to the limited duration of the intervention, suggesting that teaching a narrow set of heuristics might improve how a student understood online sources. A separate study was conducted in a midwestern school district, and results indicated improved civic reasoning by students within the intervention (Wineburg et al., 2019). In both instances, researchers suggested further exploration of this approach to other student populations in varied environments.

Supporting SWD in Social Studies

SWD need classroom interventions tested so that they can improve their historical thinking and online reasoning skills. It is important to note that there is a range of disabilities, and that the Individuals with Disabilities in Education Act (2004) classifies thirteen different categories of disability. This study recognizes the variations of student need based on those categories, although, for the purposes of drawing attention to the widespread need of educators to support SWD, it has treated all SWD together, even as the SWD in this study had different learning needs.

Recent National Assessment of Educational Progress (NAEP) scores indicated that only 4% of 8th graders with disabilities were *at or above* the level of proficiency in history, while the average scores for SWD in civics were at the NAEP basic level (NAEP, 2020). While the civics score is nearly a 10-point improvement for SWD since 1998, it fell slightly, by 3 points, from a 2014 high point. A recent meta-analysis of 42 studies connecting social studies and SWD uncovered that there was a significant deemphasis on social studies education for SWD over the course of the past twenty years (Ciullo et al., 2020). This is not altogether surprising, since instruction in all social studies disciplines, like history and civics, has diminished (Garwood et al., 2020). This finding confirmed a trend first identified by Scruggs et al. (2010) and corroborated by Heafner and Fitchett (2012), that social studies' standing was diminishing. Overall, the gap in understanding for SWD should be worrisome given the challenges students might face engaging with rapidly changing means of delivering information via media.

Traditionally, SWD have struggled with various social studies disciplines like history and civics when taught as a static set of facts (Barton & Levstik, 2004). Teachers' reliance on textbooks as the principal instructional tool has traditionally frustrated these learners (De La Paz

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& McArthur, 2003). This is because textbooks generally present too much content in unnecessarily complex and uninteresting ways. Textbooks also often present history as a single, unassailable narrative that obviates engaging problem-solving historical work that might invigorate students' interest (De La Paz & McArthur, 2003) and be beneficial to SWD (Okolo & Ferretti, 2013). SWD have also been challenged by the writing-intensive nature of social studies assessments (Graham et al., 1998).

Researchers have been attempting to correct for this, however. One study compared the results of an experimental text with a more traditional narrative and found that history content acquisition improved, possibly because of the clearer structure of the experimental text's content (Harniss et al., 2007). In a separate experimental intervention comparing the influence of assigning students to write in different genres to examine content acquisition, SWD given a short reading accommodation performed as well as their peers without disabilities on post-assessments (De La Paz & Wissinger, 2015). These positive results were generally supported by a meta-analysis, demonstrating that researchers were successfully pursuing social studies interventions and focusing on experimental or quasi-experimental designs that could produce generalizable and reliable findings for the field (Ciullo et al., 2020). The range of intervention efforts included studies on historical content acquisition, general literacy, the use of alternative or digital texts, and historical reasoning. Several interventions looking at historical reasoning (De La Paz, 2005; De La Paz & Wissinger, 2016; De La Paz et al., 2017), were able to show how SWD could use argumentative writing to demonstrate critical thinking effectively. The most recent of these (De La Paz et al., 2017) included an 18-day history and writing curriculum taught over the course of a year in which students in the treatment scored higher in historical writing and writing quality. Other studies have demonstrated better historical content acquisition using multimedia like

podcasts (Kennedy et al., 2014) or structured debates (MacArthur et al., 2002). The interventions in these studies provided large effect sizes in literacy interventions, content acquisition, and alternative text materials (Ciullo et al., 2020).

However, the meta-analysis also indicated that there were only seven total experiments for high school students, and of that number, only one (Kent et al., 2015) included standardized measures. Interestingly, the meta-analysis indicated that the effects were larger in high school settings than they were within K-8 environments. The fact that these results were promising but there were so few high school studies led the researchers to call for more studies. They argued that there was a need to confirm these results by increasing the number of interventions for SWD. They also encouraged studies that specifically examined SWD in grades 9-12 out of concern that most extant studies focused on the middle years (grades 6-8) They also suggested that exploring more social studies disciplines (civics, historical content, geography) would be helpful and warranted (Ciullo et al., 2020).

Peer-mediated Activities and SWD

Students need to learn how to work collaboratively so they are prepared to thrive outside of the school environment. They cannot have all their efforts mediated by a teacher. This is especially true of SWD, as this sets them up for failure when they complete school. An important method for doing this is peer-mediated activity, or any activity where teachers have students work together as partners or in small groups to complete assignments (Manheady et al., 1988). Given the known challenges in high schools, where large class sizes often result in lower pupil-teacher interaction, particularly for struggling learners (Blatchford et al., 2011), peer-mediated methods may help less engaged students. One approach, *Collaborative Reasoning*, was explored with fourth and fifth-grade students by scholars at the University of Illinois (Chinn & Anderson,

1998; Chinn et al., 2001; Clark et al., 2003). Their ongoing research has demonstrated the success of peer-mediated discussion, where trained teachers stepped back after asking prompt questions to students and allowing them to engage with each other. Not only was this helpful with elementary students in developing argumentation abilities (Dong et al., 2009; Reznitskaya et al., 2009), but it also helped with their honing relational thinking (Lin et al., 2015) and leadership (Li et al., 2007).

Scholars completed a synthesis of studies on secondary peer-mediated interventions for students with disabilities and highlighted the success of several strategies (Wexler et al., 2015). This synthesis expanded on the work of three prior reviews (Kunsch et al., 2007; Okilwa & Shelby, 2010; Stenhoff & Kraft, 2007). The reviews highlighted improved student outcomes from peer-mediated interventions like class-wide peer tutoring (CWPT), peer-assisted learning strategies (PALS), and collaborative strategic reading (CSR), such as higher reading scores or increased on-task behavior. The collective finding was that peer-mediated activities had high social validity with students (Wexler et al., 2015). The authors recognized that in high school environments, learners might have the hardest time getting engaged because of years of prior challenges that were left unaddressed by teachers. Because of this, the authors believed if teachers considered implementing more peer-mediated interventions, they might improve both learning outcomes and mitigate concerns like school disengagement and dropping out (Wexler et al., 2015).

The reviews demonstrated that peer-mediation interventions can improve outcomes for struggling learners (Wexler et al., 2015). Prior reviews echoed the same results, although those studies did not typically involve any social validity evaluations. Interestingly, the most recent review contained the broadest array of peer-mediated activities, but still only produced 13

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research articles for analysis; ten worked with full classes and three were single-case designs. This review grouped somewhat different classroom tasks, ranging from tutoring to small group discussions, with tutoring being the most common. In certain instances, the impact of tutoring on experimental groups was significant (Scruggs et al., 2012). Across the studies, two attributes stood out as being particularly helpful. First, the results were generally more successful if students were trained ahead of time and if operating in peer-mediated environments was modeled (Wexler et al., 2015). Secondly, struggling learners tended to benefit far more from the experiences if they were provided with regular feedback, either by a peer or a teacher. These two attributes are important for guiding the construction of a peer-mediated task for struggling learners.

Only one study examined the effects of the small group discussion as a peer-mediated task (Vaughn et al., 2011). None of the peer-mediated studies reviewed by Wexler et al. (2015) contained class groups larger than two students engaged in discussion. This is peculiar, mainly because experimental evidence had demonstrated that learners who are allowed to discuss tasks not only solve problems but improve their learning (Underwood & Underwood, 1999; Barbieri & Light, 1992). Small groups can stimulate students to evaluate multiple points of view. That is because engagement in peer discussion brings individual students into intimate contact with potentially conflicting perspectives – other students who might hold radically beliefs or have a completely different interpretation of materials, allowing them to potentially transform their understanding (Mercer & Littleton, 2013). When asking each other questions in discussion, students may challenge the logic of student beliefs, which in turn, forces that student to reconsider and potentially revise it (Wissinger & De La Paz, 2017). Given the range of misinformation that might need to be challenged by students, understanding how to provide

students with effective opportunities to practice engagement with and challenging of alternative viewpoints is important.

Discussion in Social Studies

However, most research about social studies and discussion has focused on the use of whole class discussion. Recently, social studies education scholars have worked with the whole class model and proposed a framework to implement it (Reisman et al., 2018). Inspired by the need to reverse the historic trend of student discourse being underutilized in K-12 classrooms (Cazden, 2001), the researchers developed a *Framework for Facilitating Historical Discourse* to integrate in teacher education and K-12 environments. They had examined prior research in whole-class discussion (Hess, 2004a; Parker, 2003) to craft their four-pronged framework. The first prong was to engage students as sense-makers, providing them with regular opportunities for creativity. The researchers next highlighted sociocultural theory in explaining that the framework required, in its second, third, and fourth prongs, the need for educators to orient students to each other, and to orient them to the text (a cultural artifact), and to the practices of historians (Reisman et al., 2018). This framework allows the instructor to scaffold this process for all learners, and to share with students how they think during each prong.

The researchers believed a framework for discussion in social studies was important because teachers needed a scaffold to lead full-class historical discussions. Prior research found that even teachers equipped with high-quality curricular materials were not engaging in any form of student discussion within their courses (Reisman, 2015). In that study, of over 7000 minutes of recorded video, only 132 minutes were dedicated to classroom discussion. The researcher argued that such a small amount of time given to historical discourse suggested that teachers struggle to help students navigate into what she had deemed the "historical problem space," or a

mental space where they individually could deliberate about history (Reisman, 2015, p. 5).

Students were not equipped by prior experience to engage in historical discussion. One specific

example Reisman (2015) explained was that students had trouble working past their presentism.

Presentism refers to where an individual can only interpret historical events considering

contemporary circumstances, in some cases even judging historical actors in the context of the

present day (Ashby & Lee, 1987; Lee & Ashby, 2000). This made their discussion experiences

limited as students were more prone to evaluate, and pass judgment, on historical actors, rather

than be led into a more complex conversation about historical interpretation. Reisman (2015)

found that teachers in their study were not well-prepared to facilitate discussions on topics like

this, much less teach their students how to engage in them. These findings led researchers to the

collaborative effort to create the framework in a later work (Reisman et al., 2018).

   Okolo et al. (2007) faced similar struggles when exploring the intersection of discussion

and historical engagement in an inclusive middle school classroom. The researchers were

intentionally trying to understand how discussion was helping SWD navigate historical inquiry.

The researchers found that the flow of most classroom conversation was through the instructor,

resembling what other scholars had deemed the *wagon-wheel* pattern of interaction (Okolo et al.,

2007; Quantz, 2001). While the teacher used some small group conversations and other peer-

mediated activities, over time they had reduced their number since the teacher struggled with the

tension of needing to cover curricular topics, which occurred more efficiently through teacher-

directed instruction (Okolo et al., 2007).

   The emphasis on improving whole-class discussion, given the challenges that teachers

have apparently faced in using that method to approach historical materials, is certainly valuable.

Yet, the deemphasis on small-group discussion, given the potential value of peer-mediated work,

is also concerning. Reisman's (2015) worry with small groups was that teachers could not effectively use a tool like conceptual press discourse, a method articulated by McEhlone (2012) where an instructor pushes students further in their thinking by steady following up on student ideas in a class conversation. Teachers in the Okolo et al. (2007) study reported that students might not get instructional benefits from small groups that were comparable to whole-class discussion. They found teacher-led, whole-class discussion was better for effectively clarifying historical reasoning, as small groups could be difficult to monitor or too challenging for extending the understanding of students in social studies. In their estimation, it was more effective to use small groups to complete tasks. Interestingly, one teacher in that study did indicate that small groups can take pressure off individual students, like those with learning challenges, to complete a task. The researchers noted this remark as the teacher's understanding of small groups as facilitating "distributed expertise." (Okolo et al., 2007, p.163)

The concerns about the efficacy of small groups in extending historical reasoning may be warranted, given that a well-prepared teacher might help students reach a historical problem space far greater than another student. Further, the framework proposed by Reisman et al. (2018), might be an exemplary tool for training novice teachers to become that well-prepared teacher and in turn support more students. Those researchers evaluated the framework's promise based on teacher candidates being able to implement it with varied classrooms across the K-12 continuum, although they did not necessarily suggest that it would be successful with all student groups.

De La Paz & Wissinger (2017) took a different approach, however, and actively integrated small group discussions in a study of middle school students to test whether a more involved discussion structure might improve individual student arguments in historical writing.

The study demonstrated that a heuristic given to the students that encouraged argumentation and questions in several 20-to-30-minute small group discussions improved student understanding of disciplinary content. Those students scored higher on post-tests in historical reasoning, wrote better persuasive essays about historical issues, and even demonstrated greater evidence of possessing historical thinking skills. Further, the students maintained learned skills on follow-up exams given eight weeks after the discussion intervention (De La Paz & Wissinger, 2017). These researchers overcame the assumed hurdles to help students, especially SWD, learn, and with similar approaches, more teachers might do likewise.

But teachers who do not already use small group discussion may need more than just the example of De La Paz and Wissinger (2017). Given that other researchers have reported teacher concern with small group logistical challenges (DeFrance & Fahrenbruck, 2016; Gillies, 2011; King 1999; Palinscar & Herrenkohl, 2002) or student response to small group instruction (Burns & Myhill, 2004; Gillies, 2011; Rojas-Drummond et al., 2001), teachers may need a greater understanding as to why and how small discussion works and how it aligns with good learning theory. Given the right reframing, small group discussion can be seen as not just one out of many different classroom teaching methods, but one that helps students take greater ownership of learning, which should be a principal outcome of education. Reisman et al. (2018), for example, recognized this when they predicated their historical discourse framework on a sociocultural theoretical foundation. They argued that helping teachers understand the processes of scaffolding and cognitive apprenticeship, and how they emerge from sociocultural theory, can uncover for those teachers the underlying value of discussion practices.

Further, the actual process Reisman et al. (2018) used, where students were thoughtfully oriented to discussion in four key steps, can serve as a useful model for a theory-supported

approach to overcoming logistical hurdles for discussion. This study emerged from the same belief, that bringing sociocultural theory to the foreground can help teachers and classroom researchers with understanding the ultimate why behind integrating small group discussion.

<div align="center">**Theoretical Framework**</div>

Vygotsky's Influence

This study grounds its work in sociocultural theory. It follows Vygotsky's theory that social interaction facilitates learning and subsequently fosters development. Essentially, "all higher mental functions are internalized social relationships" (Vygtosky, 1981, cited in Wells, 2000, p. 54). It is also grounded in the mediational role of semiotics, like language, as a cultural tool in the communicative process (Emilohvich & Souza Lima, 1995). For Vygotsky, the primacy of language is critical, as language represents two different instantiations of the social (1978). Any tool (i.e. – language, numbers) possessed and utilized psychologically has its origins in cultural activity. This is because that tool's roots were from a social or historical system, and people only gained access to those tools through their participation in a cultural environment, like a classroom (John-Stiner et al., 1994). Further, though, the tools are social since people use them to interact with one another (Wink & Putney, 2002). In this way, semiotic tools, like language, are instantiations of past cultural-historical activity systems, while also being the mechanism (e.g., talk, text, media) for transmitting and transforming culture on a moment-to-moment basis (Wells & Mejia-Arauz, 2006).

Sociocultural theory posits that the social environment of a classroom is a dynamic microsystem that contributes to learning. Vygotsky contended that social interaction was at the core of the developmental process and that learning comes before development (1978). This is different than other theorists, specifically Piaget, who argued that for learning to occur,

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individuals need to have reached a set stage of development (Wink & Putney, 2002). For Vygotsky, an individual is engaged in a learning process, and when that learning was properly organized, it would result in "mental development" and set "in motion a variety of developmental processes that would be impossible apart from learning." (Vygotsky, 1978, p. 90). Learning in social interaction with cultural tools allows individuals to develop their psychological processes. A cultural tool is any means that has been created by humans that helps to achieve things and can be either physical (like a screwdriver) or psychological (like language). ("Social Constructivism," 2016). These tools are often the creation of generations of humans passing down knowledge. Throughout this learning, humans operate with both intermental and then intramental processes (Daniels, 2011). Intermental means that students must first learn by engaging in conversation with others, whether an adult or a peer. After being in dialogue with others they can next internalize what they have gained from them. This internal or intramental understanding of a task or activity, so that the individual can use it successfully in society, allows them to move along on a developmental path (Vygotsky, 1978).

Some teachers struggle with incorporating more social time into their classroom procedures. Typically, teachers might frame tasks or activities that are social as being separate from what they do in their academic environment, because social time may be more challenging to manage given the reality of allowing children and teenagers to talk more freely (Mercer & Littleton, 2007). What this means is that teachers may restrict social tasks that sociocultural theorists would encourage in a classroom. From a sociocultural perspective, students might not learn as effectively because they are not allowed to enter those intermental and intramental states as frequently as they are not engaged in conversation through classroom activities like lecture or study drills (Wink & Putney, 2002).

Considering Sociocultural Theory with Teaching

In sociocultural theory, the role of the instructor is that of an active participant who is learning simultaneously with students (Mercer & Littleton, 2007). An instructor planning curriculum with sociocultural theory in mind realizes that learning occurs primarily through interaction, negotiation, and collaboration, and develops and uses specific learning tasks accordingly. They recognize that, in social studies, for example, they need to help students understand the work of historians, and so they focus on teaching norms, discourse, and practices that are often associated with historians as a community of practice (Scott & Palincsar, 2013). Teachers are key knowledgeable others in the discourse community of their disciplinary area; a social studies teacher knows enough about historical thinking skills to be able to share with new learners. They execute a cognitive apprenticeship, guiding students' learning of the thinking, knowledge, values, discourses, and cultural tools of that disciplinary community (Rogoff, 1991). In this view, then, the teacher plays a pivotal role in re-mediating disciplinary content through the creation of activity systems, or complex structures of tasks that, over time, help students to produce, reproduce, or even evolve events or actions within their classrooms (Igira & Gregory, 2009). In social studies, teachers may help students to learn a historical thinking tool like sourcing so that they too can question the origins of a primary source. Consistent practice with and thinking about this tool, over the length of a class, should help a student to produce the regular response of other historians or it might even generate new knowledge.

However, teachers also must be in regular dialogue and develop deep relationships with the learners in their microsystems (Burbules, 1993). Microsystems are patterns of activities, roles, and interpersonal relationships a developing person experiences in a particular setting (Johnson, 2008). Within those, teachers can actively scaffold learning for all students so they are

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able to extend their knowledge from what they already have learned to what might be just beyond their grasp. This scaffolding process is at the heart of Vygotsky's most well-known contribution, the Zone of Proximal Development (ZPD) (1978). Teachers must know students well enough to understand both their actual level of development, that which they could do on their own, and their potential level of development, that which could be done with assistance either from the teacher or more capable peers. They also take responses from their students and use those to build their own understandings, since the teacher themselves might, in several circumstances, be less knowledgeable than the student.

At the high school level, however, there are logistical challenges affecting the success of this process. When the average high school teacher is teaching multiple sections of classes with large class sizes (Blatchford et al., 2011), their ability to scaffold all students effectively is limited. On any given day, a high school teacher may teach hundreds of students. The ability to know and develop each student's ZPD may be practically impossible. Teachers cannot frequently dialogue with all students in such a way that students have effective conversations that lead to internal development (the intermental zones where students are processing their understanding). Logistical hurdles like these gradually encouraged evolutions in sociocultural theory from Vygotsky's original conceptualizations.

For example, Rogoff (1990, 1993) proposed the concept of guided participation. While the initial study looked at the ways varied cultures were able to transmit cultural knowledge to younger populations, the extension of the concept of guided participation leads to where social partners structure learning environments to help learners gain the cultural tools needed for membership within that culture. Teachers and learners might complement direct face-to-face instruction: as students successfully master cultural tools, such as reading, writing, computing,

and using evidence to support claims, they are able to engage in independent, self-regulated learning.

Cultural tools designed by teachers (or parents or instructional designers), even in the absence of their physical presence, retain their social origins and can serve to mediate learning through a dialectical process (Bakhtin, 1986; Wertsch, 1991). Given Vygotsky's focus on spoken dialogue and language as being so critical for learning, this learning in isolation, such as when researching a book report in the library, may seem initially seem counter to his theory. However, by considering this specific participation model, whereby dialogue is still happening between the learner and adult/caregiver/teacher due to these operative social processes or the cultural tools they created, learning and development could still occur, specifically because participants in the learning work have started to take more responsibility for the activity being done (Scott & Palinscar, 2013). These evolutions improved upon Vygotsky's initial conceptualizations and enhanced the application of sociocultural theory to important contemporary contexts. One other adaptation in this vein was cultural historical activity theory.

Incorporating Contributions from CHAT

Vygotsky's student, Aleksei Leont'ev, articulated additions to Vygotsky's work that resulted in the growth of cultural-historical activity theory (CHAT). While this paper will not review all of CHAT's development from Vygotsky's initial theories, CHAT, and more broadly, activity theory, were a transition from looking at the mediation process as an individual interacting with cultural tools to a collective activity that was more within a systems approach (Batiibwe, 2019). Leont'ev's structures incorporated more historical-cultural experiences in addition to the original cognitive and physical processes that Vygotsky considered. CHAT scholars, who reference their theoretical bearing as cultural-historical compared to sociocultural,

contend that the basis for learning is not necessarily semiotics, as Vygotsky privileged, but instead, object-related practical activity (Koulzin, 1986; Roth & Lee, 2007). In this regard, they contend that activity comes before any engagement with language, so that language is subordinate to activity. The example Leont'ev gave was that of language following the initial collective work between humans in hunting (Leont'ev, 1978, cited in Roth & Lee, 2007). These adaptations to sociocultural theory support this study by highlighting the notion that activity is more than the mere tasks that students complete in a course, but a longer-term process that leads toward contributions to human society (Roth & Lee, 2007).

After Vygotsky and, Leont'ev, CHAT continued to evolve, eventually reaching a third phase of development. The CHAT scholars of that phase, principally Yrjö Engeström, classified activity as being more than tasks with a finite beginning and end point (Batiibwe, 2019; Engeström, 1987; Roth & Lee, 2007). By utilizing what was deemed an activity triangle (Engeström, 1991) these scholars explained the salient features of a larger activity enterprise, which was complex, evolving, and collective (Roth & Lee, 2007). Learning happened when there was mutual change between subjects (usually humans) and objects (such as the material world, or social life) within that activity system; it occurred when the subject's actions expanded as they pursued important objects in activities (Engeström, 1991). This is important to highlight since this study aims to improve a lifelong activity of historical dialogue in pursuit of expansive participation in national discourse, not only isolated talk amongst students in a contained social studies classroom. The activity triangle is shown in Figure 2.

This third iteration of CHAT also presented activity as itself a part of a broader network of activity systems that in turn make up human society (Engeström, 2001; Roth & Lee, 2007). Understanding this concept could help an educator understand the larger purpose of prioritizing

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Figure 2

Engeström's Activity Triangle (1991)
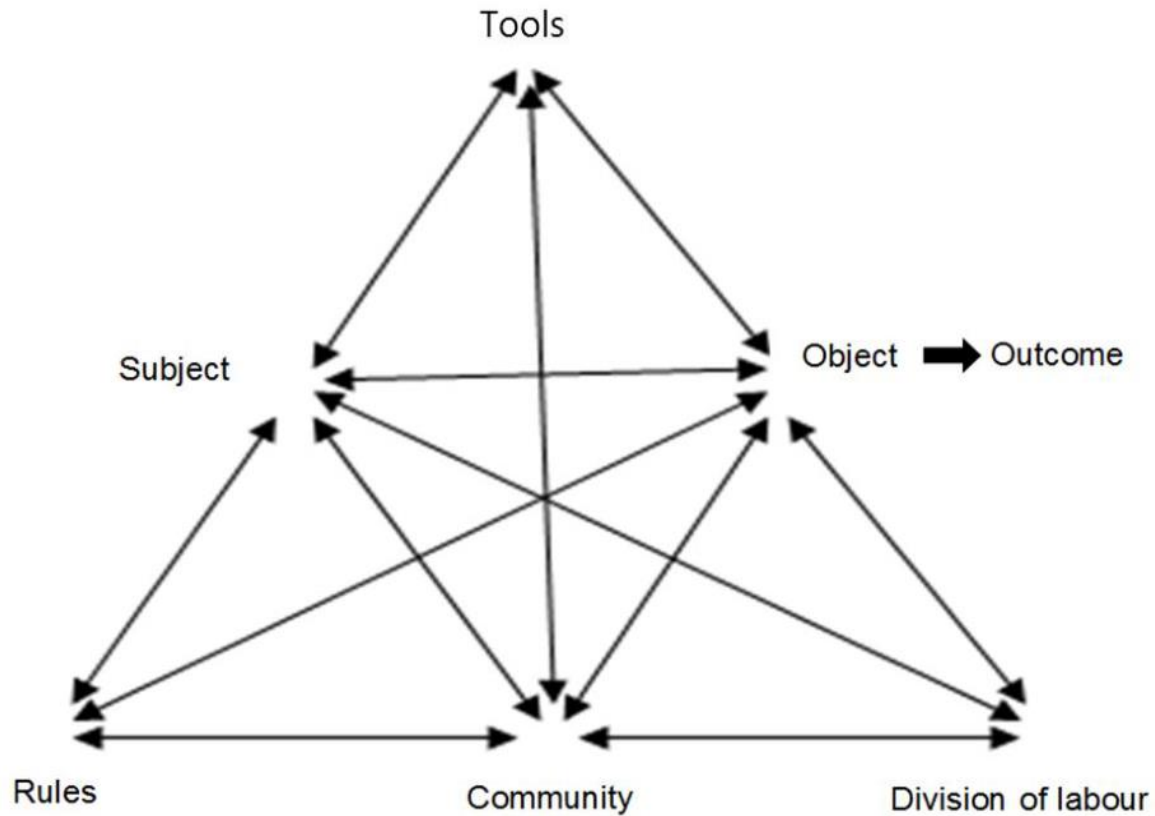
Tools

Subject

Object ➡ Outcome

Rules

Community

Division of labour

dialogue, multiple perspectives, and issues of power when designing the tasks that they ask

students to do. Designing the right methods might better prepare students to function within the

broader civic network. Teachers must consider "multisite ecologies" (Roth & Lee, 2007, p. 200),

in that students will not only learn in a physical classroom, but are regularly mediating the

variations between school, home, and other activity systems they engage. Students wrestle with

contradictions frequently, and teachers should recognize that while they may be engaged by a

cultural system to teach certain disciplinary content, the learner might not see the classroom as

their preferred environment.

CHAT theorists' explanation of the value of collective activity advances Vygotsky's ZPD in powerful ways. It suggests that engagement in collective activity may lead to learning even though learners are not on the same developmental level as teachers, since working together may permit new actions to unfold. The learners' collective intelligence allows them to extract opportunities even if they are not developmentally similar. However, it also permits new possibilities for learning to teach, as evidenced by Roth and Tobin's (2002) work in teacher induction, where researchers demonstrated the potential of knowledge sharing between cooperating and pre-service teachers. Instead of maintaining the prior system, which the researchers said had contained fundamental contradictions that undermined the teacher induction process (the not completely aligned goals of university teacher education programs and city high schools), their analysis of the given activity systems led to the creation of a coteaching model where the mutual sharing of insights on instruction between cooperating and pre-service teachers removed prior hierarchical systems that had prevented success. Learning from exercises like these may suggest that educators can further hone their understanding of cooperative work to craft pedagogies that create hybrid learning spaces for their learners (Cole, 1998). Or, by exploring these spaces like Roth & Tobin (2002), teachers may recognize that their students being subject to cultural-historical activity systems which reinforce inequity may be the cause of specific student ability differences, as opposed to innate personal attributes (Gutierrez & Rogoff, 2003).

Ultimately, these forms of analysis raise important questions about existing systems and promote new approaches to help produce better opportunities for all learners. The contribution of CHAT to the proposed study has been to help frame how different modes of classroom tasks, specifically structured, peer-mediated, small group discussion, can help teachers support

achieving higher learning aims like developing expert learners. Methods like small group discussion allow for interactions that promote work within the larger activity system in which a classroom sits. It is possible that the everyday teacher does not conceive of their specific classroom as an activity system of its own. Instead, they may only see the method of small group discussions among students as one instructional method for small-scale distributed work. This study sought to ask whether practitioners could think more expansively about peer-mediated dialogue, and how providing that opportunity for students was important for their ongoing learning.

Blending Sociocultural Theory, Peer Mediation, and Social Studies

While extensive work has been done in social studies using whole-class discussion primarily led by their teachers (Ferretti et al., 2006; Kohlmeier & Saye, 2019; Okolo et al., 2007), some of it grounded in sociocultural theory (Reisman et al., 2019), there has been limited research understanding the role of structured, peer-mediated, small group discussion in this discipline (De La Paz & Wissinger, 2017). Sociocultural theory identifies the role of the teacher as critical to the learning and development process for children, whereby the students are cognitively apprenticed to the instructor (Mercer & Littleton, 2007). In many cases, without a teacher, students will not have access to a model that shows increasing ways of using language as a tool for reasoning (Heath, 1983). The teacher is a representative of the culture, who engages the students in intelligent activity because of their ability to competently use cultural tools and help students do the same (Mercer & Littleton, 2007). In social studies, teachers apprentice students in the use of social studies tools, like historical contextualization or lateral reading. The teacher takes artifacts from history and utilizes them as learning items for the students, showing

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them how to understand the application of those artifacts to develop their thinking skills, which will serve them as a member of society (Mercer & Littleton, 2007).

Alignment with sociocultural theory might explain why there has been a continued research emphasis on whole-class discussion for teaching social studies disciplinary discourse (DeFrance & Fahrenbruck, 2016; Kohlmeyer & Saye, 2019; Okolo et al., 2007; Reisman et al. 2018; Reisman et al., 2019). This approach, however, may not be sufficient to serve all students, possibly evidenced by the continued poor performance of SWD on national exams like the NAEP (NAEP, 2020). Learners benefit from small group activity where they build their expertise with each other frequently. However, teachers have been shown to struggle with preparing and using these types of activities, so there is a noted disconnect between the potential of this teaching method and its day-by-day execution, and students might even contribute to the logistical challenge of implementing those. However, researchers can help teachers get past the perception that student talk is "disruptive and subversive" – particularly if teachers perceive it to interrupt the flow of a lesson plan (Mercer & Littleton, 2007, p. 24). It is understandable that teachers may have this misperception because while peer-to-peer student talk has been studied on several occasions (Barnes & Todd, 1977, 1995; Kumplainen & Wray, 2002), it is rarely researched as an effective intervention to learning within social studies (De La Paz & Wissinger, 2017). The guidance for teachers has been minimal. There is also an inherent complexity in designing and researching peer collaboration in secondary social studies classroom contexts, that teachers need more support to navigate.

In high school social studies, it may be rare that students have been asked to work as groups rather than in groups, so their general experience throughout their education may be limited (Mercer & Littleton, 2007). This means that the teacher must acclimate those students to

the procedure as well as the content matter (Mercer & Littleton, 2013). Further, situating

students to work collaboratively given previously mentioned logistical hurdles, such as class size

and variation among learners, can create additional complexity for group development

(Blatchford et al., 2011). Having already recognized the challenges with full-class historical

discourse (Reisman et al., 2015), the recency of resources like the framework developed by the

researchers in the Reisman et al. (2018) study might suggest that success with full-class

discourse is still a work in progress so that small group work may be farther off for competent

teachers. Further, trying to navigate the needs of SWD in small group settings may be equally

daunting.

That's because even when group work is arranged thoughtfully there can be issues for

SWD. Research has shown that SWD at the secondary level are cognizant when teachers do not

fully include them or give them work that is less challenging, which can stigmatize them

(Scruggs et al., 2012). Teachers in all subjects historically fell into this habit due to the

complexity of trying to teach to an expansive set of learner needs (Fuchs & Fuchs, 1994).

Occasionally, teachers might attempt to spare these students social anxiety by asking them to do

less, possibly by their own lack of self-efficacy as teachers working with SWD (Clark, 1997;

Curtis & Green, 2021; Woodcock & Faith, 2021). Even when teachers take intentional

precautions and espouse a broad ethos of classroom inclusion, individual students in groups may

not, for a variety of reasons, take that to heart. Berry (2006) detailed the marginalization of one

student, Marta, by another, Danny, during small-group activities even as the instructor regularly

demonstrated the importance of inclusion in full-group activities.

Nevertheless, the cost of bypassing peer-mediated activities may be a lost opportunity for

SWD to learn more effectively in social studies. Vygotsky did not believe that SWD should be

excluded from a mainstream classroom (Glindis, 2003) as they needed engagement with a broad set of peers. Contemporary scholars are also concerned that exclusion would impact their learning identity and cause potential harm (Dudley-Marling, 2004). Since high school SWD run into significant challenges because of the difficulties they have with frequent reading and writing tasks with dense social studies content, their potential to learn in small group discussion activities may be higher than with other options (De La Paz & Wissinger, 2017). Further, in considering the breadth of topics within a typical social studies curriculum, SWD may have unique insights on certain issues that the entire community could learn from, and thus finding ways to draw them out is not only important for their learning, but for the community's as well.

This was somewhat evidenced by Roth & Lee (2007), who through a vignette explained the potency of a sociocultural intervention for a middle school student, Davie, who had been identified as disabled and was struggling within traditional class environments. When Davie was engaged in a group-based activity within his science class, however, the collective effort activated different aspects of Davie's abilities and caused the teachers to see a new and different perspective of Davie as a learner. Wink & Putney (2002) similarly recount the experiences of graduate teacher education students, as when they adjusted their pedagogy to emphasize social and cultural attributes, their previously struggling learners reengaged and improved their achievements.

The small group discussion process used in this study facilitated the same activation for SWD in social studies. All students had to complete tasks together more than working just in groups. They attempted to co-construct meaning and operate in a way that allowed all members to provide insight with reciprocity (Mercer & Littleton, 2007). The study emphasized the Vygotksian notion that learning happens when more knowledgeable individuals can be paired

with those who can and want to learn, although it recognized that who is more knowledgeable varies based on topic, and that ZPDs vary for each individual and by topic (Tharp & Gallimore, 1998). Recognizing the complexity and logistical hurdles for teachers in utilizing this method, a goal of this study was to aid future teachers to harness methods that will help them implement peer-mediated learning more effectively.

Design Frame 1: Universal Design for Learning

To support the crafting of teaching materials for students with disabilities, it is important to consider complementary means of curriculum development. The UDL framework, first conceptualized by Rose and Meyer (2002) and expanded over the past two decades (CAST, 2018), can guide educators toward supporting the widest student variability in a learning environment. The UDL framework was not specifically formulated to serve SWD, with its creators espousing a greater emphasis on people being variable in their learning ability. They did not want to define people as intrinsically malfunctioning. This perspective is closely aligned to Vygotsky's, as he believed that disability needed to be framed in the social context (Gindis, 1995). The UDL framework consists of three high-level principles to guide curriculum development, each of which is divided into nine separate guidelines and 31 distinct checkpoints (CAST, 2018). The UDL framework's flexibility permits an instructor to incorporate any variety of these checkpoints to develop learning outcomes. The framework can be complementary to sociocultural theory because it recognizes the importance of the relationship between the instructor and students in the appropriate design of the curriculum. This aligns with Vygotsky's notion of the ZPD, whereby instructors consider the required scaffolding needed by all students. By suggesting that instructors afford learners multiple means of representation, engagement, and

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action and expression, the framework encourages and supports educators by enumerating teaching options that may foster growth through learning exercises.

There has been limited investigation of the UDL framework alongside interventions in secondary classrooms. Notable examples, however, have demonstrated success in how a UDL-informed intervention might support student learning outcomes. Researchers implementing a participatory action research approach in a universally designed science classroom found that SWD improved their relational skills with other students and increased their general classroom engagement (Dymond et al., 2016). Kortering et al. (2008), found that using UDL-informed curriculum generated positive feedback from SWD in high school biology and algebra classes, who voiced to researchers that more of their classes should include similar teaching practices. Not all studies produced uniformly positive outcomes, however. An intervention study in a high school chemistry class found improved performance by SWD in treatment conditions, but simultaneously found that the intervention did not effectively support students without disabilities and not all students in the treatment outperformed the control (King-Sears et al., 2015). However, based on that experience, the researchers conducted a similar second study where they demonstrated improved results, with all students in the UDL condition outperforming those in the treatment (King-Sears & Johnson, 2020).

King-Sears and Johnson (2020) provided important guidance for the use of an intervention design with UDL-influenced processes for supporting high school students, given their ability to correct problems with the the first study's application, specifically around fidelity of implementation in secondary classrooms. This study tried to build on the efforts of King-Sears and Johnson (2020) in terms of study design and reporting to further investigate how the UDL framework may support improved results for all learners.

Design Frame 2: COVID-19, Online Learning, and SWD

This study was not initially conceptualized for a fully online environment. However, the

COVID-19 pandemic had forced schools to operate primarily online, and my cooperating

teacher, Dr. Marzipan, remained an online teacher for the Newton School District even after state

regulations allowed students back into the classroom. Given this situation, I used existing

research about teaching SWD online to adjust my intervention materials. The research base for

online learning for SWD was relatively limited prior to the pandemic A review of research

conducted in 2018 was able to identify only 21 peer-reviewed articles on the topic between

2014-2017 (Rice & Dykman, 2018). A prior review (Greer et al., 2014) examined the years

before 2014, however, most of the pre-2014 articles focused on supplemental online learning

experiences for teachers working with students face to face. I found surprisingly little on fully

online learning for SWD. However, guidance from existing research (Lowenthal et al., 2020)

suggested focusing attention on a few areas such as accessible content and inclusive teaching.

One of my principal concerns was that materials that I would share with students would

not be accessible. This would have been a concern in a face-to-face class as well, as educators

need to be thoughtful when it comes to how text is provided to students, considering color

contrast or font readability (Lowenthal et al., 2020). While multiple tools and resources, like

Bookshare or Webanywhere, which might help with varied accessibility concerns, were readily

available, and some case study students had already integrated speech-to-text with Google Docs,

it was still important to consider how I situated texts like my primary source materials. Some

teachers simply scan a text, post it on Google Classroom, and assign students to read and answer

questions about it. Only doing this might not attend to the needs of SWD. I reconsidered then

what I posted for students and ensured that I gave them clear reading directions and rubrics for

assignments, so that they knew what they had to look for in readings and what they were required to complete. I also ensured that historical materials were carefully revised (Monte-Sano et al. 2011) to support reading levels detailed by student education support plans. Further, I tried to use headings, overviews, and summaries so that the SWD could track tasks carefully (Lowenthal et al., 2020). While again these directions make sense for a face-to-face classroom as well, given the limited time I would have with students, and to minimize student frustration, it was imperative that I be appropriately cognizant of material accessibility.

Research has also shown the importance of developing relationships with SWD in online settings, since often those students will have additional challenges, such as not asking for help as they might in a face-to-face environment (Adams et al. 2019) There may have been students who preferred the asynchronous online learning of Newton's method, yet there were others who would still need support with their executive functioning, one of the principal challenges for SWD in online learning (Dahlstrom-Hakki et al., 2020). This required me to consider multiple means of connection to students, trying to make myself available to them via text programs like Remind or web conferencing like Zoom. Web conferencing to reinforce online relationships with SWD has been a suggested practice with online SWD pre-dating the pandemic (Greer et al., 2014) but has been reinforced by scholars since (Dahlstrom-Hakki et al., 2020; Lowenthal et al., 2020). My aim then was to support SWD both to help them not feel isolated and to reinforce goal-directed behavior. With assignments and the structured discussion, I tried to assure greater and more frequent feedback so that students had a consistent calibration of their progress. Within the limited synchronous class time, Dr. Marzipan and I tried to find touch points with the students, and I built collaborative small groups into my lessons to ensure relational development for the students with their peers.

Basham et al. (2020) argued that educators found in the initial stages of the pandemic that SWD struggled mightily in the impromptu online environments. This was no surprise, given the existing research literature (Dahlstrom-Hakki et al., 2020; Dykman & Rice, 2018; Greer et al., 2014; Richardson, 2015). However, Basham et al. (2020) suggested ongoing consideration of the UDL framework for future online learning, as it might help SWD navigate learning should the pandemic continue or if a similar situation emerged. The authors presented a hypothetical scenario whereby a dyslexic student, connected with tools and maintaining a strong relationship with an instructor, might be able to succeed, but only if the instructor was mindful of integrating UDL. Keeping UDL in mind is useful, given that prior studies showed that students with dyslexia or SWD might still complete online work but did not achieve strong outcomes (Richardson, 2015). Knowing the past results and recognizing the early results that educators experienced during the pandemic made me even more inclined to integrate UDL in designing my supports for SWD in the case study.

Statement of the Research Problem

The ubiquity of internet use and new applications emerging from it have provided greater access to knowledge than ever before. However, these applications can be used to spread damaging misinformation, and students, particularly SWD, need training to develop a healthy skepticism toward all information and the skills to evaluate that information thoughtfully. This study emerged as a response to those conditions. It tried to see if high school SWD could develop skills through UDL-informed, structured, and peer-mediated discussion and UDL-informed classroom lessons, with the hope that these skills would help them navigate a misinformation-rich society. The purpose of this qualitative cross-case study was to describe the experience and impact of those skill-building efforts. Mandated online learning due to the

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COVID-19 pandemic prompted additional investigation of the effect of instructional methods given the unique nature and circumstance of the pandemic, and the potential to provide insights to the research community.

Research Questions

1. How did an experience in a UDL-informed, structured, and peer-mediated small group discussion affect the quality and quantity of talk for high school students with or being monitored for disabilities?

2. How did UDL-informed lessons, technologies, and materials impact the performance of high school students with or being monitored for disabilities?

3. How did this intervention impact high school students with or being monitored for disabilities in the development of historical thinking skills?

4. How did online instruction and other factors related to the COVID-19 pandemic impact the learning experience of students?

CHAPTER THREE: RESEARCH DESIGN AND METHODS

In this chapter I explain the methodology I used in this study to answer my research questions. I begin with an overview of my chosen methodology, then continue to a discussion of the participants and the setting. Following that explanation, I describe the intervention procedures I followed, my methods of data collection, and my analysis processes. Within this chapter, I also review my positionality as a researcher, explain known threats to validity, and offer how I tried to ensure the credibility of my results.

Research Design

The goal of this study was to understand how an intervention that consisted of a UDL-informed, structured, and peer-mediated small group discussion, in addition to UDL-informed lessons about historical thinking, might impact the educational performance of students with or being monitored for disabilities. I was examining whether these students' historical thinking skills might improve after their experience with the intervention. I used a case study method to explore these experiences. A case study method is used by researchers to develop an in-depth understanding of a problem where the case serves as a specific illustration (Creswell, 2013). Case study research is regularly conducted in a real-life and contemporary context (Yin, 2009). The cases that were studied here were specific experiences of three high school students during the intervention. Two of these students had diagnosed disabilities and had Individualized Education Plans (IEP), and the third student was being monitored by the school for disabilities and was labeled at risk, although she did not have any diagnosed disabilities or an IEP. These students were part of a 9th-grade world history class that was taken entirely online. To provide a wide-angle perspective of the intervention's effects, I utilized a collective case study approach (Yin, 2009). I first studied the three individual students as separate units of analysis, with each

student providing a perspective on the intervention experience. I then analyzed the experiences with the intervention across all three cases to create the cross-case analysis.

Case studies rely on a variety of methods to gather rich data (Creswell, 2013), so I collected and analyzed multiple data sources to arrive at my conclusions. I used an assessment model, the Historical Assessment of Thinking (HAT), to get a snapshot of students' initial and post-intervention historical thinking ability. I conducted interviews with the three case study students and their instructor to obtain in-depth perspectives of student and instructor thinking about their experiences. I also executed part of my intervention in the regular classroom, which included my actively teaching the students the civic reasoning skill of lateral reading and the historical thinking skills of contextualization, sourcing, and corroboration. I assembled a small intervention group that learned and used a UDL-informed, structured, and peer-mediated discussion, and I watched when and if students practiced historical thinking skills collaboratively.

Within the next four chapters, I will use the term *intervention group* to describe the six students, including the three case study students, that were part of the UDL-informed, structured, and peer-mediated small group discussion. These students met on four separate occasions to complete those structured discussions. I will use the term *regular class* to refer to the full class of eleven students, which includes every student in the intervention group, who were learning in a Google Meet synchronous online class with Dr. Marzipan and I every Monday and Wednesday.

As a participant observer, I took careful fieldnotes and reviewed case study student classwork as artifacts of their learning process. I also consistently took analytic memos of my observations about the efficacy of the intervention's design with these students (Saldãna, 2016).

Guided by those memos and ongoing reflection, I adjusted the lessons I taught and elements of the discussion process to address student needs.

I also tracked how I applied those changes and the student response. This was aligned with important elements of design research (Anderson & Shattuck, 2012; Brown, 1992; Collins, 1990). Following Anderson and Shattuck's (2012) guidelines, I modified the intervention when necessary to support the students based on what I was seeing in the data and my reflections.

Participants

This study was conducted in a classroom in a public comprehensive high school, Newton High. Newton High School educates 1600 students in a suburban community, also named Newton, about twenty-five miles outside of the region's primary metro area, Portland, Oregon. It is the only comprehensive high school in the town, which has a population of 23,000 (U.S. Census Bureau, 2020). The sample was primarily chosen for convenience since it was in proximity to the university where I work. However, Newton is a good representative of other state high schools. The school's general academic results place it in approximately the 50% percentile for Oregon schools (Public School Reviews, 2021). Classrooms usually had twenty students per class, with a student-teacher ratio of only 1 student above the state average. The school's minority population was 29% of the school, which was 11% less than the average Oregon high school, and nearly 48% of the student body qualified for free or reduced lunch. The school maintains fully inclusive classrooms (Public School Reviews, 2021).

The school and district leadership were willing to support this research both in a COVID-19 online environment or in a live face-to-face environment, depending on state regulations in place when the intervention started. The specific class, world history, and high school instructor, Dr. Heidi Marzipan (pseudonym) were suggested by district leadership because of her

willingness to support the project with their 9th-grade world history classes. Since the previous September, Newton High School students had their primary class sessions delivered by their teachers synchronously through the web conferencing program, Google Meet, twice a week for an hour per session. Students were also asked to complete two hours of what was called applied learning assignments after school ended for the day. Class sessions for the school were Monday through Thursday from 8 am – 12 pm. Students were off from school after noon and on Fridays to complete their applied learning assignments.

In April of 2021 the Governor of Oregon, Kate Brown, announced that she wanted schools to return to face-to-face instruction for the final term of the academic year. However, accommodation was made for students who themselves or their parents felt would not be safe in a face-to-face environment. Because of this, several teachers at Newton were asked to continue teaching in an online setting. Dr. Marizpan was one of the teachers who taught all her classwork for that final term of school online. The primary challenge of this announcement was that whereas in March all classes were online and running at an average capacity of 17-20 students, there was no way of knowing whether parents would choose online or face to face instruction for their children. With the COVID-19 vaccine only sparingly available to teenagers at the time, it was hard to determine what would be the case, and so the study could have been conducted in a class of twenty or a class of two.

Dr. Marzipan identified as a white female, was in her early 40s, and she had been working as a social studies and language arts teacher for ten years at Newton High School. She taught four sections of first-year world history and two sections of sophomore language arts in this term. Because of the change in Oregon regulations, Dr. Marzipan did not know what students would be in her classes until the start of the term. She also did not know whether she

would have full classes or students with IEPs. When the rosters were set, two of her history classes, Period 04 and Period 08, had students with IEPs. Through the special education staff, I connected with the IEP students and their parents, and got permission for those students to be in the study. I sent an overview of the study and all relevant Human Subjects material electronically to parents for their approval. When the period 04 IEP students dropped the class, I started work only with Period 08.

Ultimately, three high school students are included in the case studies. These students were all 9th graders between 13-15 years old. Two of these students had IEPs and one was being monitored by the school for disabilities. One of the students with an IEP had a Specific Learning Disability while the other was listed as having an Other Health Impairment." The second IEP student reported they were dyslexic, which is not categorized as a disability by the Individual with Disabilities in Education Act (IDEA). The two IEP students identified as male, and the other student identified as female. Both male students were white, and the female student was native Congolese.

The final roster for the Period 08 world history class had eleven students. The original class that met in late April was larger, but by the second week of class, only eleven remained. There were seven boys and four girls. Seven of the class identified as white, three students identified as Hispanic or Latinx, and one identified as native African. For Oregon, this was an almost representative sample of state demographics (75% white, 14% Hispanic, 2% Black) (U.S. Census Bureau, 2020). Six students participated in the intervention group. All three case study students were in the intervention group, and the other three students were volunteers, each of whom identified as a white male. None of those three students had an IEP. Each of the case study

students was provided an incentive to participate in the work – $200 in gift cards. Each of the other students who participated in the small group discussion received a $100 gift card incentive.

Researcher Positionality

I was a social studies teacher for seven years. After that experience, I was an associate professor of teacher education at a teaching university where I taught history teaching methods. I also served as the president of the Oregon Council for the Social Studies. When I started my doctoral work, I wanted to research how social media might teach students about politics and community. I developed an interest in studying methods to help SWD based on observing my own daughter's struggles. I also grew concerned by observing former students of mine who were spreading misinformation online. I am personally invested in this work as an American citizen, an educator, and as a parent of a SWD.

For this study, I worked with a classroom with students that I had no prior experience with and supported I teacher I did not know before this experience. I was empathetic to her experience teaching during COVID-19. I had not taught any class in three years and had not been with high school students since 2010, even as I maintain an Oregon state teacher's license. As a teacher, I have consistently tried to maintain the position that my job was to teach students how to think, not what to think. I want my students to be active citizens who could successfully interrogate arguments on their own. I want to continue to help educators successfully get students to do that through new pedagogies. I agree with Vygotsky that knowledgeable others can and should include students of the same age (Vygotsky, 1978), and found I learned much from my students while teaching. I want to help SWD feel and be seen as knowledgeable others. I have seen the challenges my daughter and SWD like her have when it comes to achieving this, and it influenced my thinking as I engaged in this research.

This case study required that I engage in participant observation. Participant observation can be helpful to case study research because it familiarizes the researcher with a site and individuals (Bernard, 1994; Kawulich, 2005). It limits the reactivity of the participants to the researcher, so they act more naturally as opposed to when they are aware of being observed. Being embedded in the class also allowed me to understand what was happening broadly in the culture of the classroom and in Newton High School.

Threats to Validity

Qualitative research is prone to validity threats. There are two types of validity threats that Maxwell (2013) identified which might have affected this study. One of those is reactivity, and another is researcher bias. Reactivity refers to how my beliefs might have influenced the study. This would include how I constructed my research questions, how I saw and understood what students were doing in their classes, or how I corralled my various data sources. The other threat is researcher bias. Data analysis or collection could be distorted by my values and preconceptions. My bias as a researcher is that all students should contribute to class discussions as part of civic education. I see a tight relationship between participation in class and participation in American society. Not everyone shares this perspective, particularly for SWD Individuals who adhere to the medical model of disability (Artiles, 2013), whereby disabilities are biological restrictions that may prevent learner engagement might disagree with me. I believe more in the social model of disability (Artiles, 2013), where the notion of a disability is a construct that maps to an unattainable concept of normal. I have chosen strategies and approaches within my data collection and analysis to mitigate this bias and reactivity. These are explained in the sections below.

Data Sources

I collected artifacts over the course of the ten-week term with the students. My aim was to achieve a level of saturation (Glaser & Strauss, 1967; Saunders et al., 2018), where I would reach a point that additional analysis would not generate any new insights. I worked systematically through my evidence to develop a thorough case study commentary, and after completing the review of all these data sources, I reached that level of saturation from the combined artifacts. I found that no new themes were emerging from the review of interview transcripts. Reexamination of classwork and assignments was not uncovering new insights about the case study students' performance on assignments. And after multiple analyses of the discussion transcripts, I did not find anything new regarding talk quality or content analysis.

Analytic Memos

Throughout the intervention, starting a week prior and continuing into the start of data analysis, I created analytic memos to reflect on the phenomena that I was observing within the intervention. These memos were not field notes but opportunities to track my engagement with the questions raised by my data (Clarke, 2005; Saldãna, 2016). Further, these were not summaries, they were opportunities to reflect; at times I stopped what I was doing to jot down memos which I would later transcribe and analyze.

Typically, the memos were recorded immediately after a class or discussion was completed. They were dated and time-stamped, which allowed me to observe how my understanding of the phenomenon evolved (Saldãna, 2016). Since I also took field notes as well, I could glean insights from these notes and my reflections on those notes would then become an analytic memo. As Saldãna (2016) suggests, these memos could take many forms: thoughts on student routines, how I personally related to the students, and the emergence of patterns or

themes. I was able to contemplate theory, such as how Vygotsky might consider this learning environment, or how Meyer and Rose might assess the application of UDL. These memos were an important aid to complete design research. When reviewing memos following an intervention discussion, after I had completed student feedback, I could assess student success and start adjusting the protocol. These memos are also an important reflection of my conversations with Dr. Marizpan, colleagues, and members of my dissertation committee about how to tackle key problems. They allowed for a window into my understanding of how the mindset of the students and the teacher as they were navigating class challenges. As I completed my analysis, these reflections provided me with a holistic understanding of the entire intervention process.

Interviews

I made use of semi-structured interviews with four participants – the three case study students and the teacher. A semi-structured interview utilizes predetermined questions but permits a researcher the flexibility to follow topics shared by a participant when appropriate. This required me to focus on developing a connection with the participants more than following a script (Smith & Osborn, 2008). This relational approach encourages participants to add new topic areas to the conversation, giving a researcher an opportunity to glean unique insights. The interviews with the students and the teacher each took slightly different paths, allowing me rich, varied insights.

Student Interviews. I developed a semi-structured interview process to apply with the three case study students. A copy of those interview protocols is included in Appendix A. There were ultimately six interviews – two with each case study student. One interview was conducted at the beginning of the term and the second interview was conducted at the end of the school term. The interviews were used to develop insights on the students' experiences. The first

interviews allowed me to learn about the student from their own perspective, including whether they spoke about the challenges of their disabilities or potentially disabled status. I learned how these students felt about social studies, civics, group discussion, and online pandemic learning. Using Seidman's (2013) approach, the second interviews conducted with these students were different. While core questions remained the same, follow-up questions were designed to see if the students had perceived changes over the term and what their reaction to intervention components was. All interviews took place over Zoom web conferencing software, which allowed for transcription by Zoom's built-in transcription program. Certain transcripts were sent along to TranscribeMe.com, dependent on how clear the original Zoom transcript was since the Zoom program occasionally did not pick up quieter comments from students.

Teacher Interviews. I developed an interview protocol to use with Dr. Marzipan in three interviews spread out over the intervention period. This protocol can be found in Appendix B. The rationale for gathering Dr. Marzipan's perspective was to see whether she saw any changes with the three case study students and whether she had insights into my intervention. I used a three-interview structure as proposed by Seidman (2013) to arrive at in-depth observations. The interviews varied slightly, permitting an incremental approach that gleaned different perspectives as the term wore on. I added questions about Dr. Marzipan's observation of student behavior and knowledge, capturing how she thought about things before, during, and after the intervention. The last interview took place ten days after the term ended, which allowed her time to process and reflect on the experience. Each interview ranged in length from approximately 45 minutes to 90 minutes.

The goal of the initial interview was to record Dr. Marzipan's demographic information and her familiarity with study methods, including how she conceptualized discussion processes.

I also wanted to understand how Dr. Marzipan supported SWD. I asked her to make an informed guess on how the students would respond to the intervention. This proved challenging, as due to Newton's scheduling, Dr. Marzipan did not have any of these students in a prior term, so she did not know them. The mid-point interview was designed to understand Dr. Marzipan's observations on whether the intervention was having any effect. I asked her to compare her teaching experiences with what was being used in the intervention. I also asked her to reflect on the use of UDL-informed lessons, the impact of the discussion experiences, and the student perception of historical thinking and online civic reasoning. I also asked her to reflect on whether there had been any changes in how she had thought about SWD.

The final interview was a summative conversation that took place two weeks after the term ended. Here I tried to get insights on the entire intervention: logistical issues that may have presented themselves, the students' general response to the work, and the performance of the case study students on the varied assignments. I also tried to see what Dr. Marzipan thought about teaching historical thinking skills, given that took time away from her scheduled presentations on historical content. I asked questions regarding the impact of COVID-19 remote teaching requirements and whether she could see the intervention benefitting from being conducted in an online setting.

Social Validity Survey

I gave a post-experience survey made up of both Likert-scale items and open-ended questions to case study students to chart their perceptions of the intervention group discussion process, the historical thinking lessons used with the regular class, and the technologies utilized in the regular class. The purpose of the survey was to assess social validity, or the extent to which the participants believed the intervention was valuable to them (Wolf, 1978). Social

validity surveys are important as they can help a researcher improve an intervention for future application (Common & Lane, 2017; Wolf, 1978). The survey was designed to help inform findings for the first three research questions. For example, did these students think that these lessons or this discussion protocol made any difference in their apprehension of historical thinking or world history? This survey I used was modeled on a social validity survey used for an intervention also modeled on Wolf (1978) but adopted to assess a high school (14-16-year-olds) population about mindfulness practices (Luiselli et al., 2017).

Case study students were asked to answer 22 survey questions. After two informational questions (name and email), the students were asked about technology usage. The survey asked them to rank the technologies they used in the intervention (Google Docs, Nearpod, Jamboard, EdPuzzle, Google Classroom, and Flipgrid) on a five-point scale, with potential responses ranging from *very useful* to *difficult to use.* Students were then asked to explain whether they had used the technology type before, followed by an open-ended question about technologies. The second set of questions was about the lessons regarding historical thinking. On a four-point scale of *very useful* to *not useful*, students were asked to score the lessons on specific elements of historical thinking (e.g. – contextualization). This was followed by an open-ended question about the lessons broadly. The third section focused primarily on the experience of the intervention group discussion. Students were asked, on a five-point scale from *strongly agree* to *strongly disagree,* to rank how they perceived the impact of the discussion process. This was followed by eight questions on topics like their apprehension of preparation materials, how they felt about the discussion, and their personal use of feedback. Three final open-ended questions solicited their input for improvements in the discussion process.

This survey was built in the online tool Crowdsignal and sent to the students during one of their final class periods. Crowdsignal was chosen because it would provide student time stamps, offered me an array of question style choices, and could produce individualized reports for each of the students for analysis. The students were given 15 minutes of regular class time to complete the survey, although all three case study students needed time outside of regular class to complete it.

Historical Assessments of Thinking

The case study students were given a pre-test in historical thinking called the Historical Assessment of Thinking (HAT). This was based on a question format previously validated and made publicly available by the Stanford History Education Group (SHEG, 2020). It was also aligned with Newton's world history curriculum for this term. In the HAT model, the students were presented with excerpts or images and asked to provide short responses, potentially three or four sentences. For example, in this class, a student was given an image of Armenians fleeing Turkey reportedly taken by a soldier in 1917. The students were asked to evaluate the image, explaining what they thought it might be signifying to readers. Assessments like these offer students several opportunities for analysis, from the intent of the author, the connections to other works, or any form of a call to action embedded in the image. In other HATs, a question might include two contrasting images, or it might include a reading excerpt. To test online civic reasoning and lateral reading, students were directed to a specific website and asked to evaluate how accurate they thought the information on the website was.

The model was devised by researchers to be a middle ground between a more extensive document-based question (DBQ) and a multiple-choice test (Smith et al., 2018). SHEG researchers have argued that this approach allows students to demonstrate authentic analysis

while not taxing them with the extensive time required in taking or scoring a DBQ. Completing the HATs should have taken students approximately 30 minutes in their applied learning time, although it might have taken some students longer. Dr. Marzipan and I needed about two hours to score both the pretest and posttest HATs. I built each HAT into an online application, Nearpod (www.nearpod.com), which allows an instructor to create a series of slides like a PowerPoint presentation. Unlike PowerPoint, however, I could build question slides where students could write their responses to HAT questions. When all students completed their work, the Nearpod program generated an assessment report, which included all student responses to each question. Nearpod permitted the easy application of UDL principles such as multiple means of representation and action and expression. I was able to record my voice reading all materials so that students could listen instead of reading if they wanted. Similarly, students were able to speak and record their responses and submit those, as opposed to having to type a response.

Discussion Group Discourse

Examples of student talk through UDL-informed, structured, and peer-mediated small group discourse were collected each time the intervention group convened. There were four different intervention group discussions that students completed via Zoom web conferencing between the first and last week of the term. I used a small group discussion protocol that I had initially developed as a high school teacher in the 2000s and refined as a teacher educator. In preparing for this intervention, I revised this protocol to align with UDL principles, specifically Checkpoint 8.3, fostering collaboration and community (CAST, 2018). This checkpoint suggests educators create group cooperative opportunities with clear goals, roles, and responsibilities. Further, this discussion process aligned with the sociocultural notion of having the students operate as knowledgeable others within the small group (Vygotsky, 1978). Finally, I also

considered Reisman et al.'s (2018) four-step framework for historical discussion, which included engaging students as sense-makers, orienting students to each other, orienting students to texts, and orienting students to the discipline of historical activity.

After these discussions, student comments were transcribed by Zoom. Each transcript was uploaded to my Zoom Cloud account and to my computer, and a copy of both video and audio recording, as well as the written transcript, was saved to an external hard drive for security purposes. There were four total transcripts from this process. Because the Zoom transcription program occasionally faltered in its accuracy, I sent all small group audio files to Transcribeme.com, where a professional transcriptionist provided a time-stamped and verbatim transcript of the conversation. This helped in identifying speakers and comments from the transcripts, although in certain instances it created minor issues, such as when the transcriptionist would divide up student comments into smaller parts if they were interrupted by a classmate.

Participation Tracker and Student Work

I developed an Excel spreadsheet to track how the case study participated in the regular class. A copy of that spreadsheet is included in Appendix C. Since I attended each regular class session, but only taught on four occasions, I was able to observe student behavior intently for the duration of the sessions. When I taught, I had to be mindful of case study student engagement, so I made sure during and after those four sessions I recorded how the three students performed. Overall, I tracked how many times the case study students participated overtly, what specifically the students did, and what was the impact of their actions. For example, in one instance Rodger was asked a question by Dr. Marzipan to which he answered, "Russians." I noted that he had been cold called by Dr. Marzipan, answered correctly, and this allowed Dr. Marzipan to move to the next topic smoothly. I may have also described that Rodger smiled in response to getting an

answer correct and earning praise. In retrospect, I may have benefitted from videorecording these sessions. Initially, I was concerned that adding the video recording would be problematic given privacy concerns from districts and parents in COVID-19. When that was not an issue for the intervention group, I considered asking the regular class, which was only five students more. However, I thought that based on how I was configured as a participant observer, a video recording would not give me much more than what the tracker was providing. Further, since nearly all students consistently had their videos off and appeared as black boxes on the Google Meet screen, I also was not necessarily sure a video would have provided much value.

The tracker provides an additional window on how students performed, both in comparing engagement in regular classes versus UDL-informed lessons, and with specific topics of conversation. This allowed me to develop a sense of what was happening throughout the term and to scan, week by week, how students seemed to be doing. The tracker is slightly different than my field notes, which were more comprehensive about the overall class interactivity and Dr. Marzipan's pedagogical choices. I reflected on both the tracker and the field notes in my analytic memos. Combined, the tracker, the field notes and observations, and memos were used to help with shaping second interview questions to ask case study students at the end of the term.

During the term, the case study students each generated a set of artifacts. Their classwork from their weekly applied learning assignments and their in-class notes were examined as evidence of student engagement, thinking, and improvement during the intervention. There were 22 assignments in the class between applied learning and required in-class notes. Each completed assignment provided insights into how the case students responded to different types of assignments over time, both traditional assignments (such as worksheets from .pdf copies of the regular world history textbook) and UDL-informed assignments (such as using the video editor

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Flipgrid to make a video response). Further, uncompleted assignments provided an opportunity

to postulate why a student might not have completed it. Evaluating this classwork, and

considering the various attributes like completeness or accuracy, and then reflecting on it in

analytic memos helped formulate questions for the interviews and stimulated insights for review.

Data Collection

Summary

Data collection began by first getting approval from the cooperating teacher, Dr.

Marzipan, to use her class for this intervention. She had been suggested to me as a collaborator

by the Newton Assistant Superintendent who supervised the district's IRB. Dr. Marzipan gave

her consent to participate after approval was given by the Michigan State Institutional Review

Board for this study and before intervention work began in April 2021. After that, I worked with

the special education case manager attached to Dr. Marzipan's classes to find students who had

IEPS. As noted previously, only one class, Period 08, had IEP students in it. I reached out to the

parents of the students on IEPs, Rodger, and Conan, to gain informed consent for their

participation in this study. After approval from my committee to add a third student who did not

have a diagnosed disability or IEP, I also received permission from the parents of Arminda, a

student being monitored by Newton and considered at-risk, to also participate.

In Table 1 I include a full accounting of the intervention and data collection steps that I

followed over the course of the ten-week term. These steps vary slightly from my initial plan due

to challenges that arose, such as Arminda joining the case study later than Rodger and Conan and

Conan's vaccine response forcing a postponement of the final intervention group discussion. The

schedule was mostly consistent with the original plan, however. Any item that was altered from

the original plan has been marked with an *.

Table 1

Intervention Data Collection Timeline

Week	Intervention Elements
Pre-Intervention **April 1 – April 18**	Case Study Student Recruitment Curricular redesign with UDL HAT Development Discussion protocol materials creation Analytical Memos
1 – Week of April 19th	HAT Assessment Case Study Student Recruitment Participant Observation Discussion Group Student Recruitment Case Study Student Interviews (2) HAT Evaluation/Inter-Coder Work First Teacher Interview (1) Analytical Memos
2 – Week of April 26th	Applied Learning development with UDL (Nearpod) – Hitler's Rise to Power Participant Observation Analytical Memos
3 – Week of May 3rd	First Small Group Discussion (Russian Revolution) Taught Lesson with Full Class – Contextualization Evaluation of Small Group Discussion Adjustments to Discussion based on Feedback Participant Observation Analytical Memos
4 – Week of May 10th	Meetings with Case Study Students (2) Case Study Student Interview (1) Participant Observation Analytical Memos
5 – Week of May 17th	Second Small Group Discussion (Holocaust) Evaluation of Small Group Discussion Adjustments to Discussion based on Feedback Taught Lesson with Full Class - Lateral Reading Applied Learning Development with UDL - Israel Meeting with Case Study Student (1) Participant Observation Analytical Memos

Table 1 (cont'd)

Week	Intervention Elements
6 – Week of May 24th	Third Small Group Discussion (Israel – Palestine) Evaluation of Small Group Discussion Adjustments to Discussion based on Feedback Second Teacher Interview (1)* Participant Observation Analytical Memos
7 – Week of May 31st	Taught Lesson with full class – Sourcing Applied Learning development with UDL – EdPuzzle/Guatemala Taught Lesson with full class – Corroboration Participant Observation Analytical Memos
8 – Week of June 7th	Fourth Small Group Discussion (Guatemala) * Evaluation of Small Group Discussion Development of Second HAT Participant Observation Analytical Memos
9 – Week of June 14th	HAT Assessment Social Validity Survey Case Study Student Interviews (3) Participant Observation Analytical Memos
10 – Week of June 28th	HAT Inter-Coder Meeting Teacher Interview (1)*

The intervention took place over the course of a ten-week period, which was entirely inclusive of the final term of Newton High School's academic year. My preparation with Dr. Marzipan started in March of 2021, but Oregon COVID regulations shifted my approach. It changed originally planned attributes of the study, such as incorporating the UDL-informed, structured, and peer-mediated group discussion into the regular class period so that all students would participate. Dr. Marzipan felt with the limited time afforded by the online format, it would

be challenging to incorporate those four discussions into regular class time. As such, the four

discussions became a volunteer opportunity. Since not all students would then be participating in

the intervention group discussion, Dr. Marzipan and I could not grade the assignment, since it

would unequally affect the grades of part of the class. As such, I had to alter a component of the

protocol I had originally developed.

Dr. Marzipan was also not familiar with the UDL framework nor was she familiar with

SHEG methods. The summer before the intervention I had completed a three-day workshop with

SHEG on teaching historical thinking, so she and I agreed I was better equipped to integrate

those concepts with the 9th graders. Therefore, the two of us determined that I would teach

several lessons to the regular class about historical thinking as opposed to her integrating it into

her lessons. I would teach those lessons close to when the intervention group had discussions

scheduled. I also would have to tie the training in historical thinking and online civic reasoning

to the planned historical content for the specific week. However, this historical content was not

ultimately decided on by the Newton History department until just before the start of the term in

mid-April. As such, my ability to find and revise appropriate materials for students was

somewhat restricted by when I ultimately learned the term's history curriculum.

The intervention began with the case study students receiving a pre-test in the HAT

format (Smith et al., 2018). These HATs were assigned to the students to complete at home

between their first- and second-class sessions of the week, serving as the applied learning task. A

copy of each HAT is included in Appendix D. The HAT was built in the Nearpod program and

students could complete it from a computer, tablet, or phone. It consisted of three elements – a

historical passage that had been edited to meet a 6th-grade reading level by my using the Lexile

Analyzer tool, a photograph with an accompanying explanation blurb, and a website. I used the

6th-grade reading level as my baseline as it was what Rodger's IEP suggested as his reading level. I followed guidelines from SHEG (Monte-Sano et al., 2011) in making modifications to the documents. Each HAT item was connected to the Armenian Genocide of 1915-1917, which was the curricular topic from the start of this term of the world history class. Students were asked to complete these exams by the end of the week. Dr. Marzipan and I independently scored the HATs and then met together to establish inter-rater reliability the following week.

The two case study students agreed to participate in the intervention group discussion before the term began. I asked the rest of the regular class in the first week if they would volunteer for a $100 gift card incentive. Four additional students and their parents consented, and I scheduled the intervention group to meet after school class hours ended. Dr. Marzipan had helped with group enrollment, encouraging students she knew to join. This intentionality was helpful to assure that there was a blend of student ability and social studies interest. After discussion with the dissertation committee about adding a student without a diagnosed disability, I invited a third student, Arminda, to serve as a case study student. She and her family agreed to do this prior to the first intervention group discussion.

I then held a baseline peer-mediated discussion with the intervention group, focused on questions about the Russian Revolution (the class topic in week two) to assess group dynamics. The group members were collegial and engaged, and the case study students participated generally well alongside their peers, so no changes were made to the group composition. I asked one of the non-case study students, Odin, to facilitate the session, offering the group four questions to consider for 20 minutes. One case study student, Arminda, did not show up until about 15 minutes into the discussion, claiming she overslept. I observed which students spoke, took notes about the interplay of conversations – whether students were responding to peers or

were merely loafing, and recorded the entire conversation, which was later transcribed. I wrote a detailed analytic memo, completed feedback materials for all six students, and emailed those to the students independently and as a group.

I then provided the students with an introduction to the intervention's discussion protocol. This introduction included a ten-page Google document (available in Appendix E) which included detailed instructions, graphic organizers, and embedded video links. I had filmed a series of instructional videos with older high school students to demonstrate to the case study students how to perform the tasks of the discussion for the next planned meeting. I also enrolled all six intervention group students in Remind, a mobile application that allowed me to send them messages through their phones, to keep them posted on meeting times and assignments.

At the start of the next week, I taught the entire regular class about the historical thinking skill of contextualization. I had been trained in a version of this lesson through a workshop with SHEG so I modified it using the UDL framework, incorporating multiple UDL checkpoints (2.2 – Clarify syntax and structure, 2.5 – Illustrate through multiple media, 3.1 – Activate background knowledge, 3.2 – Guide processing and visualization, 4.2 – Optimize access to tools and assistive technologies, 5.1 – Use multiple media for communication, 7.2 – Optimize relevance, value, and authenticity, and 8.3 – Foster collaboration and community). A copy of this lesson plan, and all lesson plans created for this intervention, is included in Appendix F. My lesson was followed by an applied learning assignment that I developed about contextualization that was to be completed through Nearpod. I considered options for variable student accessibility and expression within the Nearpod, ensuring that passages again were at the 6th-grade reading level and providing different tools for listening, seeing, and responding. The topic was the Nazi seizure of power in Austria, and students were asked to review historical texts and images and use collaborative tools

within Nearpod. The Nearpod program generated a report of all student activity. Two of the three case study students completed this applied learning assignment. The third case study student, Rodger, explained that he forgot to do it, and never did.

I assisted Dr. Marzipan with the creation of the next applied learning assignment about the experiences of Jewish students in the Holocaust. I created this task because the textual materials in that assignment would be used by the small group for their next intervention group discussion. Based on recommendations from the literature (Wexler et al., 2015) and my dissertation committee, I personally facilitated the second intervention group discussion to demonstrate to students how the protocol worked. This required my significant participation in the discussion, including demonstration of appropriate questioning and prompting of students. In certain cases, this was productive, but in others, such as in a conversation with Rodger, it proved to be challenging. In one instance, Rodger froze and did not say anything for over a minute. Rodger admitted that he had not prepared for the discussion, and, as leader, I tried to help him in later parts of the conversation with simpler questions. I modeled for the students how they should allow response time, being thoughtful to consider ways to incorporate their peers, even when they were not prepared.

After this discussion I again had the discussion audio transcribed, and I analyzed the student talk. Many students did not complete discussion templates prescribed in the Google document guidebook to prepare for the intervention group discussion. This alerted me to the need to review this with them in my group and individual feedback. I emailed both audio and video feedback to Rodger and Conan in addition to their written feedback. I highlighted across all three formats how completion of the template could help improve their participation, whether they were participating significantly like Conan or to a limited degree like Rodger.

The following week, I taught a second 30-minute lesson, this time on lateral reading, again using lesson content I learned from a SHEG workshop and redesigned with the UDL framework (2.3 – Support decoding of text, 3.2 – Highlight patterns, 3.3 – Guide information processing, 6.3 – Facilitate managing resources and information, 8.3 – Foster collaboration and community and 9.3 – Develop self-assessment and reflection). The primary focus of the lesson was on evaluating websites. I utilized a series of multimedia videos created by John Green at crashcourse.com and then talked through my thought processes out loud as I evaluated a website on the minimum wage and showed them how to perform lateral reading. This would let the class listen to my online civic reasoning and see how I moved laterally to other online resources. I then asked them to do the same with a different website. Within this lesson I incorporated a new technological tool, Jamboard, a digital whiteboard that teachers and students could use collaboratively in real-time, although certain students had trouble accessing it correctly that day.

After completing this lesson, I held the third intervention group discussion with one of the non-case study students, Gareth, facilitating. Gareth was asked to use the discussion protocol guidelines as I had done in the second intervention group discussion as opposed to leading in a more freeform manner as Odin had in the first intervention group discussion. I met with Gareth ahead of the discussion to review the format so that he would know how to do it correctly. The students who participated in this discussion generally did this well with Gareth leading. Rodger did not show up for the discussion, even with repeated reminders I sent to him through Remind and directly to his phone. Even with his absence, I decided to continue with the discussion, hoping Rodger would show up as Arminda did midway through. He did not.

I had met with Rodger after class the previous week, traveling to Newton High to see him in person, trying to support him with building his template. I explained both the why behind

doing the work, referencing some of the higher learning aims of this type of discussion. I also

reviewed specifically how to complete the template to prepare him for the intervention group

discussion. I had also redesigned certain classroom materials so that they might be easier for

him, and by extension, all students, to use. I saw this as part of the design cycle I was following

to improve the intervention materials. As with previous sessions, I had the discussion transcribed

and I evaluated the student comments. I emailed the students feedback, with the case study

students receiving their feedback in written, audio, and video form. Since most students had

improved, I put supportive comments on their progress. For Rodger, I replicated his previous

material but was more direct in asking him to consider how to improve for the next discussion

and directed him to use the templates we had reviewed together.

Throughout this period, I was in regular contact with Dr. Marzipan and would meet with

her at least one evening a week. I interviewed her a second time around the mid-point of the

class to get her perspective on how the case study students were doing, how the lessons I taught

had gone, and whether she saw any impact from the structured, peer-mediated discussion on the

case study students. I incorporated her feedback into the setup for both the next round of

discussion as well as the remaining lessons that I was teaching. I also completed a few analytic

memos reflecting on teaching during the pandemic, and the challenges in trying to instruct given

the time and modality limitations.

After the third intervention group discussion I taught two final lessons for the regular

class of students. The first was about the historical thinking skill of sourcing. In planning this

lesson, I tried to integrate UDL checkpoints (2.5 – Illustrate through use of multiple media, 3.2. –

Highlight patterns, critical features, big ideas, and relationships, 5.3 – Build fluencies with

graduated levels of support for practice, 8.1 – Heighten salience of goals and objectives, and 8.3

– Foster collaboration and community). I again used Jamboard, which students used more successfully to analyze photographs from their previous applied learning. This was one of the few lessons where I collected completed classwork from all three case study students. The case study students also participated well in the collaborative small group activities I embedded in these regular class lessons, which was a significant change for one of the students. Conan and Arminda, actively participated in their respective groups, debating their classmates and facilitating discussion. Considering that both had been quieter in a small group discussion in my first regular class lesson, I thought their increased participation was a good sign, specifically for Conan, who had not spoken much in regular class periods. I thought the students might be transferring their confidence built in the intervention group to these regular class collaborative activities.

The next regular class lesson I taught was less productive. Dr. Marzipan taught first in this session and went over her time, leaving me with a condensed teaching window. This lesson was about corroboration, and I constructed activities based on SHEG materials I had learned and modified using UDL design principles (2.5 – Illustrate through multiple media, 4.1 – Vary the methods for response and navigation, 5.1 – Use multiple media for communication, and 7.1 – Optimize individual choice and autonomy). I created a new Nearpod presentation to use for this activity. The regular class students followed along generally well, audibly impressed by the real-time polling and question features of Nearpod. However, only 60% of the overall lesson was completed, as we ran out of time and Dr. Marzipan could not allocate time in the next regular class session.

The fourth intervention group discussion was scheduled a few days later. However, one case study student, Conan, had been ill after receiving his second COVID-19 vaccine and asked

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if I could reschedule the session. I worked with students to find an acceptable time a few days later. This allowed for more students to complete their templates; two case study students who had not done these previously completed them this time. However, the new date for the discussion proved to be problematic as the students were on their last official day of classes and less focused than they had been on the other dates. Further, Arminda struggled while facilitating as she had to take care of her siblings. She forgot parts of the protocol and would ask questions and then switch her screen and sound off. This confused the group, and they sat in silence waiting for her to return. Nevertheless, the discussion lasted close to 30 minutes, with several topical talk exchanges. All case study students participated in this discussion, although Rodger continued to struggle having missed the previous discussion, and he only spoke three times.

Right after this, the post-test HAT, based on American intervention in Guatemala during the Cold War, was assigned using Nearpod. The students were first asked to read an account of the American intervention from the perspective of a CIA operative. Again, I modified this account based on SHEG guidelines (Monte-Sano et al., 2011) to meet Rodger's IEP Lexile level. The students were then given a photograph from the period with an attached blurb that provided some descriptive content about it. Finally, the students were given a website that included a video created by a potentially biased creator and asked to gauge the trustworthiness of the video. All case study students were able to complete this work via Nearpod.

The students were also asked to complete a social validity survey. Nine of the eleven students in the regular class completed the survey, including all three case study students and the full intervention group. This survey was created in Crowdsignal and contained 22 questions that were broken into four categories. All students who completed the survey, including case study students, were eligible for a $5 gift card to a Newton coffee shop.

I interviewed all three case study students in the afternoon after school right before the term ended. Each student took approximately an hour to be interviewed, and I asked a series of questions in a semi-structured interview format. This format allowed me to ask questions about important study attributes but also provided me the flexibility to follow what students might have to share that was unexpected or novel. Rodger completed his interview in less time than the other students, and his interview was often challenging because of significant ambient noise and distractions, and he would not turn his video on. The other two case study students spoke for over an hour, both going into greater detail regarding their experiences with the discussion protocol and how they felt about learning online during the COVID pandemic. All interviews were transcribed by the Zoom service, although I sent Rodger's to Transcribeme.com to have additional professional support in listening through the ambient noise.

I met with Dr. Marzipan about a week after classes ended, and we conducted an inter-rater reliability evaluation for the second HAT assignment. It was also during this time that I conducted a final, 90-minute, face-to-face interview with Dr. Marzipan that allowed me to record her insights on the lessons, our teaching within COVID, the progress of the three case study students, and how the SHEG and UDL-informed lessons might inform her future classes. After the interview I completed an analytic memo reflecting on her experience. I also sent the recording of her interview to a transcription service since there was no Zoom transcript.

After a quick review and finalization of memos, I started the analysis process for the data collected during the intervention.

Data Analysis

Discourse Analysis of Discussions

A total of four intervention group transcripts, totaling approximately two hours of discussion with six students, were analyzed multiple times throughout this study. As with prior research (Mariage, 2000; Santa Barbara Discourse Group, 1992), the analysis examined the educational affordances of this specific discourse space where students mediated their own conversations. I hoped that, based on their social and cultural-historical circumstances, the students might provide unique insights into the historical materials discussed.

I created an initial tracking form which is included in Appendix G. This helped me to record the students' participation and discourse in four distinct ways:

    a. Quantity of talk: I looked at how often students spoke and how long they spoke in each small group discussion. I noted the average and median lengths of student turns in seconds. I defined a turn as when a student was able to complete a thought when in conversation with peers. Admittedly, this was a subjective exercise, as sometimes a student would complete a thought after interruption by a peer. I had to carefully examine the discourse to determine when this happened. I noted their longest spoken overall contribution, and the total number of turns each student took. I created charts based on their total participation so that I could see the balance of conversation between students in the intervention group.

    b. Quality of talk. I evaluated how each student participated in the parts of the discussion. I examined whether a student contributed assigned elements, such as insights, informative questions, or discussion questions, which they had been asked to prepare in advance. I recorded whether a student had to be prompted to

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engage by the group leader, or if the student joined the discussion within the natural flow. I also noted when a student was directly responding to a question or a comment from a peer who was not facilitating.

c. Content Analysis: I examined how and when students were focused on the content of the discussion. At a basic level, I recorded whether a student's comments were on the topic at hand, or whether the student offered a comment that went off the primary conversation strand. I noted if a student contributed anything that was distracting to the group. Also in the content analysis, I examined whether the student used language or phrasing that demonstrated the particular use of historical thinking and civic reasoning skills. I looked specifically for evidence that aligned directly with SHEG concepts in this area (McGrew, 2018; SHEG, 2020), trying to see if responses mentioned questions or insights that could tie directly to SHEG's materials that I had taught in class. For instance, if a student were discussing the texts they read in advance, and then asked questions about how the circumstances in which that text was made might have affected its creation, then I might identify that comment or question as evidence of contextualization as defined by SHEG.

d. Leadership/Sociocultural Impact: In a final category, I evaluated how students may have demonstrated group leadership through facilitative comments. For example, Newark, one of the students, frequently would prompt other peers to offer their opinion, such as asking, "hey, what do you think, Gareth?" The group facilitator did this most commonly, so Odin, Gareth, and Arminda all had many comments labeled *facilitative* since they were asking their classmates to share

insights or questions or trying to encourage more responses to someone else's question. I also examined whether students contributed comments or insights that belied some sociocultural or unique personal experience and tied it to the materials discussed in the group. This meant I was looking to see if someone referenced their unique life experience, such as when Arminda brought up fleeing political violence as a Congolese refugee.

I drafted a codebook to operationally define each of these categories, along with a scoring sheet that allowed me to hand code from the printed transcripts. That final codebook, as well as original scoring sheets, are available in Appendix G. I reviewed student transcripts thoroughly in two separate time periods: once during the intervention and a second time approximately six months later.

When I reviewed transcripts, my initial process was to read an individual student's comments on a transcript for each category, starting with talk quantity, then talk quality, then content analysis, and then leadership and sociocultural impact. Each pass allowed me to become more familiar with the statements made by the student. In most cases, students spoke between 5 and 20 times, so I was able to examine their contributions comprehensively. After I completed a student's review, I wrote a feedback document for the individual student. Often, these feedback forms were based on the student's need to improve in the first two areas – essentially trying to speak more, and then trying to speak using the rudiments of the discussion process. However, I would also give them encouragement to keep thinking creatively about the content they were reading. I used the results of the content analysis segment to also consider how to shape discussion materials to help generate opportunities for students to enhance the content of discussion. My choice of using a video for the fourth discussion, as opposed to written materials,

for instance, was based on this process, as I was trying to be creative with encouraging greater historical thinking discussion. This also was in line with the design cycle process I was using.

After the intervention was completed, I revised my codebook and initially shared it with my dissertation advisor, who reviewed it and provided feedback. Based on this feedback, I made some revisions to the codebook, clearing up terminology that was difficult to understand and sharpening what other readers could look for in the transcripts. I then began an inter-coder review process. While establishing inter-coder reliability for qualitative research is not universally seen as necessary by some members of the research community (O'Connor & Joffe, 2020), it can help to affirm the trustworthiness of research work (Lincoln & Guba, 1985). Therefore, I provided this codebook to a fellow student, a Ph.D. candidate at Michigan State in the Educational Psychology and Educational Technology program, and asked him to review it. We took the third transcript and collaboratively coded the comments of speaker 3 of that transcript. We reviewed challenges and I revised the codebook again based on his feedback. I then gave the revised codebook to my colleague, and we independently coded two more of the speakers (speakers 4 and 5) in this conversation.

Considering the guidance provided by Miles & Huberman (1994) regarding inter-coder reliability in qualitative coding, we arrived at agreement based on the following formula: reliability = number of agreements divided by the number of agreements plus disagreements. In our first review, we arrived at 96% agreement for these two speakers across 13 categories. We then reviewed two more of the speakers, this time including the facilitator (speaker 1) for that discussion. We arrived at 97% agreement across the same 13 categories with these two new speakers. To ensure that we had coded 25% of the discussions' total content (Englert et al., 2009; Ko & Hughes, 2015) and to also ensure we coded all six participants in the discussion group

(since Rodger was absent from the 3rd discussion and we had used Conan to practice score), we independently reviewed their contributions within the fourth intervention group discussion as speaker 4 (Conan) and speaker 6 (Rodger). Across the 13 categories, we arrived at 98% agreement. Across all six speakers, we coded a total of 68 distinct spoken contributions. Our combined agreement from those three sessions was 97%. We improved incrementally given our general agreement on areas, and generally resolved disagreements through conversation. I also considered changes to the codebook for future use based on my colleague's perspective and insights.

Student Survey

A total of nine students in the world history class completed the social validity survey. The responses were reviewed after its initial administration. The results of the full class were evaluated to look for patterns and themes. Then the case study students were examined separately for responses, which were recorded across the four categories of questions. Each student was examined for how they used the technologies in the intervention, how they perceived the content of the UDL-informed lessons, and how they felt about the small group discussion protocol experience. These responses were then compared across the case study students to arrive at cross-case understandings. These observations, of the individual students and the cross-case phenomena, are reviewed in Chapters Four and Five respectively.

Interviews

Student Interviews. The student interviews were designed to allow the case study students to share how they perceived the impact of the intervention on their experience. There were two sets of interviews with each case study student. Two of those interviews, with the two SWD, were conducted in the first week of the term before any specific intervention work began,

and the third was after Arminda joined the study in the term's second week. The review of those interview transcripts was used to guide lesson development and inform the intervention group discussion protocol design cycle. These same students were interviewed at the end of the term. I then began a two-cycle approach for coding these transcripts (Saldãna, 2016).

I started with an In Vivo coding approach for my first review of the interview data. According to Saldãna (2016), In Vivo coding is a first-cycle elemental coding approach that provides an opportunity for reviewing a corpus and giving a starting point for further coding. In Vivo coding, which is also referred to as "natural", "literal" or "indigenous" coding, at its root meaning equates to "in that which is alive" (Strauss, 1987, p.33), and refers to when a researcher uses the actual language of participants to create codes. The rationale for using this, broadly, is that coding the indigenous language used by participants might capture ideas more directly from their perspective. Saldãna argued that In Vivo coding can be particularly helpful in educational qualitative work with youth, as it might deepen comprehension of the perspective of younger worldviews (2016). Stringer (2014, p. 140) contended that In Vivo coding researchers "are more likely to capture the meanings inherent in people's experience."

I coded each interview to produce an expansive list of codes that emanated from the participants themselves. I divided up the text after an initial read, guided by Saldãna (2016), analyzing lines of text for codes representing key ideas from the students' perspectives. Sometimes a line of text would have a single code, other times multiple codes. As Saldãna and others (Glesne, 2011) argue that the coding process relies heavily on intuition, I followed Saldãna's direction to subdivide my text, sectioning the interviews into segments based on the key topics covered. I created analytic memos after each initial coding experience, and in doing so, was able to use the memoing process, as suggested by Saldãna (2016), as a code- and

category-generating method. The In Vivo process generated a substantive number of codes that would be pared down through second cycle coding.

I then began a second round of coding using Axial coding. Axial coding aims to strategically reassemble data that were split during the first round of coding, with Boeje (2010) noting that it helps determine which codes and categories are dominant and which are less important. Saldana (2016) claimed that Axial coding is most appropriate for studies that incorporate a wide variety of data forms, and that ultimately the aim of Axial coding is to sharpen codes to their clearest meaning. That sharpening takes place partly by analytic memoing, but also by being attentive to things in the interview where participants may have spelled out key attributes of the analysis (Glaser and Strauss, 1967). A principal goal of Axial coding is to achieve saturation, where no new properties or conditions are seen in the data (Strauss & Corbin, 1998).

In my second round of coding, I examined the codes that were developed from the In Vivo cycle and pared them down into broader categories. From there, I reexamined my Excel chart list of over 566 codes from the three interviews and began to characterize the larger list into clusters that suggested larger themes, getting to a list of approximately 30 themes. I then analyzed the variations and similarities between the interviews and what different students said about similar topics. I used this listing of codes to do another read-through of the three interviews, and again, refined my codes based on what I thought was evident in the transcripts. I eventually arrived at 14 distinct codes. I put these into a draft of an interview codebook, which included a definition of the code and samples of what would be classified by that code in the interview transcripts.

I gave an initial draft of this codebook to my dissertation advisor, after which I made some initial revisions to the codebook, including the addition of one further code. I then gave the codebook to a colleague, a Ph.D. Candidate from Michigan State University in the Educational Psychology and Educational Technology program. I gave a segment of an interview transcript to this colleague, and we collectively coded this segment. Initial conversations about this coding process led to further refinement of the codebook, in particular changes to specific code names and their examples. I then sent this codebook alongside a sample of 10% of two of the transcripts. We independently coded the first segment and arrived at 58% agreement for the initial run. We then looked at a second sample that we scored independently and arrived at approximately 67% agreement on the coding. After discussing the disagreements and coming to a resolution, I again revised the codebook to adjust any areas that lacked clarity. I sent out another set of segments from the sample to my peer. This time, after independent coding, we reached 72% agreement on the third set. We reviewed these disagreements again to get to consensus and found ourselves able to agree after conversation. However, we also independently reviewed a fourth set of comments from the transcripts. This time, we arrived at approximately 85% agreement. This allowed me to reach what other researchers would consider an appropriate level of inter-coder agreement (Miles & Huberman, 1994).

Teacher interviews. The teacher interviews were designed to assist in answering research questions about lessons and intervention group impact. Semi-structured interviews in qualitative research settings are often used to find broader understandings of phenomena (Creswell, 2013). In this case, they allowed Dr. Marzipan to share more personal observations about the experience. I examined all three teacher interviews using a holistic coding process, which was designed to examine the interview corpus and determine any insights that might arise

from the teacher experience (Saldãna, 2016). I reviewed each transcript twice – once to review for any insights regarding the individual students and the experience of the teacher with the UDL-informed lessons I taught in the regular class. I did this prior to conducting student interviews. I reviewed the transcripts a second time to understand whether there were any connections between the student experiences and the teacher experience. Since the teacher was not being evaluated for their use of historical thinking skills, what I gleaned from the instructor provided additional process insights from the overall study and the implementation of the discussion protocol in future research. Those insights were incorporated into the case study results for each student and can be read in Chapter Four.

HATs

The HATs were administered and scored twice over the course of the study. Twenty-two HATs were submitted from the students in Period 08 – 11 in the pre-test and 11 in the post-test. The HATs were scored on a three-point scale, with scores ranging from 1 (*Basic*) to 3 (*Proficient*). A student was scored on that 1 to 3 scale for each segment of the HAT: once for their interpretation of the written passage, once for their response to the photograph, and once for their response to the web-based content. I created a rubric for each of the HAT assessments to help both Dr. Marzipan and I to align our scoring of student responses. These rubrics are available for review in Appendix D.

For the first HAT, Dr. Marzipan and I jointly scored three of the eleven student responses, or approximately 27% of the data. In this first scoring, Dr. Marzipan and I were not close on our scores, registering only 33% agreement. We were entirely in disagreement on the first student (0/3), and then had better results with the second student (2/3) and more disagreement with the third (1/3). We discussed our responses and rationales for how we graded.

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Of note, however, we recognized that we had the most agreement on one of the case study students (Conan). We recognized we needed to achieve a greater level of reliability, so we graded a new set of three students and reviewed those together. This time, we arrived at a greater sense of agreement, marking seven of the nine potential categories across three students the same. We resolved any remaining disagreements through conversation and consensus. We jointly coded one last student and had 100% agreement. Given this was the first HAT, and that we had coded seven of the eleven students, we felt confident in our joint scoring for the remaining four students. Dr. Marzipan incorporated HAT completion as a component of students' class grades, meaning that students received credit simply for completing the HAT, as opposed to having their score vary based on HAT performance.

The second HAT was completed in the second to last week of the term, and Dr. Marzipan and I met after the term was finished to review our independent scoring. We took a sample of five of the eleven students who completed the HAT to reach a level of inter-rater reliability. In the first batch of three students, we agreed on the scores of eight of the nine categories for the students, or a level of 88% agreement on student performance. We could not agree on the scoring for the last category. For IRR, however, this would be an acceptable level of agreement between two raters. We continued to score the next two and agreed on scores for 6 of the 6 categories. This ultimately allowed us to arrive at a 100% initial rate of agreement on scores, with a final agreement rate of 93% after discussion. We agreed on the scores for all three case study students, who were included in this sample of five.

Credibility and Trustworthiness

Throughout the course of the data analysis, I employed measures to ensure the credibility of my analysis. I presented my analysis approach to experts in the varied forms of analysis that I

was using for this project, for peer review (Creswell & Miller, 2000; Lincoln & Guba, 1985). Peer review is an important process where a researcher presents materials to experts who are familiar with the phenomenon that is being researched, and while reviewing, challenge the researcher's assumptions. I shared my discourse analysis process with Dr. Troy Mariage, Associate Professor at Michigan State University, frequently, which helped to shape my tracking forms and analyses process. I shared my interview materials with Dr. Cindy Okolo, Professor Emeritus at Michigan State University, to ensure that my interview coding and inter-coder reliability process could be seen as trustworthy.

These types of reviews were in accordance with guidance from Creswell & Miller (2000)'s suggestions to check on the bias of the researcher. I also, as noted, used an inter-coder agreement process to improve the trustworthiness of the scoring of discourse, interviews, and the HATs. As part of that process, I allowed my two raters, my colleague at Michigan State and my co-teacher, Dr. Marzipan, to review this methods segment to assure that I have accurately captured the process of our collaborative work.

CHAPTER FOUR: RESULTS

In this chapter I present the results of my study. The results are presented through an in-depth analysis of each individual case study student's experience. In each case, I provide contextual information about the student and then review how each individual student's experience addresses my first three research questions. I begin the review of my research questions by discussing each student's response to the intervention group discussions. I then review each student's performance with UDL-informed lessons, assignments, and technologies. I follow this with a review of each student's performance on their two HATs. I use all data sources to present these results, with student and teacher input from interviews and surveys woven into each segment. In Chapter Five, I will discuss collectively how all case study students responded to online instruction during COVID, which was my fourth research question.

Case Study One: Rodger Weems

Participant Characteristics

Rodger Weems was a 15-year-old freshman at the time of the intervention. Rodger was categorized with Primary-Other Health Impairment (OHI)-ADHD inattentive type, Communication Disorder, and Specific Learning Disability (SLD) in reading comprehension, written language, math calculations, and math problem-solving. He had not received consistent special education services as he had been in private school until 6th grade. He lived with both of his parents and a younger sibling. Rodger was described in his IEP as a "polite, kind 9th-grade student" with a "passion for playing his saxophone in the school band and at home." The case manager and teachers agreed that he was cooperative and easy to get along with. Rodger had no school absentee issues and taught himself how to record his saxophone playing to post on social media. He hoped to be able to play saxophone in the Oregon Symphony.

In Rodger's 2020 IEP meeting, the case manager noted that Rodger's father was worried about his son not turning in work. Rodger's father said his son was often distracted at home, especially by his electronic devices. In his 2019 IEP meeting, Rodger's parents shared concerns about his ability to "keep up with grade-level academics, socially and emotionally." They said they attempted to talk to Rodger, but he rarely said much to them. He did not initiate conversations and only responded to their questions with one- or two-word answers. His mother said Rodger could get frustrated and be aggressive with his little brother. Rodger's parents were both in contact with the special education department and me as we set up the study and were encouraged that he would receive additional support through the intervention.

The IEP team had completed an assessment that evaluated Rodger's reading, writing, and mathematics ability. He was given an unspecified reading assessment. His overall score was 88, and the IEP said an average score was 100. The IEP explained that Rodger had significant variations in his subtest scores but only listed a few. One was a 77 score on a subtest for reading grade-level passages, which the IEP said was in the low range for his age. He also scored an 89 in reading comprehension for 6th-grade level passages. The IEP reported that his strengths included "decoding basic sight words and applying phonetic rules to decode nonsense words." On that subtest assessing these skills, he was in the 50th percentile.

In Rodger's writing assessment, the IEP team did not calculate a score for him because his response was too brief. He had been given ten minutes to write a short paragraph that the team evaluated. Rodger was asked to write a short essay about a game he liked and three reasons he did. Rodger wrote three short sentences and did not write about a game but his favorite activity, playing the saxophone. The IEP team concluded that he needed additional support in this area without providing a scaled score.

Rodger was also challenged in expressive communication. A separate speech and language report was generated in January 2021 which indicated that on the Clinical Evaluation of Language Fundamentals (CELF-5), a comprehensive test of a student's (age 6-22) ability to understand, use, and remember language, Rodger demonstrated difficulty expressing his ideas and understanding given materials, even with support and processing time. With a top score of 13 and a mean of 10 for each subtest, he received 5 / 13 on formulated sentences, 7 / 13 on recalling sentences, 3 /13 on sentence assembly, 8 / 13 on understanding spoken paragraphs, 9 / 13 on semantic relationships, and 9 / 13 on word classes. The speech pathologist who completed the evaluation commented that language formulation and retelling would be most impactful for him.

The IEP reported that in May of 2020, a Conners-3 Behavior Scales and a Behavior Rating Inventory of Executive Functioning (BRIEF) were administered to Rodger. While no scores were provided from either, the IEP noted, "Results…strongly indicate that ADHD-Primary Inattentive Type has a significant impact on Rodger's executive functioning skills and ability to benefit from his education. He fits the profile of a particular subtype of Inattentive ADHD referred to as 'Sluggish Cognitive Tempo.'" The IEP noted that Rodger's parents should share these results to potentially obtain medication to ameliorate Rodger's symptoms, although no indication was given that this recommendation was followed.

The IEP indicated that for social communication, Rodger received additional support in a weekly social skills group, where he was kind to others, gave his peers good eye contact, and answered questions. However, a third of the time, he would answer questions with "I don't know." Sometimes, he would repeat details a peer may have said. When Rodger talked about

something he was interested in, he spoke in greater detail. The IEP noted that Rodger needed adults to help him constantly understand his executive functioning challenges.

In my initial interview with Rodger, he often did not respond to basic questions. He gave one- or two-word answers, although at times responded with longer sentences. I attempted to follow up in areas he seemed eager to talk more about, although this did not prove successful at eliciting more detail. Rodger never offered more information other than what was directly asked. Sometimes he would provide an audible "hmm" and then wait. I would give him upwards of a minute to respond and sometimes repeat the question to allow him a second chance to consider it. That did not usually work to get a different response. In retrospect, it seemed that Rodger might have been demonstrating what educators describe regarding developmental language disorder (Archibald, 2019) and how it impacts student engagement.

The special education case manager, Madelina, discussed Rodger's performance at the midpoint of the term. Madelina indicated that task completion was problematic in Rodger's other classes. However, Rodger was earning an "A" in band class, which was an increase from a "D" in the prior semester. Madelina explained that she rarely got Rodger to speak in sentences longer than four words. Nevertheless, Madelina was hopeful that Rodger's participation in the study might stimulate greater engagement.

Rodger's general demeanor was polite, and he seemed to enjoy talking with Dr. Marzipan at the start of class since she always called him Sir Rodger. Yet, he fell behind in completing his assignments and did not attend Dr. Marzipan's Friday extra help sessions. He did stay for one session with me when I asked him to. In that meeting, Rodger was conversational and spoke about his parents and his family. Rodger shared that he often skateboarded to and from the stand where his mother sold goods at the local farmer's market. He talked more expansively than in

class or the interviews, suggesting that he might be able to articulate longer sentences on specific topics.

Impact of the Discussion Protocol

My first research question was, "How did an experience in a UDL-informed, structured, and peer-mediated small group discussion affect the quality and quantity of talk for high school students with or being monitored for disabilities?" Table 2 summarizes Rodger's discussion results and shows how he engaged over the course of four intervention group discussions. Each intervention group discussion took place virtually and outside regular classroom meeting times. They were in the early afternoon after the students had completed all their classes.

Table 2

Rodger's Results, Intervention Group Discussion

	Number of utterances	**Total Time Spoken**	**Longest utterance (Words/Time)**	**Quality of talk/Content Analysis**
Discussion 1	3	23 seconds	26 words/21 seconds	No evidence of historical thinking
Discussion 2	2	25 seconds	18 words/9 seconds	No evidence of historical thinking
Discussion 3	Absent	Absent	Absent	Absent
Discussion 4	4	24 seconds	11 words/15 seconds	No evidence of historical thinking

Rodger attended three of the four discussions. The first discussion was a baseline to see how students would respond in a small group setting. The students had been given the questions ahead of time, and I had asked a non-case study student, Odin, to lead the discussion. The students spoke for 17 minutes as a group and had about 4 minutes of quiet time where no student

spoke. Rodger spoke in this conversation for 23 seconds, which was the least time among the case study students. He spoke three times – his first comment being: "Um, at first, I thought it was like, Lenin, at first. But now, since knowing he, like, killed people who didn't agree with him, I would go for the, the gov—the standing government. Um—." Rodger's response clearly stated his opinion and was over 20 words long. This response, however, was after Conan had responded with a similar statement, and Rodger might have been copying Conan. His other utterances were less extensive. In one instance, when Odin asked Rodger if he wanted to answer a question first, Rodger said, "someone else can." Slightly later, Odin asked Rodger if he wanted to contribute to a discussion segment about Stalin, and Rodger replied, "I don't have anything to say right now."

Only Rodger's first comment referenced historical content, so overall, he did not demonstrate specific historical thinking skills. This was partly expected since no instruction in historical thinking skills had been provided during regular class time. But overall, from a quantity, quality, and content analysis perspective, it seemed like Rodger's baseline was low. His performance appeared consistent with his IEP, although his first answer was significantly longer than what he typically contributed elsewhere. His response quantity and quality were like two other group members, so in the initial analysis, he did not appear to be a complete outlier within the intervention group.

I provided Rodger with written feedback on how he might improve between the first and second discussions. He had said in his initial interview he wanted to communicate better with classmates, so I reminded him of that. My feedback reviewed how he contributed to the first discussion. I asked him if he could try to speak five times for a total of a minute in the second discussion. He received the discussion template to craft his responses along with a series of

videos that would demonstrate how to do this. My hope was that if Rodger completed the template and observed the students in the videos, he could develop responses that addressed content, contribute more to the discussion, and increase his overall talk quality, as well as lay the foundation for discussing historical thinking skills.

I facilitated the second intervention group discussion, joining the students as their discussion leader and modeling the protocol I wanted them to use. Rodger did not prepare for this conversation: he did not review the instruction booklet, did not review the overview videos, and did not complete the template. The group discussion lasted approximately 30 minutes, with 90 seconds of silent time. Rodger spoke for 25 seconds, a two-second increase from the first discussion. After a 9-second introductory comment, where he shared his favorite ice cream flavor and how he was doing, his only other utterance was to say that he did not do his work. He stated this after I had asked him to provide his insight on the materials. He responded with a series of "umms" for over a minute. As the facilitator, I waited patiently to let him contribute, and I repeated my question to him after a minute. I did not press him again when he said he had not prepared. He did not contribute after this. As such, his talk quality, quantity, and content analysis did not differ much in quality from the first discussion.

Because of his limited progress, I revised the discussion preparation materials. I met with Rodger in person at Newton High School after class one day so that I could review the materials with him directly. I revised the discussion template by adding sentence stems to the outline format I had previously provided. Therefore, Rodger would just have to complete a sentence like "This reading made reminded me of _____" instead of writing a complete sentence. I walked Rodger through the revised template, explaining what he might write in these areas. After our meeting, I sent Rodger additional feedback in writing. I also sent him the same feedback in a

video and a separate audio file. These allowed him to listen to my comments about his contributions. For the third discussion, I asked him to try to speak five times and for about 45 seconds of total contributions, a slight decrease from previous expectations. At this point I was less worried about his historical thinking and merely wanted him to engage in discussion, so feedback was directed toward talk quantity.

Rodger then missed the third intervention group discussion. He told me he had forgotten the meeting and did not remember to bring his phone when he went out, so he did not receive my text message reminders. He also had not completed the template work or examined my video feedback. Rodger missing the third discussion meant he had no improvement from the prior discussion. In my feedback between the third and fourth discussions, I tried to reemphasize the importance of preparing for the discussion and reminded Rodger that he wanted to improve in this area. I again revised the template, trying to reduce the number of sentences students needed to complete. Since Rodger had not completed the third discussion, the written and video feedback I provided Rodger was almost the same feedback I had provided him for the second discussion, again asking him primarily to increase his talk quantity.

In the fourth intervention group discussion, the group spoke for 28.5 minutes, with about 3 minutes and 30 seconds of non-speaking time. Rodger spoke four times for 24 seconds. This was a one-second decrease in total time from the second discussion but a one-second increase from the first. Rodger participated in the introductory part of the discussion, saying that he was looking forward to performing in the band when the school went back fully after COVID. Arminda, the facilitator, tried to involve him on two other occasions. The first time Rodger said, "I did not prepare any questions." Another time, Rodger asked, "What was the question?" After Arminda repeated it, Rodger said, "Oh." He did not, in this discussion, engage in any further

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examination of historical topics. Based on these contributions, it did not appear that Rodger improved his talk quantity or quality in the fourth discussion.

Over the four intervention group discussions, Rodger's quantity of talk did not substantially change in the number of contributions or their length, his quality of talk did not change as he did not provide insights or questions, and his content analysis did not change. Only once, in the first comment in the first discussion, did he offer any comment that included historical content. When Rodger was asked about the intervention group discussion in the social validity survey, he classified the experience as good. He agreed with every favorable option on the Likert-scale segment (*strongly agree* to *strongly disagree*) of the survey and even checked *strongly agree* for three categories:

1. The discussion process helped me.

2. The discussion process increased my awareness of my opinions and ideas.

3. The discussion gave me better insight into the class content.

On non-Likert scale survey items, Rodger answered that the discussion process was straightforward to understand, that it was enjoyable, and that he might do it again. He also indicated that he thought the resources given were helpful and used the feedback to adjust his materials. However, he also answered that he did not watch any videos to help him prepare. In the open-ended questions, when asked what he could have done better, he wrote that he needed to prepare for the discussion.

When I interviewed Rodger, and I asked questions about the intervention group discussions, such as why he did not participate more or why he did not complete the templates, his responses were "I just didn't know what to say" and "I just didn't do them." When reminded of his desire to talk more, he repeated that he did not know what to say. He appreciated that the

group was small because he thought he could learn more than in the larger class, but that history as a topic was not necessarily what he wanted to talk about.

Impact of Lessons, Technology, and Assignments

My second research question was, **"**How did UDL-informed lessons, technologies, and materials impact the performance of high school students with or being monitored for disabilities?" I tracked how Rodger performed in regular class lessons with and without UDL-informed materials. The regular class met from 11 am – 12 pm on Mondays and Wednesdays. Rodger had perfect regular class attendance of the case study students and always appeared on video in Google Meet. Dr. Marzipan and I talked to him at the beginning of every class. When we asked him about turning in his unsubmitted work, he was always conciliatory, usually answering in short responses, such as "I will."

Rodger may have been limited with his participation because he was taking this class online while physically having to sit in the Newton High School cafeteria with about one hundred other students in a version of a study hall. His being physically situated that way might have inhibited his class participation because speaking out loud might have been noticeable or even perceived as disruptive to the other students quietly working in the cafeteria.

When Dr. Marzipan taught class, she used traditional (non-UDL informed) teaching methods, and her approach sometimes made it hard for students to participate in class. She included a large amount of historical content in her prepared PowerPoint presentations and spoke rapidly. Students infrequently offered comments unless she called on them for answers. Nevertheless, Rodger was able to participate in these classes. For example, when she called on him in a lesson about the global depression, he correctly answered "Russia" regarding a country most impacted. This was consistent in the non-UDL lessons – he appeared to be following her

lectures, and whenever he was called on, he could answer questions related to the discussed content. Rodger would also write responses to questions in the class Google Doc and frequently nod his head in agreement with Dr. Marzipan. As a baseline, Rodger participated, although his participation was limited to answering close-ended questions, consistent with Dr. Marzipan's teaching style. Without Dr. Marzipan's asking him a question directly in these classes, Rodger usually did not speak. In classes tracked from 5/6 – 6/15, he spoke three times in 12 classes, at no point speaking more than one word.

The one significant difference was his final presentation, where he spoke much more than I expected. The final assignment, which Dr. Marzipan created, was a presentation task in which students had to make 2-3 PowerPoint slides about a country not covered in class and then talk about it. Figures 2 – 4 are images of Rodger's PowerPoint slides about Belize. He used them to guide himself through his presentation. When asked a question by Dr. Marzipan, he answered it clearly in a sentence of about ten words.

While Rodger completed this final assignment, he had an inconsistent record of assignment completion. Rodger had completed eight out of 22 possible assignments during the ten-week term. Of those eight, five were in-class notes he finished during lectures, and three were applied learning assignments that he completed at home. All the assignments that Rodger completed were assigned before May 13, the halfway point of the term. Rodger's grade book showed few assignments submitted, including in-class notes, between May 15 – June 18, when the class finished. The exceptions were his class final and the second HAT.

Figure 3

Rodger's Final, Slide 1

Figure 4

Rodger's Final, Slide 2

- Belize was controlled by the british from 1862-1981
- From 1562-1862 the spanish conquistadors
- They gained independence in 1981

Figure 5

Rodger's Final, Slide 3

> Recent events: there has been human trafficking in men and women and girls and lgbti people.

Response to UDL-Informed Class Components. Within the class experiences, there were two ways that I utilized the UDL framework to engage case study students. One was through the design of some of the classes' applied learning assignments. I redesigned assignments to determine if new formats would better support student learning. For instance, I regularly tried to integrate multiple means of representation. The assignments Dr. Marzipan gave students were mostly written texts. I began using the Nearpod software program to offer the students more media – I incorporated audio files, video files, and varied graphics in presentations. I also tried to permit multiple means of expression, where the students could choose how to show comprehension other than a text-based typed response. When Rodger was later surveyed about using these tools, he categorized every technology I integrated as *useful*. He specifically said in open-ended responses that Google Docs and Classroom were "good to use in class" and that Flipgrid was "a great way to record videos." When Rodger was discussing technologies in his interview, his most detailed response was about Google Docs because "it was easy to follow." He also described how he used his phone to follow the Google Docs that Dr.

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Marzipan shared in class. Table 3 provides an overview of assignments and Rodger's performances with them.

Table 3

UDL and Applied Learning Assignments for Rodger

Applied Learning Topic	Applied Learning UDL Principle	Applied Learning Technology	Rodger's Performance
Rise of Adolf Hitler	Representation	Nearpod	Did not complete
Children of the Holocaust	Expression	Flipgrid	Did not complete
Vietnam Photos	Expression	Google Doc	Did not complete
Cuban Missile Crisis	Engagement	EdPuzzle	Partially completed – answered 4 of 5 questions but did not submit assignment to Google Classroom

However, Rodger did not use all these technologies. He did not complete the Nearpod-based assignment that I used to discuss the rise of Adolf Hitler, even though he had completed the initial HAT formatted in the Nearpod program. He did not complete the Flipgrid task on the experiences of children in the Holocaust. Dr. Marzipan and I thought he would create something musical, given his penchant for the saxophone and his familiarity with uploading items to the web as described in his IEP. Rodger also did not fully complete his EdPuzzle task, where students were guided through a video of the Cuban Missile Crisis, with questions popping up at varied points. This technology tool was designed to help moderate student effort by having them not get too far into the video and forget where the answers to the questions were. Rodger spent approximately 11 minutes on the EdPuzzle task and attempted to answer the questions. However,

he did not answer anything correctly, so he appeared to give up before the last question and did not submit the assignment at the end. His EdPuzzle score sheet can be seen in Figure 6.

Figure 6

Rodger's Results, EdPuzzle
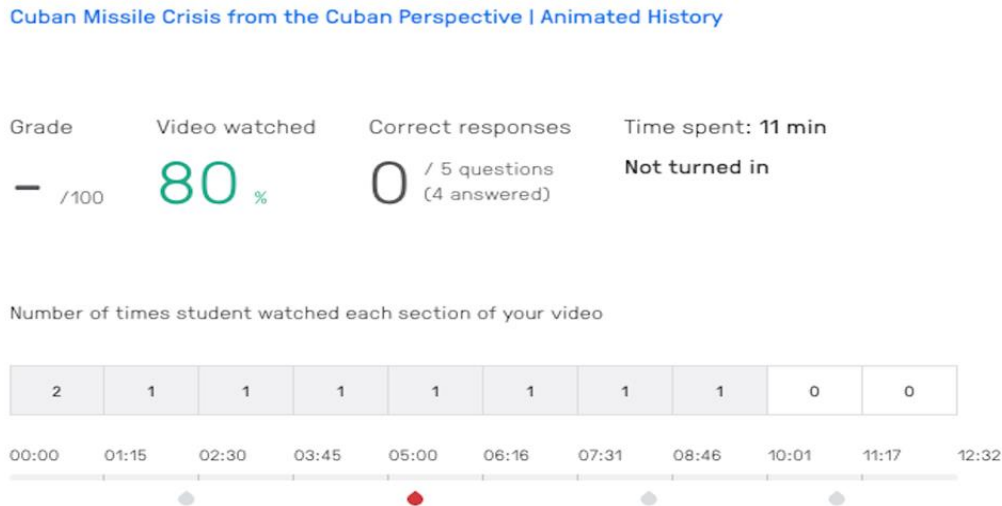
I also used the UDL framework to design lessons on historical thinking and civic online reasoning skills. The UDL checkpoints and guidelines that were applied are noted in Table 4, along with Rodger's performance with them. In contrast to Dr. Marzipan's primarily PowerPoint presentation-driven lessons, my lessons integrated a wider variety of class activities. I incorporated more technologies, small group activities, and media. However, even with this UDL-informed approach, Rodger did not participate more or complete his classwork at a rate different than he did in the lessons facilitated by Dr. Marzipan.

Table 4

Rodger's Response to UDL-Informed Materials and Lessons

UDL Lessons	Lesson topic & Historical Thinking Skill	Technology tools	UDL elements (CAST, 2018)	Rodger's participation and classwork
Lesson One	Nazi Seizure of Power Contextualization	Jamboard	2.2 – clarify syntax and structure 2.5 – Illustrate through multiple media 3.1 – activate background knowledge 3.2 – guide processing and visualization 4.2 – Optimize access to tools and assistive technologies 5.1 – use multiple media for communication 7.2 – optimize relevance, value, and authenticity 8.3 – foster collaboration and community	Pointed out how to use Jamboard Did not speak otherwise in small group Did not complete Jamboard tasks.
Lesson Two	Politics Lateral Reading	Jamboard	2.3 – support decoding of text 3.2 – highlight patterns 3.3 – guide information processing 6.3 – facilitate managing resources and information 8.3 – Foster collaboration and community 9.3 – develop self-assessment	Did not speak during full class discussion. Did not complete Jamboard tasks.
Lesson Three	Vietnam Photographs Sourcing	Jamboard	2.5 – illustrate through use of multiple media 3.2 – highlight patterns, critical features, big ideas 5.3 – build fluencies with graduated levels of support for practice 8.1 – height salience of goals and objectives 8.3 – foster collaboration and community	Did not speak during small group. Answered all questions on Jamboard.
Lesson Four	Cuban Revolution Corroboration	Nearpod	2.5 – Illustrate through multiple media 4.1 – vary the methods for response and navigation 5.1 – use multiple media for communication 7.1 – optimize individual choice and autonomy	Did not speak during full class discussion. Answered question on Nearpod.

Rodger seemed engaged in the first regular class lesson I taught, which was about contextualization. I divided the students into small collaborative groups, and Dr. Marzipan worked with four classmates and him. Dr. Marzipan said that Rodger was "on the ball" with the technology we were using, a program called Jamboard, trying to help his peers use it for note-taking. She said he spoke to the group about how to use the tool. He did not speak otherwise in the group. He also did not take notes about contextualization using the Jamboard, which was the purpose of using it in this lesson. The next time I taught, focusing on lateral reading, I asked students to respond using Jamboard and the chat function in Google Meet to determine if these worked better. Rodger wrote in the chat function but did not talk in class. And even though he accessed the Jamboard, he was one of two students that did not write anything on it.

My third teaching session in the regular class was about the historical thinking skill of sourcing. I used Jamboard with another collaborative group activity, hoping that familiarity with the tool, and experience with a small group, would help all students participate. As seen in Figure 7, Rodger used the Jamboard this time and answered some questions. He did not take notes about the sourcing process, however, as indicated by the blank space beneath *Mr. Daley's Process* in Figure 7. Rodger was in my group and was quiet throughout the conversation. Since the group collaboratively worked through the information on the Jamboard, that collective effort may have aided Rodger. He could hear my think-alouds about specific questions, and he also heard classmates share their thoughts.

The fourth regular class lesson I taught was about the historical thinking skill of corroboration, and I used the Nearpod program this time as a presentation aide. The students accessed the Nearpod presentation on their phones and were prompted by the program to contribute responses to a set of questions about Cuba in the 1950s. Rodger participated and

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provided an extended written response, which is displayed in Figure 8. While Rodger's response was not as detailed as some of his peers, it was nevertheless an accurate response, showing he had been following along with the lesson. We ran out of time in class that day, so we did not continue with other questions in the Nearpod program.

Figure 7

Rodger's Jamboard, Sourcing Lesson
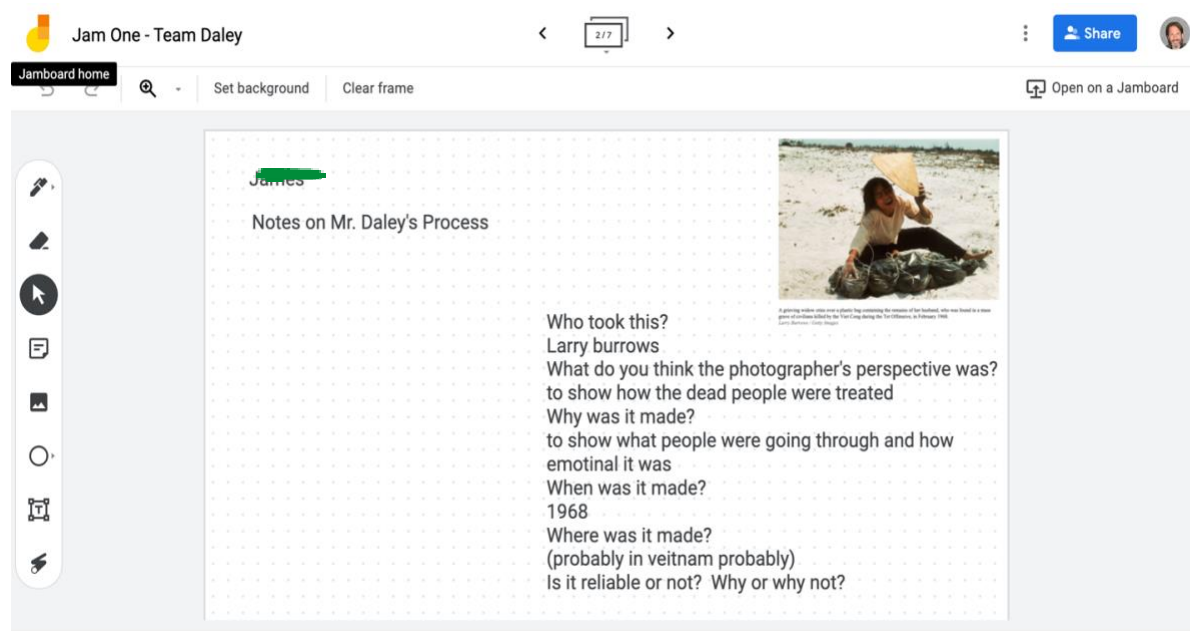
During the social validity survey and interviews, Rodger was asked to reflect on these experiences. The survey asked Rodger, "What did you think of Mr. Daley's contributions to class in addition to what Dr. Marzipan taught you." He responded, "I think the comments Mr. Daley made helped me do my notes in class." This was likely referencing when I typed follow-up notes in the chat function on the Google Meet screen. When asked more specifically about the historical thinking lessons, he answered that each skill (contextualization, lateral reading, sourcing, and corroboration) was *useful*. During his interview, however, Rodger did not respond when asked about contextualization, sourcing, or corroboration. He answered questions about

each one with, "I don't remember." However, when I asked him about lateral reading, he explained that lateral reading was when "you have to open a new tab on Google." This is a principal task of lateral reading, although it was only one of several steps. He did not include any other steps in his response.

Figure 8

Rodger's Response, Nearpod, Corroboration Lesson
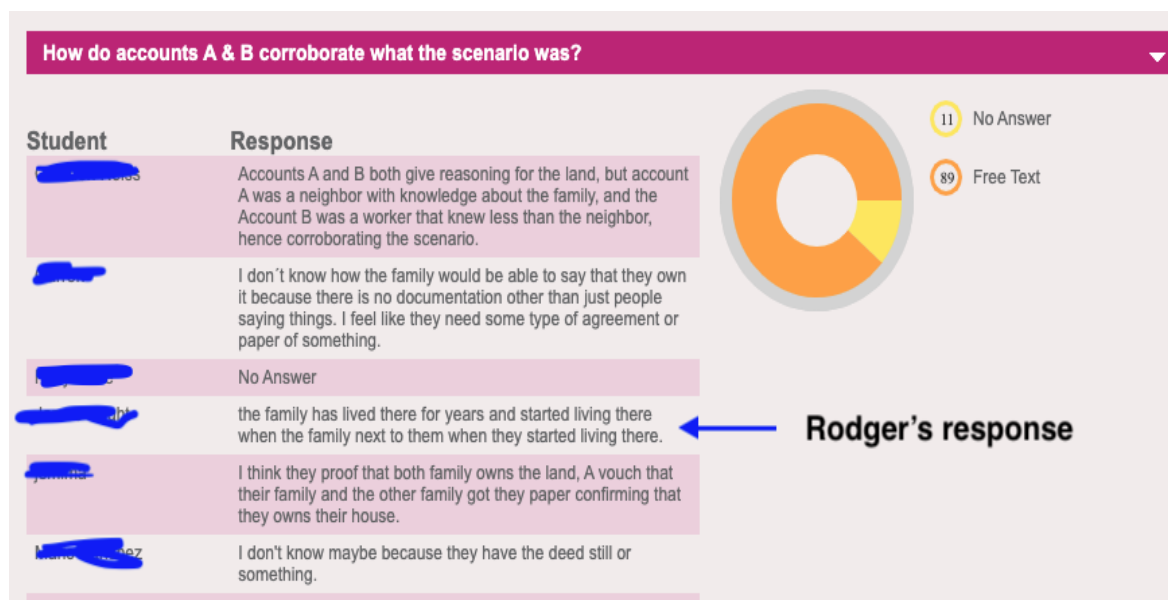
Considering Historical Thinking

My third research question was, "How did this intervention impact high school students with or being monitored for disabilities in the development of historical thinking skills?" This was principally evaluated through the HAT. Rodger's HAT scores, both first and second assessments, are listed in Table 5.

Rodgers' performance on the HAT suggests he made minor growth in historical thinking. Rodger completed both the first and the second HAT. He answered all questions and submitted both on time through the Nearpod program. The first question of the first HAT asked him to read a short historical passage, which was edited to a 6th-grade Lexile level, and then answer why the

story was written and whether it was reliable, which was meant to test the sourcing historical thinking skill. Rodger's answer is listed in Figure 9.

Table 5

Rodger's HAT Scores

HAT Question	Skills assessed	First HAT Scores	Second HAT Scores	Change
Q1 – Text Analysis	Sourcing	(1) Basic	(1) Basic	0
Q2 – Photo Analysis	Corroboration	(1) Basic	(1) Basic	0
Q3 – Website or YouTube	Lateral Reading	(1) Basic	(2) Emergent	+1
Total				+1

Figure 9

Rodger's First Response, HAT 1

#1) I think the story was written to tell us about how people treated the Armenians. #2) Yes because the author is descriptive about what is happening in the article.

This was scored as a *Basic* response. While the first answer ("#1") may have been sufficient to reach an *Emergent* level, the second part ("#2") did not. It was expected that the student should comment on who the author was and what their situation might have been to provide a reason the passage was or was not reliable. Many students answered similarly to Rodger, given that they had not been taught to consider the authors of the content.

The second HAT question asked students to examine a photo of people titled "Refugees at the Taurus Pass" with a short, written description of the photo's origins. Students had to

answer if the photo confirmed that the Armenian Genocide took place and what about the photo might make it trustworthy or untrustworthy. Rodger's response is in Figure 10. This question was designed to evaluate the student's ability with the historical thinking skill of corroboration.

Figure 10

Rodger's Second Response, HAT 1

#1) Yes because the woman in front is holding a baby and there is a little boy and some white men. #2) it is trust worthy because there is a good description.

This was a *Basic* response, given that Rodger's first comment did not clearly explain why a photo of a woman holding a baby was proof the genocide occurred, even though he said affirmatively the photo is proof. Further, his second answer was somewhat unclear. While he presumably was responding to the short blurb about the photo, he did not qualify what made the description good or how that description made the photo trustworthy. He would have to explain that with more specific detail to reach an *Emergent* level.

The third question on the HAT asked Rodger to examine a website called *Fact Check Armenia*, and he was asked to answer whether the website was trustworthy or untrustworthy and why. Rodger supplied the response in Figure 11.

Figure 11

Rodger's Third Response, HAT 1
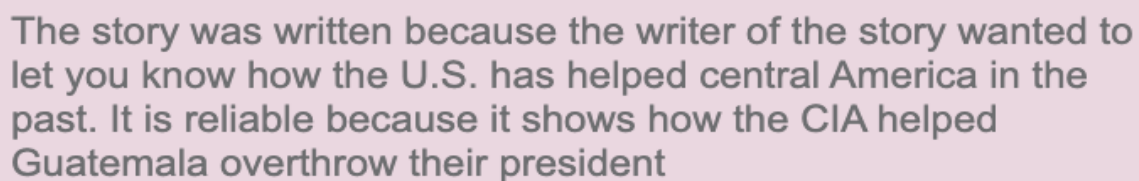
trustworthy a whole lot because it tells us all about the Armenian genocide

This was scored as *Basic,* as this question measured whether Rodger used lateral reading to assess the website, and there was no evidence he did. He was not critical of the website, nor did he explain what the site told that made him think the description was trustworthy.

Rodger completed the second HAT at the end of the term. The first question again tested his sourcing skill and asked Rodger to read a passage written by a former CIA agent named Roettinger. Rodger had to explain why he thought the story was written and whether the story was reliable. Rodger's response is shown in Figure 12.

Figure 12

Rodger's First Response, HAT 2

The story was written because the writer of the story wanted to let you know how the U.S. has helped central America in the past. It is reliable because it shows how the CIA helped Guatemala overthrow their president

This response was scored at the *Basic* level because even though Rodger provided a more in-depth explanation of the passage than during the first HAT, it still did not meet the SHEG standards for *Emergent*. Rodger's response to the first part of the question was okay but lacked detail about what specifically the author wanted people to know about the U.S. in Central America. In the second part of the question, Rodger did not critically examine the author's intent or even who the author was. So, while he referenced more details from the passage in this response, he did not demonstrate a greater ability with sourcing.

The second question again asked that students complete a photo analysis by examining an image and an accompanying description to test the corroboration skill. The students were first asked, "do you think this photo corroborates that Roettinger was correct in his explanation of the CIA overthrow of President Arbenz? Explain." Then they were asked, "What about this photo

makes you consider it trustworthy or untrustworthy? Use the information provided to explain."

Rodger's answer is in Figure 13.

Figure 13

Rodger's Second Response, HAT 2

> Yes he helped the us int the air force in 1946 and then he became a photojournalist in 1954. It is trustworthy because it shows how Guatemalas president is helping the country.

This was a *Basic* response. The first part of Rodger's response focuses on the photographer, which could be fine, although the question is about the photo and his answer does not directly explain why the information about the photographer corroborates the first passage. The second part of Rodger's response showed that he had apprehended some information from the photo and its description, and that it was about Arbnez, but again, Rodger does not explain how it is trustworthy because the photo was not of Arbenz himself helping the people.

The third HAT question asked Rodger to evaluate a YouTube video about the United States' anti-government activities in Guatemala in the 1950s. It specifically asked, "How trustworthy do you think this website/YouTube video is? Explain?" This was aimed at testing his lateral reading ability. Rodger's response is in Figure 14.

Figure 14

Rodger's Third Response, HAT 2

> It is not trustworthy because it is made by a single person who is the person making all of the videos on the YouTube channel.

Rodger's response to these questions was more substantial than in the first HAT, where he only said, "trustworthy a whole lot…." In this response, he clearly did not think it was

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trustworthy and had a reason for it. He indicated that the YouTube video had a creator. This demonstrated that he understood that the material was made by someone who potentially had a perspective. Dr. Marzipan and I scored this as an *Emergent* response. However, there was no evidence that he looked up anything about the video creator, which would have shown that the specific video was created by a state-sponsored media group in Venezuela which has typically been anti-American in its materials. Additionally, he indicated in his answer that all the videos on YouTube were made by the same person, which is not true. We thus scored his response as *Emergent* and not *Basic* because he understood that someone made the videos, and their perspective could be called into question, although simultaneously that score may have been better justified had Rodger demonstrated an effort to examine another source.

Overall, Rodger demonstrated minor improvement in historical thinking skills.

Dr. Marzipan's Observations

During her interview with me, Dr. Marzipan shared her insights on Rodger. She felt Rodger grew during the class even though it did not show in the grade book. She thought she built a camaraderie with Rodger, leading to an improved comfort level over the term. When she looked at Rodger on Google Meet, she could see he was listening to her lectures. She recalled that Rodger usually tried to answer questions. Therefore, she categorized the overall change for Rodger as positive. This did not lead to more work being completed, however. She thought Rodger started the term well but struggled after a few weeks. Dr. Marzipan recalled when she tried to meet with Rodger on a Friday, and he did not show up. She referenced multiple reminders she sent him to do his work, but he still did not complete it. She also mentioned that Rodger's participation in the structured small group discussion did not seem to get him to participate more in class. She worried that Rodger did not understand that he was at risk of

failing the course. Dr. Marzipan also did not know what else she could do since Rodger was not completing the work, even though she believed he could do it.

Summary

Rodger was the case study student who historically had struggled the most in a traditional classroom. It was evident from his IEP that working in an online environment would also be difficult, given that he did better with regular adult contact. Further, the intervention group discussion would be hard for him since he generally performed better with talking when he had more time and familiarity with group members. We only had a narrow window of ten weeks to develop a relationship between him and his classmates. I used the UDL framework to consider his needs in my lesson and small group design. What I designed, while made for all, was sensitive to his skills and abilities. Assignment and classwork scaffolds and curricular materials were created and then tweaked with these considerations. I also used regular vocal reminders and tried different technologies to foster greater executive functioning from Rodger. In the end, he did not demonstrate improvement in talk quantity or quality, did not demonstrably function differently in UDL-informed lessons, and only showed minor improvement in his HAT results.

Case Study #2: Conan Coleman

Participant Characteristics

Conan Coleman was a 14-year-old freshman at the start of this intervention. He was officially categorized as having Other Health Impairment and he reported that he had dyslexia. He had an IEP that had been written during his last year in middle school, and he had been participating in school remotely for the entire year. He had received special education services since his 8th-grade year. His mother, the parent he lived with, had initiated the referral for services because she was concerned about his reading and writing abilities.

Conan's IEP stated that he had earned a grade of 17% in English, based on his average score across all assignments in the spring semester of 2020, during middle school the previous year. In social studies, he scored better, with a total average for the class of 55% across all assignments, although that was still a failing course grade. Conan's performance in math, science, physical education, and study skills classes all appeared to be strong, as his total class average grade in those classes was passing or excelling. His science class score averaged across assignments was 94%. Across all his class subjects, lack of assignment completion seemed to lower his grades.

In February 2019, the Wechsler Individual Achievement Test (WIAT-III) was administered to Conan. The WIAT-III assesses a broad range of academic skills and helps determine the need for special education services. The WIAT-III subtest scores range from 40 to 180, with average scores ranging from 86 – 115. On this exam, Conan scored lower on the subtest for basic reading, earning a 62. He also scored low in word reading, with a score of 56. Slightly higher scores, but still below average, were his scores in pseudoword decoding (71), reading comprehension (84), written expression (80), and sentence composition (83). Conan scored at the average level in essay composition ability with a score of 103 and above average in the receptive vocabulary subset with a score of 122.

The IEP also indicated that Conan was given an unspecified reading assessment to determine his reading skills in February 2020. On this test, which Conan completed with the aid of a human reader, he achieved a score of 67% comprehension in reading 8th-grade passages. The IEP referenced another unspecified exam, and here he earned a 40% score in comprehending 5th-grade level passages, although it was not explained whether he had a human reader. In the

IEP, coupled with the assessment scores, it was also reported that he had earned a 2 out of 4 on a summative writing assignment in his English class.

In his 8th grade year, Conan's science, language arts, and special education teachers jointly administered an Informal Executive Functioning questionnaire developed by Dawson and Guare. This questionnaire permits teachers to assess specific students' strengths and weaknesses with executive functioning. It breaks down executive functioning into twelve different areas. Teachers can use it to categorize the student's three strongest and three weakest areas. In Conan's case, the teachers' analysis suggested that Conan's strongest areas of executive functioning were emotional control, working memory, and task initiation. Their analysis indicated that Conan's executive functioning challenges were organization, flexibility, and time management. The teachers produced a summary statement where they concluded that Conan's struggles in these areas inhibited his ability to participate in the general education curriculum. They believed he required accommodations and specially designed instruction.

Conan told me he believed he had dyslexia in my initial interview with him. Despite Conan's belief that he had dyslexia, he qualified for services as Other Health Impaired. Students with dyslexia are often served under this category, as dyslexia and ADHD are not categories of disability under IDEA. In the initial interview, Conan shared lengthy anecdotes about his interests. He occasionally struggled to share his exact thoughts, needing a moment to process what he wanted to say. Conan was also overly apologetic, saying sorry frequently when he had done nothing wrong.

Impact of the Discussion Protocol

My first research question was, "How did an experience in a UDL-informed, structured, and peer-mediated small group discussion affect the quality and quantity of talk for high school

students with or being monitored for disabilities? Table 6 summarizes Conan's discussion results. Each intervention group discussion took place virtually and outside regular classroom meeting times. The discussions were in the afternoon after students had completed their classes.

Conan attended all four discussion sessions. The first discussion was a baseline to see how students would respond in a small group setting, and the discussion was centered on the 1917 Russian Revolution. The students had been given questions ahead of time, and I had asked a non-case study student to lead the discussion. The students spoke for 17 minutes as a group and had about 4 minutes of quiet time where no student spoke. Conan spoke in this discussion six separate times for just over three minutes. Conan's median turn length in speaking was approximately 35 seconds. His contributions were thoughtful and demonstrated his preparation. His first response lasted nearly 40 seconds and he explained that he might have trusted Russian leader Vladimir Lenin. Still, since he had researched him, he realized that Lenin often did not respond well to criticism and, in his opinion, was an untrustworthy leader. It was an answer that demonstrated that Conan could not only participate but that he had done additional research since those details about Lenin were not included in the preparatory reading. He would later also contribute a comment that linked the discussion to present-day issues:

> I would have to agree with you…modern-day politics, uh, have been hitting kind of strains, let's say. And it's been kind of hard for some people to accept other people's opinions without creating an argument or having a breakup or anything. So, I think that modern d--, modern-day politics is more about that "my opinion is correct, you're wrong. If you don't agree with me, then you're not my friend or girlfriend." And I think that's a problem the same way with, or not the same level, but the same way, with this.

Table 6

Conan's Results, Intervention Group Discussion

	Number of utterances	Total Time Spoken	Longest utterance (Words/Time)	Quality of talk/Content Analysis
Discussion 1	6	3 minutes, 6 seconds	133 words/55 seconds	No evidence of historical thinking
Discussion 2	9	3 minutes, 58 seconds	161 words/80 seconds	No evidence of historical thinking
Discussion 3	10	4 minutes, 3 seconds	115 words/58 seconds	No evidence of historical thinking
Discussion 4	6	2 minutes, 46 seconds	100 words/60 seconds	Partial evidence of historical thinking

In the baseline intervention group discussion, Conan's talk quantity appeared good, as his utterance frequency was in the upper half of the group. His talk quality was also good, as his contributions were always on the Russian Revolution topic and connected to the conversation at that moment. His content analysis was basic – in reviewing his comments, like the shared quote about Lenin, he had done extra research about Lenin's leadership to evaluate the sources he was given. This showed he might be able to, when more clearly directed, engage in SHEG-defined corroboration or sourcing, and clear historical thinking skills. But his comments did not specifically dispute or confirm the given materials, nor did they ask about how the provided documents were created. So, there was no evidence of historical thinking skill yet.

In providing Conan with feedback, I told him his contributions were thoughtful, and he improved as the discussion continued. I explained that his last comment, which tied the discussion to contemporary events, was his best, and he should continue looking for opportunities to connect historical events to the present day. Since we had not discussed

historical thinking during class time yet, I mainly focused on asking Conan to improve in talk quantity. However, I also wanted him to try to generate discussion instead of just building off what other people said because he needed to start seeing himself as someone who could produce original historical thoughts.

I facilitated the second intervention group discussion, modeling the structured small group discussion protocol I wanted the students to use. In this discussion, Conan hit every goal I had set for him. He spoke nine times for a total of 3 minutes and 59 seconds. Both measures were increases from the previous discussion. His median contribution length was 30 seconds. However, he did not speak at all for the final 10 minutes. When he spoke in those first twenty minutes, he usually helped extend the discussion around a classmate's question with a detailed answer. His responses demonstrated that he had again done additional research, as, for example, he spoke about the marking system the Nazis used for the Jewish people in Europe and the total number of Jewish people killed in the Holocaust, neither of which was in the reading packet.

Conan made gains in talk quantity and quality in this discussion. He spoke more than most of his intervention group peers and advanced the discussion using research he had done. At this stage of the regular class, we were just starting to discuss historical thinking, so he did not yet demonstrate this competency in his content analysis regarding historical thinking. Again, however, I thought his questions, such as "what do you think it was truly like to live in the Holocaust?" hinted at his ability to use a skill like contextualization, but again, he did not demonstrate this fully.

Seeing this improved contribution, I continued to ask Conan to improve his talk quantity in my feedback. I also complimented his attempt to think like people from the studied period. I explained to him that he was starting to move beyond basic questions like "what do you all think

about this topic" to questions about the period and the people living in that time. Since that type of thinking was essential for honing historical thinking skills, I wanted him to keep doing that. Further, since questioning a basic explanation of a historical document or event was an essential building block of historical thinking, I asked him to play a devil's advocate role in the following conversation. Since I noticed that he investigated the documents on his own, I wanted him to prompt the same skepticism in his classmates. By doing so, I thought Conan could help the other participants discuss historical thinking skills.

In the third discussion, Conan addressed some of my suggestions. He contributed more, speaking ten distinct times, once more than the last time. His median length decreased, though, to an average of 25 seconds. Conan had a few contributions under 10 seconds, although he had two that were close to one minute long. He spoke for over four minutes, which was below his goal but above what he had done in the prior discussion. Conan once again mainly agreed with his peers and did not try to dispute the things they said. I realized that being a devil's advocate was hard to do without more modeling, but I had wanted to see if he would attempt it, and he did not. However, Conan asked more open-ended questions, which permitted his peers to respond at greater length. This was a positive development, as Conan frequently fostered new strands of discussion.

Conan completed his template for the third discussion. He used the template to guide his work within the discussion, so the items he had to provide, an *insight* on the reading, and *questions about* the reading, were prepared. He read these items verbatim from his template. Conan also used the template for notetaking. A notes section was built into the template, and Conan was the first student in the group to use the template for notetaking. This put him in an excellent position to offer the concluding summary a group member needed to do at the end of

the discussion. However, when asked to do so, Conan said, "I'll pass." Overall, his talk quantity increased again, and his talk quality was strong, even though he still just mainly agreed with his peers. While we talked about contextualization and lateral reading in regular class lessons, he did not necessarily utilize either in this discussion. But contributions were more complex. For example, he shared why the conflict in Palestine continued, again demonstrating his doing additional research:

> I think that is a very difficult thing to talk about. Just, um, I'd say in my opinion, if the U.S. stopped getting involved and sta-- if the U.S. stopped supplying, uh, Islam-- I forgot the name, geez. Uh, if the, uh, if the U.S. stops supplying the war and just leaves entirely, I think there could be a possibility of peace in the future because U-- one side or the other will eventually run out of supplies or have too many losses and then just stop fighting because, well, it wouldn't be worth it to continue. -- not revolution, this war will continue for a long, long time.

However, this comment was not a demonstration of contextualization yet, as Conan did not veer into thinking about what was happening in the given period that might have prompted the U.S. to do so.

In my feedback, I discussed how the original insight he provided, which was about the history of the Palestinian people, was strong because it asked for more information so that he and the group could form a more in-depth opinion. He was demonstrating skill in considering that the narrative provided by the given documents was not the whole story. He had not yet learned about sourcing or corroboration, but this question indicated basic aptitude. I wanted him to consider how to do more of this, and I again suggested increasing his contributions and adopting the

devil's advocate position. However, I offered more specific directions on how to do this. I also asked him to be prepared to complete the summary at the end of the next discussion.

In the fourth intervention group discussion, the group spoke for almost 30 minutes, with about 3 minutes and 30 seconds of non-speaking time. Conan spoke for 2 minutes and 46 seconds, which was his least amount in the four discussions. He spoke six times, and his median contribution length decreased to 18.5 seconds. Conan seemed prepared when he shared an insight regarding the U.S. government's attempts to assassinate Fidel Castro. But when Arminda asked him if he had a question to share, he said, "No." He had one comment of note, which was when he agreed with Newark about how Americans may be too eager to trust videos on YouTube because those videos looked polished. Conan was ready when asked to complete the summary at the end of this discussion. However, he lost his train of thought, apologized to the group, and concluded:

> Summary for the discussion. We mainly focused on the questions. Sorry. For the summary, we mainly focused on the questions and discussion we had. We did pretty good. So, to summarize in full, we mainly talked about the s—if the source is reli—if this —video was reliable or not. We did some other questions too, like the assassinations and the, uh, gosh, I'm terrible at this. Um, yeah, like, summarizing. Okay, I think that's it. That's about it. That's all I got.

In looking at Conan's overall performance in the intervention discussions, it seemed like he was making progress from the first to the third discussion, increasing his contributions, remaining on topic, responding to his peers, and demonstrating competencies like outside researching that could help him develop historical thinking skills. He also steadily increased his speaking time from the first to the third discussion. He continued to improve his talk quantity

and quality, although he regressed in the fourth discussion. When analyzing the transcripts, it was uncommon to find exact evidence of historical thinking defined by SHEG. That made sense in the first two discussions because we had not reviewed these skills in regular class time. In the last two discussions, which came after lessons on historical thinking skills, he started to provide glimpses of nascent historical thinking ability. In the fourth discussion, Conan had a remark that might qualify as demonstrating civic reasoning:

> Yes, I was gonna say something similar. I think conveniency [sic] is the reason why someone may believe someone that's not an expert 'cause, uh, these days, anyone can become an author. Anyone can make a YouTube video. So, a person that might be good at, um, presenting, presenting something, well, is going to have a better chance at getting a-- --the person that ha—yeah, I'm saying – what I'm saying is that since everyone can be an author and everyone can be a—make a YouTube video, then it's more convenient and easier to find that random person than the actual expert.

In the social validity survey, Conan answered Likert-scale questions about the discussion, ranging from *strongly agree* to *strongly disagree*. He did not *strongly agree* with any statement. He agreed with these statements:

1. The discussion group was a positive experience for me.
2. The discussion process helped me become more aware of my thoughts and insights.
3. The discussion process helped me to organize my thoughts and ideas more clearly.
4. The discussion process helped me to understand the ideas and opinions of my classmates.
5. The discussion helped me learn how to listen to and respond better to classmates.
6. The discussion helped me to understand historical concepts in general.

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7. The discussion helped me to understand online content for this class.

Conan disagreed with three of the statements:

1. The discussion process helped me to contribute better in other classroom conversations with classmates.

2. The discussion process helped me to understand concepts for civic life.

3. The discussion helped me to understand history content for this class.

In answering non-Likert questions, Conan indicated that the template, instructions, and training videos helped him comprehend the discussion process. Simultaneously, he only found the discussion process *somewhat easy* to decipher. When the survey asked Conan an open-response question about what could be improved, he wrote: "I don't have any suggestions."

Conan's second interview comments about the intervention group discussion process were like what he answered in the survey. He explained that he could not have led the group because he would not remember the group members' names. Conan also shared an insight on why he might have struggled in the fourth discussion. He said he found doing the discussion summary difficult because he was using the speech-to-text function of his Google Docs program to take notes on his classmates' comments during the discussion. By doing this, he could not wholly participate in the discussion, which decreased his number of contributions. He admitted that his preparation could have been more focused but that he was tired at the end of the school year. Conan also said that his WIFI had poor reception during the fourth discussion.

Impact of Lessons, Technology, and Assignments

My second research question was, "How did UDL-informed lessons, technologies, and materials impact the performance of high school students with or being monitored for disabilities?" I tracked how Conan did in lessons with and without UDL-informed materials.

Conan attended every class over the term, although he did not leave his video screen on during the class, and his WIFI kicked him out of at least two classes. He explained that turning off his camera facilitated his use of speech-to-text for taking notes. Otherwise, he said teachers assumed he was trying to talk, and they would pause their teaching to see what he wanted to say. He did not want other students to know he was using speech-to-text.

Dr. Marzipan taught using traditional (non-UDL informed) teaching methods, and her approach may have limited student participation. Over the course of the semester, Conan infrequently participated in her classes. If he had questions for Dr. Marzipan, he would ask them after class when others had logged off. He did this twice, one time before the final, to ensure he understood Dr. Marzipan's expectations. He spoke five times in classes from 5/6 – 6/15, occasionally engaging in discussions with classmates.

Conan completed all 22 assignments, although he usually completed and submitted his work, including class notes, at about 5 pm. This was because he could not complete his assignments in class because he used speech-to-text. He would take the best notes he could during class and re-write them when he had more time to correct his original notes. He expressed his frustration that while speech-to-text was helpful, it still made errors that he would have to fix. He, therefore, tried to keep his comments succinct so there were fewer errors he would have to correct. The result was that his notes appeared to be shorter than what his classmates produced. This was often the case with other text-based activities Conan completed. The one occasion where Conan went beyond the assignment requirements was when students were asked to complete an assignment that was not text-based. Using Flipgrid, Conan made an original audio-visual composition that he recorded and edited about children experiencing the Holocaust. It was several minutes long, and Dr. Marzipan complimented him publicly about his expanded effort.

Conan produced a detailed PowerPoint presentation about Ghana for his final assignment, the slides for which can be seen in Figures 15 and 16. He incorporated multiple images, which included maps and climate charts, as well as demographic facts in paragraph form. In his second slide, seen in Figure 16, he analyzed Ghana's current political situation. In his research he had found that Ghana had planted nearly five million trees in one day. He concluded that Ghana must be a politically stable country because the people could focus on this type of social activity, as opposed to being beset by conflict. Both Dr. Marzipan and I thought was a novel insight among the regular class students since most did not venture anything similar about their respective countries.

Figure 15

Conan's Final, Slide 1

Figure 16

Conan's Final, Slide 2

        Response to UDL-Informed Class Components. As previously mentioned, within the

class experiences, I utilized the UDL framework to redesign applied learning assignments,

regularly integrating multiple means of representation, engagement, and action and expression.

Because Conan did all the assignments in UDL and non-UDL lessons, I considered differences

in his completed works' quality. Conan completed his Flipgrid assignment and commented that

he enjoyed doing it because he liked using his editing software. He also appreciated Nearpod

assignments because he could use the embedded audio directions. He explained that the human

voice embedded within the Nearpod slides helped him follow along better than the robotic voice

that typically accompanied text-to-speech applications. This was because a human voice would

emphasize and accent words better. Table 7 details the different assignments and Conan's

performance on them.

Table 7

UDL and Applied Learning Assignments for Conan

Applied Learning Topic	Applied Learning UDL Principle	Applied Learning Technology	Conan's Performance
Rise of Adolf Hitler	Representation	Nearpod	Fully completed required questions and added additional materials in optional activity.
Children of the Holocaust	Expression	Flipgrid	Fully completed a 2-minute audio-visual recording with composed music.
Vietnam Photos	Expression	Google Doc	Fully completed with 5 different political cartoons as required.
Cuban Missile Crisis	Engagement	EdPuzzle	Fully completed, but only 1 correct response out of 5. Spent twice as much time on assignment as any other student

Conan did not appreciate all technologies integrated into the UDL-informed lessons, however. Conan struggled with the EdPuzzle assignment, which is shown in Figure 17. He spent 25 minutes completing this assignment. He watched a 12-minute video and took another 13 minutes to answer the five accompanying questions. Yet, he only recorded one correct answer among those five questions. He did not like a setting on EdPuzzle that required the students to answer a particular question before continuing with the video. Instead, he wanted to watch the full video and answer the questions. Nevertheless, Conan's responses to the EdPuzzle questions were thoughtful. In the examples in Figure 18, he contemplated the context of the historical decisions shown in the video. While his first response in Figure 18 lacks analysis of Cuba's

discomfort with the U.S. based on what was relayed in the video, his second response was accurate regarding American beliefs about communism in the Western Hemisphere.

Figure 17

Conan's Results, EdPuzzle Assignment
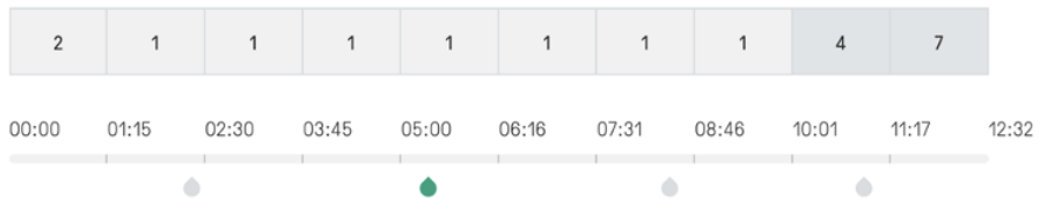
Figure 18

Conan's Responses, EdPuzzle Assignment

Table 8

Conan's Response to UDL-Informed Materials and Lessons

UDL Lessons	Lesson topic & Historical Thinking Skill	Technology tools	UDL elements (CAST, 2018)	Conan's participation and classwork
Lesson One	Nazi Seizure of Power Contextualization	Jamboard	2.2 – clarify syntax and structure 2.5 – Illustrate through multiple media 3.1 – activate background knowledge 3.2 – guide processing and visualization 4.2 – Optimize access to tools and assistive technologies 5.1 – use multiple media for communication 7.2 – optimize relevance, value, and authenticity 8.3 – foster collaboration and community	Spoke first in the class in full class discussion. Did not speak in small group discussion. Wrote some notes in Jamboard.
Lesson Two	Politics Lateral Reading	Jamboard	2.3 – support decoding of text 3.2 – highlight patterns 3.3 – guide information processing 6.3 – facilitate managing resources and information 8.3 – Foster collaboration and community 9.3 – develop self-assessment and reflection	Did not participate in full class discussion. Answered all questions on Jamboard
Lesson Three	Vietnam Photographs Sourcing	Jamboard	2.5 – illustrate through use of multiple media 3.2 – highlight patterns, critical features, big ideas 5.3 – build fluencies with graduate levels of support for practice 8.1 – height salience of goals and objectives 8.3 – foster collaboration and community	Actively participated in small group discussion. Answered all questions on Jamboard
Lesson Four	Cuban Revolution Corroboration	Nearpod	2.5 – Illustrate through multiple media 4.1 – vary the methods for response and navigation 5.1 – use multiple media for communication 7.1 – optimize individual choice and autonomy	Did not participate in full class discussion. Did not complete Nearpod/Wifi

Conan was also generally successful using the in-class technologies, such as the collaborative whiteboard tool, Jamboard. By the third lesson I taught, Conan used Jamboard productively, as seen in Figure 19. Consistent with most of his other assignments, he finished his work after class had ended. As noted from the 1:47 PM time stamp in Figure 19, Conan returned to Jamboard after class ended and completed each question. He showed he was able to use Jamboard independently. However, some technologies were problematic for Conan. He could not complete the Nearpod assignment that I gave students in the fourth lesson, which was about the historical thinking skill of corroboration. Conan's home WIFI reception prevented him first from accessing the Nearpod and then from attending the entire class, so he vanished midway through the lesson. Because of this, there is no Nearpod artifact for that lesson from Conan.

Figure 19

Conan's Jamboard, Sourcing Lesson

When surveyed about his experiences in the classroom in the social validity survey, Conan commented on the varied technologies. He found Jamboard as *neither useful nor not useful*. He categorized Google Classroom and Flipgrid, by comparison, as *very useful*. When given a chance to provide an open-ended response, he indicated that he liked Flipgrid because it allowed him to use his editing software. While he said that Google Classroom and Docs were easy to use, he found Jamboard unreliable. Conan's interview responses were consistent with his survey responses. Google Docs, Google Classroom, and Flipgrid were his favorite tools to use. He appreciated the Flipgrid assignment and enjoyed the chance to use his editing software. However, he said that Flipgrid might not be the best tool for learning, as a student like him might spend all their time working on the editing and learn nothing about the history content.

When asked the question, "What did you think of Mr. Daley's contributions to the class in addition to what you were taught by Dr. Marzipan?" his survey response was, "Mr. daily [sic] was awesome 8/10 both teachers are very helpful this year. Same thing with Dr. Marizpan 8/10." Within the interview, when Conan was asked about the variations between the UDL-informed lessons and the non-UDL lessons, he shared, "I think you are a lot slower, which I liked, as Dr. Marzipan was more of a fast pace, which is all right, but when she did talk, I was scrambling." When asked on the survey about the historical thinking lessons, he answered that the lessons for the three primary historical thinking skills (contextualization, sourcing, and corroboration) were *useful,* but he rated the lateral reading lesson as *very useful*. During his interview, however, Conan explained that he did not remember the three historical thinking lessons. For the lateral reading lesson, however, he said, "Looking at the website where you're getting information…like what their biases are, and how like they portray information, I think that is very important."

Considering Historical Thinking

My third research question was, "How did this intervention impact high school students with or being monitored for disabilities in the development of historical thinking skills?" This was evaluated through the HAT. Conan's assessment scores are listed in Table 9.

Table 9

Conan's HAT Scores

HAT Question	Skills assessed	First HAT Scores	Second HAT Scores	Change
Q1 – Text Analysis	Sourcing	(2) Emergent	(2) Emergent	0
Q2 – Photo Analysis	Corroboration	(2) Emergent	(3) Proficient	+1
Q3 – Website or YouTube	Lateral Reading	(2) Emergent	(2) Emergent	0
Total				+1

Conan's performance on the HAT suggests he made minor growth in historical thinking. He completed the first and second HAT, answering all questions and submitting each assessment on time. The HATs were administered through the Nearpod program, with which Conan had some technical issues on the first HAT. For this reason, Conan completed the first HAT twice because he was not sure if the program had recorded his responses the first time. We thus had two answers to each question from Conan. Dr. Marzipan and I used his first response only, although we were interested in the variations between responses.

The first question of the HAT asked Conan to read a short historical passage, which was edited to a 6th-grade Lexile level, and then answer why the story about the Armenian Genocide

was written and whether it was reliable, which was meant to test his sourcing skill. Conan's

answer is listed in Figure 20.

Figure 20

Conan's First Response(s), HAT 1

1. The reason why this story was written, was to show people how badly Armenians were treated. In the text, It talks about 1220 Armenians being deported by Lieutenant Said Ahmed Mukhtar al-Ba'aj, About 120 men,700 Children and 400 women. In the beginning all the men are killed "Here the 120 men were taken away, and, as I was informed later, they were all killed." At the end of the story, A gang stopped the group and killed all the Armenians "They ordered Mohamed and his team to keep away. They shot every one of the Armenians and threw them in the river." 2. yes, I do think this story is reliable. I think this because It is in the perspective of the defected Ottoman officer, So he knows the people.

I believe the purpose of this writing was to inform the reader about what happened in December 1916. I believe that this story it's not reliable, if I knew who wrote this story I would trust the story a little more because how do I know he's not leaving out important information, how do I know he's not lying and skewing the information to make it seem like he's the good guy. Was the person that was talking in the story the one that wrote the story, because if so then I believe it's likely he left some important information out to make him not seem like a bad person.

This was an *Emergent* response. The answer to the first question was complete and

effective, addressing a potential historical reason why the passage had been written. Conan's

answer to the second part was detailed, but Conan did not explain why it mattered that the

respondent was an Ottoman officer. Had he explained more, this may have resulted in a

Proficient response score.

The second HAT item asked students to examine a photograph of a group of people titled

"Refugees at Taurus Pass," accompanied by a short description of the photo's origins. The

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question was designed to evaluate a student's ability with the historical thinking skill of

corroboration. Students had to answer if the photo confirmed that the Armenian Genocide took

place and what about the photo might make it trustworthy or untrustworthy. Conan's response is

in Figure 21.

Figure 21

Conan's Second Response, HAT 1

> 1. Now I do not believe that this proves that that the Armenian genocide may have happened. That image itself does not show much of a massacre in my opinion, and no boot camp of any kind. They're not in jumpsuits or prison Uniforms that can indicate that something's going on. 2.I think this image is untrustworthy. By getting someone else's opinion, I believe this image is stage. I think this because how it looks ,looks suspicious to me , it looks like a setup.

> No, Because if you look at the image there is nothing that can even lean to the idea that the Armenian genocide could have taken place. usually, when people think of genocide they think of blood and or body piles, And the people in the image don't look sad, in fact, some of the people do look joyful. I think this image is untrustworthy, If you look up the author he's a German Soldier. So is likely That some fishy stuff is going on. that is why I still grieve my first assumption that this was staged or skewed in a way.

This was an *Emergent* response. Conan was skeptical about whether the image accurately

represented what happened in Turkey, and he described elements of the photograph that would

imply a massacre commonly associated with genocide. His skepticism about the staging of the

photo demonstrated historical thinking, but he needed to elaborate his reasoning more fully. In

the second response, he recognized from the blurb that the photographer was a German soldier.

If explained more thoroughly (and had he included it in his first response), this fact may have

also led him to a *Proficient* score since the Germans were allies of the Turkish in World War I

and may have had a specific perspective on the incident. However, Conan's explanation was not in-depth enough to demonstrate proficiency in corroboration.

The third and final question of the HAT asked Conan to examine a website, *Fact Check Armenia*, and determine if the website was trustworthy. Conan's answer is in Figure 22.

Figure 22

Conan's Third Response, HAT 1

1.By clicking on this link and examining this website, I believe that this website is not very trustworthy. This website claims a lot, Without citing some its sources. But I do believe that some of his points are correct. For example I believe that Ottoman Armenians Were not the only group that suffered. The web site itself looks good to me, but how it is setup, it looks hostile to me like propaganda, I really don't know how to describe it.

For some reason the website is now blocked for me, so I will try my best to examine the image that is given to me. The website looks aggressive, How it looks, the coloring, the wording just seems like propaganda to me. It uses bolded words to intimidate you Like ""TAKE ACTION NOW!". the coloring scheme of this website is strange it's like if they're trying to intimidate you or make you feel angry.

Dr. Marzipan and I had each initially scored this differently. However, after a brief discussion about what Conan could have been expected to do at this stage, we agreed to score this as an *Emergent* answer. While Conan was looking at the website critically, the fact that he did not examine any other sources suggested that he was not proficient at lateral reading just yet. To earn a score of *Proficient*, there needed to be evidence that the student went to other sources or websites to support his answer.

On the second HAT, Conan had no technical issues with the Nearpod program. Regarding sourcing skills, the first question asked Conan to read a passage written by a former

CIA agent named Roettinger. Conan had to explain why he thought the story was written and whether the story was reliable. Conan's response is shown in Figure 23.

Figure 23

Conan's First Response, HAT 2

> The purpose of this writing was to spread the truth. Guatemala was framed as a communist country when in reality, it's not. The fight was for land, not freedom. The US brainwashed Guatemalans into removing their democratically elected president. I think the sources are reliable. By doing a little research about the topic and Philip C and everything checks out.

This response was scored at the *Emergent* level. Conan explained that the passage was more than a simple exposition about Guatemala, and there was an argument the author was trying to make. Conan's response suggests that he knew it was essential to consider the author's background. However, he did not provide specific details about the author that would explain anything regarding the author's judgment. While Conan said he did a little research he did not explain what he meant by "everything checks out." A *Proficient* score would have required that Conan provide detail about what he found about Roettinger or made an informed guess about how Roettinger's being in the CIA impacted the passage's reliability.

The second question asked students to complete a photo analysis by examining an image and an accompanying description to test their corroboration skill. The students were first asked, "do you think this photo corroborates that Roettinger was correct in his explanation of the CIA overthrow of President Arbenz? Explain." Then they were asked, "What about this photo makes you consider it trustworthy or untrustworthy? Use the information provided to explain." Conan's answer is in Figure 24.

Figure 24

Conan's Second Response, HAT 2

yes, I think he is correct. President Arbenz was a democratically elected President. The only thing he did was demolish a monopoly, I personally think that was the right thing to do. He wasn't a communist, he was just helping the people. I think this photo is reliable because it comes from a trustworthy photographer. The only reason why I think this guy is trustworthy is that there is nothing to make them untrustworthy. The image itself seems all right, there's nothing to indicate that the image might be fake or exaggerated. The only thing that is weird is that the image you gave us to examine is not on Magnum photos, or at least it is not on Cornell Capa page.

This response was scored as *Proficient*. Conan answered the first part of the question correctly – he explains how the details in the prior passage by Roettinger align with the photo. In evaluating its trustworthiness, he demonstrates a process where he took steps to consult other sources and examine the photograph at greater length by going to the Magnum photos website and reviewing the photographer's page. He even hints at a potential issue with how the description given with the photo may not have accurately sourced it with his reference to its not being on the Cornell Capa web page.

The third HAT question asked Conan to evaluate a YouTube video about the United States' anti-government activities in Guatemala in the 1950s. Specifically, it asked: "How trustworthy do you think this website/YouTube video is? Explain?" This question examined his lateral reading ability. Conan's response is in Figure 25.

Figure 25

Conan's Third Response, HAT 2

> YouTube is a website I commonly use every day. You can technically count it as a social media platform but I don't think it is. YouTube is owned by Google. I think the website itself is reliable and trustworthy, but the videos on YouTube are not always reliable. Since basically anyone can upload a video about anything, well almost anything, the website is going to have a mix of reliable information and unreliable information. The question we should be asking is how trustworthy do you think the YouTuber is. More detail on why think YouTube is trustworthy, Google is a search engine that almost everyone uses. Right now Millions of students are using Google Chromebooks. So Google is pretty trustworthy and if we can trust Google then we can trust YouTube, which was bought by Google for about 1.65 billion.

This answer was scored as *Emergent*. While the question asked how reliable the website/YouTuber was, Conan devoted significant time in this response to focusing on the reliability of YouTube as opposed to the video itself. He parsed out that the real question was whether the YouTuber who made the video was trustworthy, which is what was being asked. However, he did not answer that question and went back to whether he should trust YouTube/Google. If he had indicated that he found further information about the author of the video, which was a state-sponsored media group in Venezuela, he might have earned a *Proficient* score. He needed to show clearer evidence of lateral reading. His response suggests he consulted additional information, such as the fact that Google bought YouTube. But Conan did not have an explicit demonstration of lateral reading to show he evaluated the creator of this video.

Dr. Marzipan's Observations

Dr. Marzipan thought that Conan had changed the least among the three students in the case study, and he was the student she knew the least about. This was the case even though Conan was the only one of the three that she thought would earn an "A" in the class and was the most frequent user of classroom tools. Dr. Marzipan mainly remembered Conan for the one time when he asked to talk to her before the final presentation. Dr. Marzipan did not remember the presentation itself, but the fact that Conan wanted to check in to see what he needed to do. She appreciated that Conan was conscientious about completing work correctly. She felt it was hard to see any growth over the term with Conan since she hardly saw him, and he did not participate in class consistently.

Summary

While some of the same issues documented in Conan's IEP were consistent with my observations, such as his not completing the discussion templates, he earned an "A" in this class. His HAT scores indicated that he had initial solid skills in historical reasoning that improved over the study. He consistently submitted all assignments for the class and ensured his final presentation was done correctly. He also participated more in the UDL-informed classes. Within the confines of the intervention group discussion, he contributed consistently. While Conan regressed slightly in the fourth discussion, overall, he had improved between the first and third discussions. He started completing the template, researched topics outside the given materials, and tried to engage his peers with intelligent responses. While Conan struggled with completing the summary in the fourth discussion, he seemed to want to honor the contributions of his peers as well as the process itself.

Case Study #3: Arminda Bozeke

Participant Characteristics

Arminda was a 15-year-old freshman at Newton High School during the intervention. She had started school in Newton that year as her family had just moved. Arminda is the seventh of twelve children, but she was the oldest sibling still living at home. Arminda was often asked to take care of her younger siblings so that her parents could work. Arminda is a Congolese refugee. She was born in Congo and her family fled political violence when she was four. They relocated to the United States, starting in Portland, Oregon, then moving to Arizona. They returned to Oregon and moved to McMinnville, just outside Portland, where she attended middle school before moving to Newton.

Arminda was the only student in this study without an IEP, but she was being *monitored* by the school and considered *at risk*. Newton did not explicitly define *at risk*, but Arminda's academic performance had not been strong up to this point in the school year, so there was concern that she might have some undiagnosed learning challenges. Given her background, that she was a refugee and had moved around school systems frequently, there was a possibility that educators had not been able to fully assess her. Upon a recommendation from Dr. Marzipan and after discussion with my committee about including a third case study student, I asked Arminda if she would like to participate in the study. She agreed, and her parents gave their consent.

In contrast to Arminda's reserve in class, she was talkative in her initial interview. She had been only attending class sporadically in the first two weeks. She was frustrated because she had lost track of her middle school friends due to her family's move. She stated that she could not make new friends because she had to attend school online, and her classmates did not turn on their video screens. Her teachers also did not provide many opportunities for social activity. The

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state of Oregon had decided that younger students would only attend school for two hours a day, so her younger siblings came home before the high school day was completed. Even though Arminda could have physically attended Newton High School for the entire day, her parents needed her to stay home and watch her younger siblings when they got home from school.

Arminda was articulate in her second language, English, and quickly formulated extended responses to my questions. We had to pause frequently so she could help her siblings, which made it apparent how challenging attending school was for her. Nevertheless, she shared that she liked social studies and liked Dr. Marzipan. Just a few days earlier, Dr. Marzipan dropped off a copy of the book, *The Rape of Nanking,* by Iris Chang. Arminda said in class that she wanted to know more about the Japanese invasion of China during World War II, so Dr. Marzipan got her address, drove to her house, and gave her the book. Arminda stated that she was touched by Dr. Marzipan's effort.

Arminda reported that she enjoyed her middle school classes, but she did not like class projects because they typically required buying additional materials. Arminda said her teachers never considered that her family might not have money to buy resources to complete the project. She was happy to participate in this study, given that she would earn the incentive.

Impact of the Discussion Protocol

My first research question was, "How did an experience in a UDL-informed, structured, and peer-mediated small group discussion affect the quality and quantity of talk for high school students with or being monitored for disabilities?" Table 10 summarizes Arminda's discussion results and shows how she engaged in four intervention group discussions.

Table 10

Arminda's Results, Intervention Group Discussion

	Number of utterances	Total Time Spoken	Longest utterance (Words/Time)	Quality of talk
Discussion 1	5	41 seconds	40 words/21 seconds	No evidence of historical thinking
Discussion 2	13	3 minutes, 59 seconds	96 words/47 seconds	No evidence of historical thinking
Discussion 3	17	6 minutes, 35 seconds	189 words/73 seconds	Partial evidence of historical thinking
Discussion 4	35	10 minutes, 17 seconds	126 words/72 seconds	No evidence of historical thinking

Note. Arminda was the facilitator for the fourth discussion, meaning that many of her comments were facilitative in nature, such as reminding students of protocols. It is likely that this significantly impacted her discourse.

Arminda was a participant in all four intervention group discussions. The first discussion was a baseline to see how students would respond. The students had been given the questions ahead of time, and I had asked a non-case study student, Odin, to lead the discussion. The students spoke for 17 minutes as a group and had about 4 minutes of quiet time where no one spoke. Arminda arrived at the first discussion fourteen minutes late, so she only attended this discussion for seven minutes. Arminda did not talk much initially. Seeing her not participating, I sent Odin a direct message through Zoom asking him to include her. When Odin then asked her to respond, Arminda answered, "I agree with Conan," after a response Conan had made. She also elaborated on the ongoing controversy of the U.S. national elections, a turn that lasted 26 seconds. However, this comment was a paraphrase of a peer's statement. Her talk quantity was limited by her appearing late, and her talk quality and content analysis were also limited because

she offered no original historical thought. She showed no evidence of historical thinking, which made sense, given that this was before the concepts were introduced in the class.

Initially, I was concerned that Arminda might have undiagnosed learning challenges, given that she had not spoken much up to that point. Based on these concerns, I gave Arminda some lower-level goals in my feedback. I thought that getting her to a reasonable level of contribution and asking her to provide slightly more detailed insights and questions about the reading material would be appropriate. I asked if she could speak for two minutes, a total of 10 turns, and to do a better job preparing and being on time. I also asked her to provide me with a copy of her discussion template before the next round of discussion.

Arminda did not submit her template to me ahead of time. However, she contributed far more than in the first intervention group discussion. She spoke for three minutes and 59 seconds, tied for the second most of any group member. She spoke 13 times, over twice as much as the last time, with five contributions lasting longer than 30 seconds. She was engaged from the beginning to the end of the discussion. Arminda initiated two separate discussion questions, responded to her peers, and moved the conversation along by building off insights provided by others. Arminda was also willing to share her own story in her insights, mentioning her parents' escape from Congo during political violence in the early 2000s. Her talk quality was also better, given the details she shared in her responses. She did not demonstrate any historical thinking skills in her discussion. Her responses did not, for example, show additional research beyond the provided content.

When I wrote feedback for Arminda to prepare for the third discussion, I complimented her increased participation. I also asked her to complete the template as I wanted to see her preparation. I noted that her second question during the discussion included some

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misunderstandings and seemed improvised. I explained that I wanted to help her hone how she might ask a question like this, particularly with historical thinking skill development in mind. I still asked her to increase her talk quantity to over five minutes and to improve her talk quality and analysis through written insights and questions. I also explained I appreciated her willingness to share her personal story about fleeing political violence in Congo.

In the third discussion, Arminda spoke 17 times in the 30-minute conversation for a total of 6 minutes and 35 seconds. Her contributions were elongated, with 9 of her 17 contributions being over 30 seconds and one being over a minute in length. When Gareth asked for group insights, she shared two, which suggested she prepared. One insight she shared was about how rapidly the population of Palestine went from Palestinian to Jewish, which showed that she had examined the maps included in the reading. Later she shared that she was confused that the Palestinians had been so generous to let so many Jewish settlers into Palestine only to be ousted from their homes by them eventually. Her insights informed her questions regarding what about Palestine made it so desirable a location. Her comments touched on critical features of the Israeli-Palestinian conflict, from the religious aspect to the presence of oil to the existing land use issues in the territories. One of her questions also indicated nascent historical thinking skill (note: since Arminda is a non-native English speaker, I will not use *sic* for usage errors):

> Um, my question is-- okay, so my question is, I was wondering because like, I haven't really did a dig in-- dig on this, but where-- like, earlier in our conversation, [Conan], I believe it was [Conan] asked this question, like, we need to know the background of the Palestine, where they came from, like who they are, like, any insight on them, like, what's their history, like, this and that so we have to be able to, like, either predict or to know,

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like, where this war is goi-- is gonna, like, le-lead us. So that's one of my questions. Like, who exactly are they, and when or how did they end up there? Yeah, that's my question.

While we had not spoken about sourcing or corroboration yet in class, this was a comment potentially demonstrating the development of historical thinking. She thought that the information they had to that point was insufficient and that she needed more information to make a fair prediction about the end of the conflict. That was true, as their applied learning packet only included a limited set of excerpts, which I had altered to a 6th-grade reading level, removing several details, and did not go further back than the 1910s. While her classmates responded that the Palestinians were formerly part of the Ottoman Empire, which was accurate, there was a more profound question Arminda was asking about history. Arminda again did not complete her template, so I did not have concrete evidence that she prepared her thoughts ahead of time. Yet her basic understanding of important questions of the Israel-Palestine conflict was clear, and she referenced themes from the materials. In reviewing the third discussion, she improved her talk quantity and showed nascent content analysis ability. Her talk quality improved from the first two discussions, as she was referring to the course materials and responding specifically to critical topic ideas shared by her peers.

I asked Arminda to lead the fourth discussion. In my feedback for the third discussion, I complimented Arminda's ongoing participation, particularly her attainment of the three primary goals for a second time. I tried to stress again that if she completed the template, she would be in an even stronger position, as it would help organize her thoughts. This time the template was even more significant because, as the facilitator, she needed to support the group throughout the discussion. I also said that her comments showed some historical thinking, but additional preparation could help her develop her skills further. I knew from experience that students who

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facilitated the discussion tended to speak much more, so I asked Arminda to be mindful of this as she led. I also gave her a leader overview sheet that she could consult.

Arminda seemed prepared before the fourth discussion, submitting her template for the first time. However, this discussion took place earlier in the day than the previous discussions due to scheduling issues. The new time may have been more challenging for Arminda, as her younger brothers constantly interrupted her in this discussion. She frequently turned off her sound, which made facilitating difficult as her questions and responses were cut short. She forgot cues to give the group for different discussion parts, such as deliberately contributing their insights. While the group spoke for 28.5 minutes, there were about 3 minutes and 30 seconds of non-speaking time. Arminda alone spoke 35 times during the discussion for 10 minutes and 17 seconds, but every other group member except for Newark spoke less in this discussion than they had in previous ones. It seemed the group stopped contributing when they realized Arminda could not pay full attention to what they were saying. She would toss out questions and then not stay to hear them answered. Arminda asked each student directly to contribute or take a discussion forward, but they often deferred, and the discussion faltered when she turned off her sound.

It was interesting to see how Arminda varied from being a principal group contributor in the previous discussions to a facilitator. She could not focus given her home circumstances. In her prepared materials, questions were more refined than in previous discussions, but due to the flow of this discussion, they did not stoke deeper inquiry from her peers. So, while her talk quantity increased substantially because she was facilitating, her demonstration of talk quality and content analysis was not as strong as in the third discussion. She did not, for example,

demonstrate any specific historical thinking skills even though they had been referenced in the regular class by this point, and used by Odin within this discussion.

In the social validity survey, Arminda was mainly positive about the discussion experience. She had only one *neither agree nor disagree* response, which was that the discussion process prepared her to understand concepts of civic life. Of the remaining 12 items, Arminda selected *agree* for five and *strongly agree* for seven statements about the structured discussion's helpfulness. On the non-Likert scale questions, Arminda answered that the discussion process was straightforward for her to understand and that she used the feedback, reading it carefully to improve. However, she only found the discussion somewhat enjoyable, even though she was willing to participate in other discussions like it. She found the videos about the discussion process more helpful than the other items provided to the students. In her open-ended response, she wrote, "It was a great and enjoyable process."

When Arminda spoke about the intervention group discussion experience in her second interview, she offered perspectives on learning the protocol. When discussing why it was so challenging for her to complete the templates, she said it was because it was not an expectation from the beginning. Since the first discussion did not require it, she did not associate it with the task. She had to remember to find the template in the overview guide for the other discussions and make her own copy. She felt she was not guided through these steps enough. However, once she completed the template, she believed it helped organize her thoughts. Arminda also explained that she used the discussion feedback broadly and tried to talk more than in the previous discussion. She appreciated being prompted to say more; the feedback detail surprised her. She initially assumed that she would receive little feedback. She also enjoyed the discussion

because it helped her get around pandemic restrictions and talk to people other than her family. Arminda shared this general feedback about the discussion structure:

> Yeah. I feel like, yeah. Especially because most of the time, we just go straight out to the questions. Or the teacher just say, "Okay. So, we learned this and that." And blah, blah, blah. "Okay. Okay, anyone has [sic] any questions?" Because they never really ask us how we feel about that topic. It's actually, whatever we're talking about, they never really ask about what we got from there, any connection. Most of the time-- actually, I remember…I've only had one teacher who actually asked about if we related to any of the questions about what we read about.

When I asked her what she did not like about the discussions, she said the last discussion was boring. She thought the boys in the group shut down during her time to lead:

> It was so hard because all of a sudden, they were like, "Oh, I don't know what I'm doing." So, I don't know. It was just kind of hard to get something out of them. Because I was expecting more, because I had a higher expectation. So, maybe next time, I should not have so much high expectations.

Arminda said she wished the group had another female in it. She conceded that it was hard for her to lead because of the distractions her brothers were making during the discussion. She also had WIFI connectivity issues that cut off her sound, so the group may not have heard everything she said.

Evaluation of Arminda's overall contributions showed that she generally improved in talk quality, quantity, and content analysis. Arguably, had she not been the facilitator in the final discussion, she might have improved more in these areas like she had between the first three discussions.

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Impact of Lessons, Technology, and Assignments

My second research question was, "How did UDL-informed lessons, technologies, and materials impact the performance of high school students with or being monitored for disabilities?" I was not tracking Arminda for the first week of the course because she was not a case study subject yet. Between the start of the class and the start of her participation in the study, she had about 50% attendance. After she started the study, she only missed one class. In all remaining classes, she was a frequent participant and often answered questions that Dr. Marzipan and I asked.

Dr. Marzipan used non-UDL-informed teaching methods, and her approach sometimes made it hard to participate, as she spoke rapidly and used content-laden PowerPoint presentations. Arminda still contributed often. Between the term's midpoint and the end of class, June 15, Arminda participated in every class. In classes tracked from 5/6 – 6/15, she spoke over 15 times in 12 total classes, often asking detailed questions.

Arminda's regular class participation did not necessarily transfer to the consistent completion of her written work. In the first month of class, Arminda completed 8 of 13 assignments. At that checkpoint, on May 15, several assignments remained ungraded as Dr. Marzipan got them all in a burst from Arminda, so they were turned in late. Interestingly, when I went to pull Arminda's grades at the end of the term, she disappeared from the class grade book, even though her completed assignments were still in Google Classroom. I could not see scores for many of these assignments because she was no longer in the system. Dr. Marzipan was not sure why this happened, but the likely reason was that Arminda had withdrawn from Newton High School.

Arminda seemed to take her assignments seriously. She completed an engaging Flipgrid video where she spoke to the camera for 90 seconds and addressed the varied issues of World War II and the Jewish Holocaust. She also thoroughly completed an assignment on political cartoons, answering the questions with specific historical details. Her class final, the PowerPoint presentation on a country of her choosing, was one of the more comprehensive submissions in the class. Arminda had chosen her native country of Congo, and her detailed presentation included important facts about Congo and referenced two different historical patterns she felt were on display in recent Congolese history. Her slides are below in Figures 26 – 28.

Figure 26

Arminda's Final, Slide 1
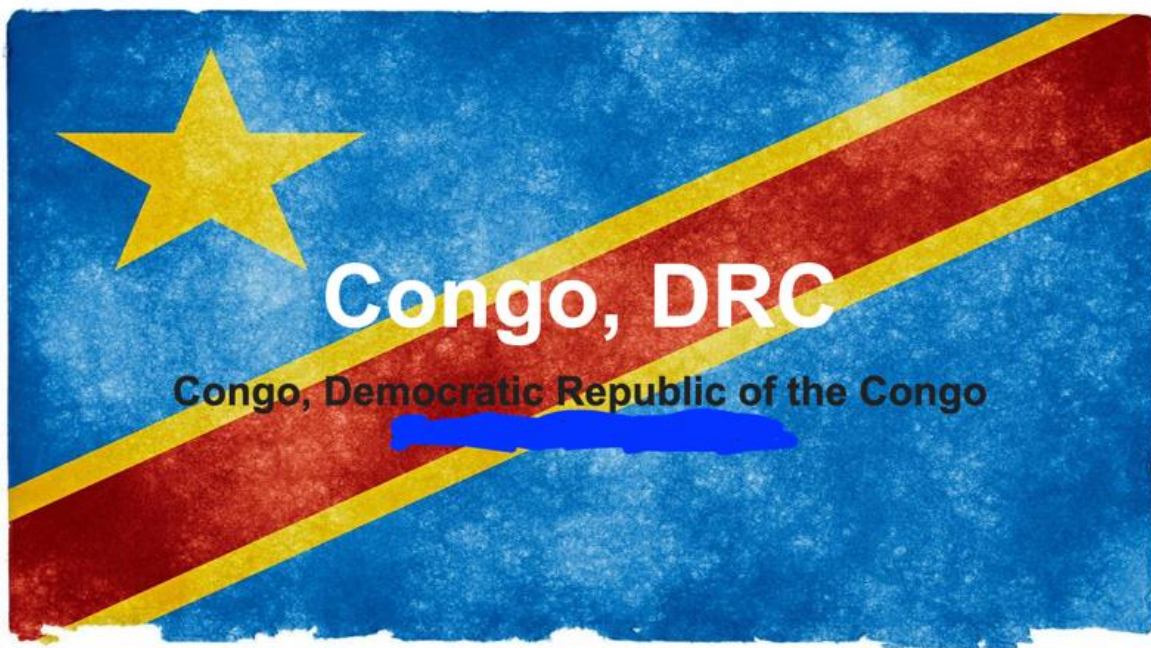
Figure 27

Arminda's Final, Slide 2

Victim: Scramble for Africa + Gaining independence

They were the many 53 countries of Africa that got colonized by Europe. Belgium started to colonize DRC in 1885 under king Leopold II. After long years of dehumanization and long suffering the congolese people couldn't take it longer. Began May, 1959 to May, 1960, uprising of political parties which gave congolese the voice in institutional respsention. One specific party called **Parti Solidaire Africain** which became one with other party and pushed for complete independence from Belgium in 1960. After winning their independence the Congolese elected a president, Joseph Kasavubu, prime minister, Patrice Lumumba, a senate and assembly, and similar bodies in the Congo's numerous provinces.

Figure 28

Arminda's Final, Slide 3

Current issues/historical pattern

Due to a lot of corruption in the country it limit them in many ways.
- Bribery illicit financial flows
- Abuse of power
- Mineral wealth=mismanagement+conflict+poverty

They are many armed groups in DRC. They target citztien, they will kill, rape, child slavery, and sexual slavery. Rape is being us as a war weapon against young girls and women

Historical pattern: DRC keeps repeating political crisis which keeps the country form going forwarding

Historical pattern: Rape as a war weapon leave people traumatize and live in fear

Response to UDL-Informed Class Components. There were two ways that I used the UDL framework to engage case study students. One was through the redesign of applied learning assignments to incorporate UDL principles. Arminda's level of quality from assignment to assignment, whether UDL or non-UDL, was generally high – she typically received full scores on completed work. Arminda said, however, that she enjoyed the choices she was able to make with the UDL-informed assignments. For example, she appreciated creating an artistic piece on children in the Holocaust that allowed her to compare their experiences to hers. A review of assignments and Arminda's performance is provided in Table 12.

Table 12

UDL and Applied Learning Assignments for Arminda

Applied Learning Topic	Applied Learning UDL Principle	Applied Learning Technology	Arminda's Performance
Rise of Adolf Hitler	Representation	Nearpod	Fully completed required questions and added 2 additional materials in optional activity.
Children of the Holocaust	Expression	Flipgrid	Fully completed audio-visual of herself reflecting on historical experience.
Vietnam Photos	Expression	Google Doc	Fully completed with 5 different political cartoons with substantive historical detail about photos.
Cuban Missile Crisis	Engagement	EdPuzzle	Fully completed, but only 1 correct response (out of 5). Spent 12:30 on assignment.

Arminda reacted positively to the technologies used. She said that Nearpod made things easier to understand. Since ideas were contained in a slide format, it simplified how she could identify separate concepts more than in a Google Doc. She liked how she could slide back and forth with the notes and questions in the Nearpod, and she used the embedded audio to get another perspective on the text. She said the audio file identified when certain words were emphasized, which helped her understand the historical context more. She had used Flipgrid before, but she appreciated its use in this class because she could choose to video record herself. Arminda felt that EdPuzzle's video restriction, where the learner must answer a question to move on with the video, was annoying. Arminda finished her EdPuzzle quickly, as seen in Figure 29. She watched the entire video (12:30) and answered the questions as she went. She completed her five questions in approximately a minute and a half and left a written response for each. Not every response was fully developed, as seen in Figure 30, where her answer did not address the reliability question.

Figure 29

Arminda's results, EdPuzzle Assignment

Cuban Missile Crisis from the Cuban Perspective | Animated History

Grade	Video watched	Correct responses	
— /100	100 %	1 / 5 questions (5 answered)	Time spent: **14 min** Turned In: **On time – June 6th – 10:33pm**

Number of times student watched each section of your video

2	1	1	1	1	1	1	1	1	1
00:00	01:15	02:30	03:45	05:00	06:16	07:31	08:46	10:01	11:17	12:32
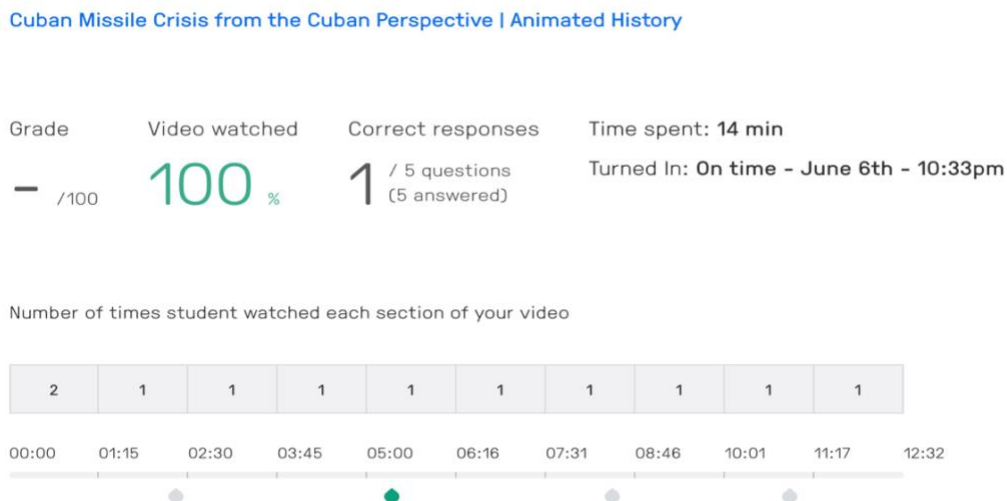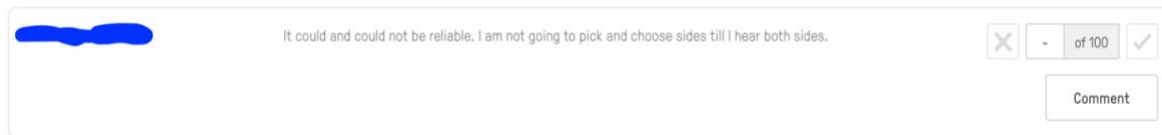
Figure 30

Sample, Arminda's Answer, EdPuzzle Assignment

I also used the UDL framework to design lessons that integrated a wider variety of class activities. These activities, and Arminda's response to them, are listed in Table 12. Arminda said there was a clear difference between the regular class lessons I taught and the other lessons in the class. She said I used more explicit instructions in my lessons. Arminda remembered Dr. Marzipan's non-UDL lessons as mainly PowerPoint presentations that she enthusiastically talked through. However, she said I explained things to the students more. She also appreciated the UDL-informed lessons typically made use of more explanatory visuals:

> I think there was a difference. I'm trying to think what was the difference. I think there
> was a really big difference on how you two taught. [Dr. M] usually-- she usually would
> just have up the slides, stop, and kind of talk through it with the slides and everything.
> Usually, you just have the slides. She's scrolling down and talking, stopping, and talking
> and showing us either pointing with her mouse about, "Oh, you see here," this and that.
> And then with your case, you're-- and with your case, you usually kind of took us step by
> step whether you're going to tell us to do something, either step by step how to do things
> or this and that.

Table 12

Arminda's Response to UDL-Informed Materials and Lessons

UDL Lessons	Lesson topic & Historical Thinking Skill	Technology tools	UDL elements (CAST, 2018)	Arminda's participation and classwork
Lesson One	Nazi Seizure of Power Contextualization	Jamboard	2.2 – clarify syntax and structure 2.5 – Illustrate through multiple media 3.1 – activate background knowledge 3.2 – guide processing and visualization 4.2 – Optimize access to tools and assistive technologies 5.1 – use multiple media for communication 7.2 – optimize relevance, value, and authenticity 8.3 – foster collaboration and community	Participated extensively in the small group assignment, speaking about lack of media available to Austrians/Germans Did not complete Jamboard assign
Lesson Two	Politics Lateral Reading	Jamboard	2.3 – support decoding of text 3.2 – highlight patterns 3.3 – guide information processing 6.3 – facilitate managing resources and information 8.3 – Foster collaboration and community 9.3 – develop self-assessment and reflection	Spoke briefly regarding the website exercise in full class discussion. Partially completed Jamboard tasks.
Lesson Three	Vietnam Photographs Sourcing	Jamboard	2.5 – illustrate through use of multiple media 3.2 – highlight patterns, critical features, big ideas 5.3 – build fluencies with graduate levels of support for practice 8.1 – height salience of goals and objectives 8.3 – foster collaboration and community	Actively participated in small group discussion. Answered most questions on her Jamboard.
Lesson Four	Cuban Revolution Corroboration	Nearpod	2.5 – Illustrate through multiple media 4.1 – vary the methods for response and navigation 5.1 – use multiple media for communication 7.1 – optimize individual choice and autonomy	Participated in full class discussion. Answered the Nearpod question.

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Arminda said that she remembered the two small group activities I used in class because she had not had many collaborative groups in other classes. She also said that she liked that the students were asked to do more in groups since these groups were one of her few chances to engage other classmates. In my first regular class small group session, for instance, she was grouped with Newark and Chloe, two of the more talkative members of the class, and she bantered enthusiastically with them. She also provided pertinent insight about the differences in technology access between 1930s Austria and the present day, which was why she felt Hitler might have been successful in corralling support. I thought this was an example of intermental communication – she had raised a version of the point in the larger class, and was developing her insight here with her peers, who addressed it, rephrased it, and allowed her to continue thinking it through.

Figure 31

Arminda's Jamboard, Sourcing Lesson

r a plastic bag containing the remains of her husband, who was found in a mass
the Viet Cong during the Tet Offensive, in February 1968.

Who took this?   Larry Burrow

What do you think the photographer's perspective was?
          To show how the war affetec civillians
Why was it made?
          maybe
When was it made?
          to documnet
Where was it made?
          1968
Is it reliable or not? why or why not?
     I think it is becuase its so emtional

Arminda's use of in-class technology was good, since she had no technical issues with any in-class tool and generally completed the assignments using technology. As seen in Figure 31, she worked on the Jamboard for the third lesson, although she did not finish answering her questions and had a few spelling errors. Arminda's class notes were often this way: cursory and incomplete. During her interview, she said she disliked being graded on notes. She thought that notes should serve her need to remember what was happening and not be something that was graded for an assignment. She was also able to use Nearpod successfully within the fourth lesson. She logged into the software and completed the two questions as required. Her answer can be seen in Figure 32.

Figure 32

Arminda's response, Nearpod, Corroboration Lesson
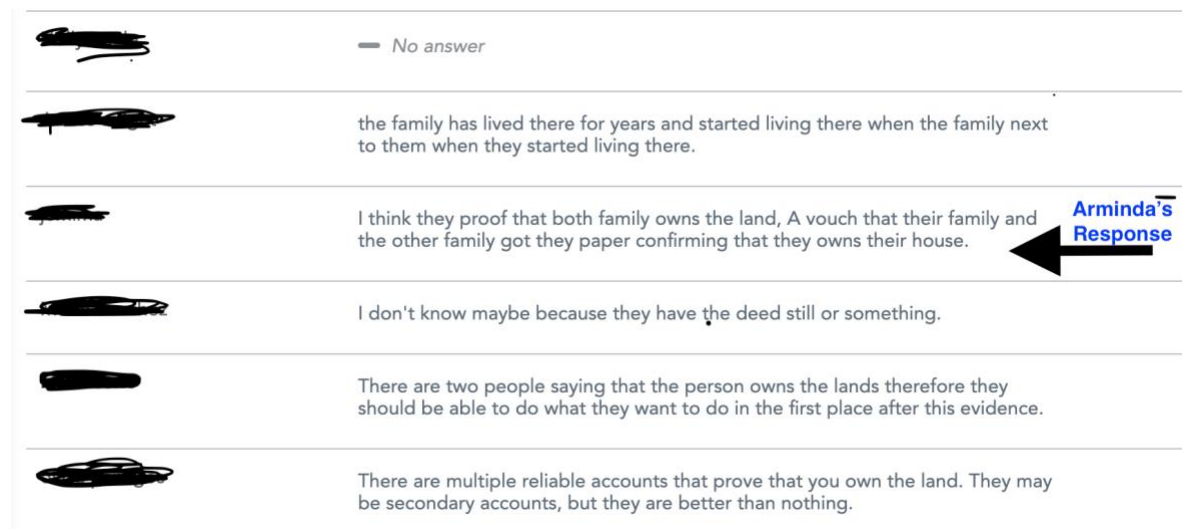
In the social validity survey, Arminda reacted positively to all the educational technology used in the class. She scored Nearpod, Google Classroom, and EdPuzzle, as *very useful*. When asked to comment further, she said that both Nearpod and EdPuzzle were the most useful because they "give us a time to think to each passage as read and listen to." In her interview, she said that using Nearpod and EdPuzzle were the most useful because they allowed her to look

back at the material before answering. Then she could provide her answers in multiple ways. She

did not like Flipgrid, mainly because she did not like appearing on video. While she was

comfortable showing her video to friends, she was less inclined to share her video with an

undefined audience because she was worried her video might somehow go viral.

Considering Historical Thinking

My third research question was, "How did this intervention impact high school students

with or being monitored for disabilities in the development of historical thinking skills??" This

was evaluated through the HAT. Arminda's first and second assessment scores are listed in

Table 13.

Table 13

Arminda's HAT Scores

HAT Question	Skills assessed	First HAT Scores	Second HAT Scores	Change
Q1 – Text Analysis	Sourcing	(2) Emergent	(2) Emergent	0
Q2 – Photo Analysis	Corroboration	(2) Emergent	(2) Emergent	0
Q3 – Website or YouTube	Lateral Reading	(1) Basic	(1) Basic	0
Total				0

Arminda's performance on the HAT suggests she did not improve in historical thinking

skills. Arminda completed both HAT assignments, although she had a minor difficulty with a

website filter on the first HAT. The first question of the HAT asked Arminda to read a short

historical passage, which was edited to a 6th-grade Lexile level, and then answer why the story

about the Armenian Genocide was written and whether it was reliable, which was meant to test

her sourcing skill. Arminda's answer is displayed in Figure 33.

Figure 33

Arminda's First Response, HAT 1

> I think the story was written to show that the genocide to get rid of Armenian did occurred. I would say the story could be reliable because it could be one of the many soldiers who is brave enough and decided to come and tell their story, that in fact the Armenian genocide did happened.

This response was scored as *Emergent* because Arminda answered both parts of the question with some accurate detail. First, she explained why she thought the story was written, and then she offered a scenario for why the story should be considered reliable. She classified the soldier as brave for coming forward, and that his intent was to let people know the genocide had happened. However, her response to the second part of the question needed more development. First, Arminda says it could be reliable instead of saying it is or is not reliable. She did not explain why she qualified the reliability. Secondly, she does not describe any specifics about the soldier other than calling him brave. She does not analyze his nationality, which was German, and might have impacted why that was important to his coming forward amid World War I. A more complete explanation would have discussed specifics about the soldier that came forward, and why that mattered, which would have resulted in a *Proficient* score.

The second HAT item asked students to examine a photograph of a group of people titled "Refugees at Taurus Pass" accompanied by a short, written description of the photo's origins. Students had to answer if the photo confirmed that the Armenian Genocide took place and what about the photo might make it trustworthy or untrustworthy. Arminda's response is in Figure 34.

Figure 34

Arminda's Second Response, HAT 1

> The photo shows no prove that the Armenian genocide took place. One reason is that they are just walking and shows nothing in particular;or anything related to the genocide. Not only does the photo shows no prove of Armenian genocide, it also seems untrustworthy because in the description about the photo it uses "ironic image of the Armenian genocide".

This was an *Emergent* response because Arminda showed that she was skeptical about the photo and how the photo itself did not necessarily show genocide. She also shared a reason for why she did not trust the photo based on the accompanying written description. However, Arminda read that description incorrectly, as it was not labeled as an *ironic* image but an *iconic* image. This was not a *Proficient* response partly because of that misreading of terms. She also did not explain why using that phrase made the photo untrustworthy. The skepticism that Arminda displayed, however, signaled emerging skill.

The third and final question of the HAT asked Arminda if she could examine a website, *Fact Check Armenia*, and determine if the website was trustworthy or untrustworthy. Arminda chose to dictate her response to Nearpod, which created an audio file that is transcribed below:

> …as I checked through the website…really I couldn't really open it my computer wouldn't let me, apparently it's blocked so I couldn't really go through the page, but I looked at what was already up there. It kind of seemed trustworthy because it had different designs. As I looked at the stuff it seemed like it's pretty much trustworthy… so…yeah, it seems like I can trust it…the writing. It seems to be in place. That's one thing about it. There is a photo section. It has some videos of different stuff of different

events, what happened and this and that, and how you can help. So, I would say that I would trust it. Maybe not very much, but if I could, I wish I could go deeper into the website and check if it's really trustworthy. But for now, I'll say it's trustworthy.

This was scored as *Basic*. Even though the computer's filter prevented her from looking deeper into the website, she needed to interrogate the website's content more. Arminda did not examine any other source to verify her answer, and she appeared to be convinced about the page's trustworthiness because of its design and how it looked rather what it was saying. Overall, Arminda finished the first HAT with two *Emergent* scores and one *Basic* score.

On the second HAT, Arminda had no website filter issues and completed the HAT on time. Regarding sourcing skills, the first question asked Arminda to read a passage written by a former CIA agent named Roettinger. Arminda had to explain why she thought the story was written and whether the story was reliable. Arminda's response is shown in Figure 35.

Figure 35

Arminda's First Response, HAT 2

> I think this story was written to share a story of a person who was a big part of the US government, then started to work against them. I believe this story is reliable because the person telling the story named date, place, and people who was involved. Not only that, also I search him up just to make sure.

This response was scored as *Emergent*. Arminda provided a strong response to the first part of the question, correctly identifying that the story was a recollection of a government official who was unhappy with what had happened in Guatemala. However, she did not give an effective explanation as to why this passage was reliable. If Arminda had explained what her research told her about the author, her response would have been scored *Proficient*. Her logic

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was not strong enough: just because Roettinger included the things Arminda listed did not make the passage reliable.

The second question tested corroboration skills by asking that students complete a photo analysis by examining an image and an accompanying description. The students were first asked, "Do you think this photo corroborates that Roettinger was correct in his explanation of the CIA overthrow of President Arbenz? Explain." Then they were asked, "What about this photo makes you consider it trustworthy or untrustworthy? Use the information provided to explain." Arminda's answer is in Figure 36.

Figure 36

Arminda's Second Response, HAT 2

Yes, the photo does a line with Roettinger story because the document was called a long-short lived democracy. Which conclude that Arbenz was overthrow by the CIA. One reason why I think this photo is trustworthy is that the board is in Spanish, it shows a man that looks like Arbenz, and in conclusion it makes sense if Arbenz tried to target the commoners.

This was an *Emergent* response. Arminda named Roettinger as the author, which was correct, and she included details about Arbenz, the Guatemalan president that was overthrown. Arminda accurately identified that elements within the photo, such as a caricature of Arbenz and Spanish text on a sign, were helpful markers for analysis. But Arminda's final line about Arbenz targeting the commoners was confusing since Arbenz protected and did not *target* commoners during his presidency. A *Proficient* answer may have explained what Arbenz was trying to do for the people, which would have further confirmed Roettinger's story.

The third HAT question asked Arminda to evaluate a YouTube video about the United States' anti-government activities in Guatemala in the 1950s. It specifically asked, "How trustworthy do you think this website/YouTube video is? Explain?" This was designed to test her lateral reading ability. Arminda's response is in Figure 37.

Figure 37

Arminda's Third Response, HAT 2

> I believe this YouTube video is trustworthy because in the video it shown papers that has date and specify information about what was occurring that time.

This answer was scored as *Basic.* Arminda did not demonstrate any skepticism of the site, nor did she indicate she looked at another source to determine whether the authors of this material were trustworthy or not. A higher score required at least some attempt to talk about who created the source. In all, Arminda did not demonstrate any facet of online civic reasoning and thus received another *Basic* score.

At the end of the HAT exercise, Arminda did not show score improvement in her HAT scores. While she may have made incremental gains in her answers to questions about sourcing and corroboration, she remained at *Emergent* in both categories.

Dr. Marzipan's Observations

Dr. Marzipan shared that Arminda had earned a "C" in the class. This was a positive development because Arminda had an "F" for part of the term. By the end of the term, Dr. Marzipan said she saw Arminda as a "regular kid" and no longer had any concerns about her ability to progress. She thought Arminda's strongest performance was when she led a small group during a UDL-informed regular class lesson. She generally saw an upward trajectory for

Arminda over the course of the class and thought that Arminda could, in future classes, develop leadership traits. Dr. Marzipan did not have any reflections on the impacts of Arminda's home life. When I discussed home life issues, Dr. Marzipan said she understood them because she had dropped off the book at Arminda's home. She was also surprised that Arminda would need to go to summer school (which she would be required to do to pass mathematics).

Summary

In considering Arminda's initial performance in class, and her high number of absences, I could see why the Newton staff saw her as needing to be *monitored* and potentially *at risk*. Her having been to multiple school districts in the previous years, and her status as a refugee, signaled that it could have been possible that districts may not have had the opportunity to diagnose her. However, at the end of the case study, I was uncertain if Arminda needed to be monitored further or considered at risk regarding a potential disability. When Arminda was engaged, she was an excellent student. Within the intervention group discussions, she became an essential contributor. In the most productive discussion, the third one, Arminda provided insights, asked discussion questions, and listened intently to her peers. She was also engaged and active in the regular class lessons, whether they were UDL-informed or not. While she did not improve on the HATs, like the other two case study students, her results might suggest that she needs more practice with completing these specific types of assessments, particularly keeping in mind that she was performing these tasks using her second language.

CHAPTER FIVE: CROSS-CASE ANALYSIS

In this chapter I provide a cross-case analysis of my results. A cross-case analysis is designed to produce more robust findings than would be possible with a single case (Yin, 2009). While each case provides insight into how individual participants reacted to the intervention, analyzing results across cases can provide insights into how this research might be more broadly applied. I provide analysis for each specific research question, concluding in this chapter with research question four, regarding the response of the students to online instruction mandated by COVID-19.

Student Talk

My first research question asked, "How did an experience in a UDL-informed, structured, and peer-mediated small group discussion affect the quality and quantity of talk for high school students with or being monitored for disabilities?" Two of the students participated in all four intervention group discussions, and one participated in three. It was clear that for two of the students, Arminda and Conan, the discussion process provided them with a forum to channel their thoughts during history class. Their regular engagement with the protocol and feedback seemed to encourage them to continue experimenting and contribute more frequently and at greater length. Conversely, Rodger's contributions stayed about the same, both in length and type, from the first discussion to the last. In comparing him to Arminda and Conan regarding utterance length, in the first discussion, Rodger's longest utterance was approximately 30 seconds shorter than Conan's but was longer than Arminda's. However, by the fourth discussion, his longest utterance was close to one hundred words and between 45 and 60 seconds less than both Conan and Arminda. In each discussion, he typically introduced himself and listened politely but did not share thoughts about the history content. Results seem to suggest that the

intervention discussion process could help a range of students, including some with learning impairments like Conan. However, it might not be effective as presently designed for supporting a student like Rodger with more significant communication needs. If Rodger had developmental language disorder, it is possible that challenges with working memory or processing different phonological information might need to be taken into greater account, and procedures beyond just the templates would need to be integrated to scaffold participation (Archibald, 2019).

Where that specific difference in impact between specific SWD for this intervention discussion was unclear. Certainly, this experience was not easy for Conan, and there were instances in his performance where his impairments likely impeded his ability to reach a higher level of participation. In the final discussion, for example, he thought that the only way he could effectively complete the group summary at the end of the discussion was to take extended notes about what his classmates said. Since he did not take notes by hand and instead used speech-to-text technology, the logistics of doing that precluded him from being able to participate in all parts of the discussion. He thought he simply could not focus on both notetaking and speaking. He also reported that he did not want to be a facilitator because he would struggle to remember the names of his classmates, even if they were written on the screen as they were in Zoom.

But simultaneously, Conan was able to improve to some degree, and so did Arminda, a monitored student without an IEP. If I disregard the fourth discussion, where Arminda spoke much more as the facilitator and Conan spoke less because he was trying to prepare the summary, both students were relatively close in how they increased how much they spoke. They talked for the same amount of time in the second discussion, and then they both increased their total speaking time for the third discussion, although Arminda did speak more than Conan in that

discussion. Overall, though, both students continued to increase the quantity of their talk as the intervention continued.

Talk quantity does not necessarily equate to talk quality, however. Rodger's talk quality did not vary much from the first discussion to the fourth discussion. As previously mentioned, Rodger's introduction was his primary contribution to each discussion. The protocol, with its templates and supports, did not help Rodger improve the quality of his contribution regarding the discussion topics. It may have been that the scaffolds were insufficient to support Rodger's needs with executive functioning, so he still was unable to prepare for the discussion effectively. It also could have been that, like his IEP indicated, he needed more time to know his classmates in the intervention group to the point that he would feel comfortable offering his opinions on the history content.

Arminda and Conan jointly and individually continued to improve their talk quality, again suggesting that this protocol helped them. Some of these improvements could be identified in their developing use of historical thinking. While neither Arminda nor Conan demonstrated historical thinking as defined explicitly by SHEG, there were rudimentary elements of those skills within these discussions. Arminda made a comment that demonstrated aspects of corroboration when discussing Israel and Palestine. Conan expressed doubt about how much we could trust content creators when discussing Cuban history and YouTube, hinting at some nascent online civic reasoning. Again, while these comments were still underdeveloped, both students were starting to raise these issues within the intervention group.

Interestingly, Conan had also shown, by his comments in the first discussions, that he was doing background research. If there were a notable quality difference between Conan and Arminda, it would be that Conan's contributions typically included information that he had

looked up outside the discussion materials. Several comments he made referenced historical ideas he could only have found through his own research.

Also, Conan's contributions were frequently in response to Newark or Odin. In the third intervention group discussion, for example, where Conan spoke 10 times, 6 of his 10 comments immediately followed a comment Odin had said, and three of those began with "I agree with Odin." This might suggest an attempt by Conan to imitate peers that he felt were smarter or add credence to his own beliefs by aligning them this way. This said, to be fair to Conan, two of his initial speaking instances in that third discussion were when he shared his written insight and question, which he did first, before anyone else spoke. In contrast, Arminda was more inclined to ask a question than make a comment. Her questions were also more far-ranging than Conan's, so while they applied to the topic at hand, they were not necessarily focused on the precise issues represented in the texts. And while in that third discussion she began one comment referencing what Odin said, she did not indicate agreement with him as she started, venturing her own independent thought. I also found it interesting that Conan asked fewer questions as discussions continued. Conan dropped from asking three questions in the second discussion to only one in the fourth discussion. Meanwhile, Arminda, in the same discussions increased in speaking instances and more than doubled her number of questions from three to seven.

There may be something to say here about further differences between a student like Conan, who reported that he did not remember names, did not feel like he was a great speaker, and said he struggled to contribute to groups, and a student like Arminda, who reported that she wanted to talk more. I encouraged both students to ask more questions when I wrote feedback, and Arminda seemed to have no issue with doing that. But Conan asked fewer questions as the discussions progressed. This made me wonder whether any social anxiety came with asking a

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question. Did Conan think he would be perceived as smarter by his classmates if he linked his comments to a remark by someone he perceived as intelligent, like Newark or Odin? Would more training or modeling of question-making be helpful so that all students would feel greater aptitude and potentially ease any anxiety?

There was also a quality difference between Arminda and Conan when answering questions within the discussion. Whenever Arminda was asked a question by another student, she almost always attempted an answer, regardless of whether it turned out that she knew the content. There was only one instance in the first conversation, when she arrived late, that she told the facilitator that she would prefer not to respond. From that discussion on, she always answered questions. Meanwhile, in each discussion, the first through the fourth, Conan had at least one time where he responded to a request by asking the facilitator to ask someone else. I was unsure if he did that because he lacked confidence in responding or had lost track of the discussion strand, but I found this a subtle difference between the two students. Rodger also regularly passed on replying to a question when asked. No other student among the other four in the intervention group passed on any single question asked in the four discussions. I wondered if this was a random coincidence or if it hinted at behaviors related to difficulties caused by these students' diagnosed disabilities. To be clear, there was nothing wrong with passing if they had nothing to say on a topic.

Student Response to UDL

My second research question was, "How did UDL-informed lessons, technologies, and materials impact the performance of high school students with or being monitored for disabilities?" This intervention used the UDL framework in two ways. One was to design four regular class lessons regarding historical thinking skills. The other was to redesign a set of tasks

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the students would use for applied learning assignments, several of which supported the students in the intervention group discussions.

Arminda participated frequently in the UDL-informed lessons and completed all UDL-informed assignments. Conan participated in the UDL-informed lessons (whereas he did not in the non-UDL-informed lessons) and completed each UDL-informed assignment. Rodger, however, did not participate in the UDL-informed lessons and did not regularly complete UDL-informed assignments. This suggests that either the tasks needed to be redesigned to support Rodger better or that UDL-informed lessons needed more integrated supports to assist a student with Rodger's more extensive needs. Of note, however, the technologies used to support a UDL-informed approach seemed to engage all three students. The students utilized three educational technologies in a way they did not with other assignments.

In examining the variation of student experience between UDL-informed and non-UDL lessons, it appeared that in the regular world history classroom setting, a lesson informed by UDL seemingly had minimal impact on participation or task completion for Arminda and Rodger. Arminda, who had no diagnosed learning impairments, and Rodger, who had several, seemed unaffected by whether a lesson was UDL-informed. After an initial period where Arminda was not attending classes, she regularly participated in class, asking questions, and responding to Dr. Marzipan. Her completion of in-class work (such as notes) did not appear to vary based on whether the lesson was UDL-informed, although it was her failure to complete class note assignments that contributed to her lower final grade. Rodger was also seemingly unaffected, although in his case, he did not frequently participate in either the UDL-informed or non-UDL-informed lessons. Likewise, he did not complete most in-class work.

Conan was the exception for whom the presence of UDL seemed somewhat beneficial. As noted in Chapter Four, Conan's in-class participation was almost entirely concentrated within the UDL-informed lessons. This might be attributable to how he took notes and that most of the non-UDL lessons principally asked the students to take notes during Dr. Marzipan's lectures. Within the UDL-informed regular class lessons, there were collaborative small-group activities, and he participated in these. He was not required to take notes during those times so he could focus on participating. However, there was no difference in his classwork completion rate between the two types of lessons, as Conan always did his classwork.

When it came to completing applied learning assignments, UDL again did not seem to have a major impact on the case study students. Conan completed all his work for the class, whether it was a text-based Google Doc assignment or a more creative task like a Flipgrid video. Arguably, his engagement might have been more extensive with the creative tasks, given that he reported he enjoyed assignments like the Flipgrid video and said that he just tried to complete written assignments as quickly as possible because of how laborious he found speech-to-text writing. Arminda also completed most take-home assignments, including all the UDL-informed ones. Rodger's completion rate also did not seem to be affected by using UDL. Rodger completed some of the initial non-UDL assignments in the class and then stopped doing most assignments for the rest of the term.

The place where UDL seemed to most impact student engagement and assignment completion was when technology the students had not used before was implemented. This engagement was not universal, but all three case study students mostly completed these tasks: a video analysis in EdPuzzle, an audiovisual creation in Flipgrid, note creation in Jamboard, and HATs and review tasks in Nearpod. The three students completed both HATs in their entirety on

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Nearpod. Likewise, all three students tried to complete the EdPuzzle assignment and attempted to answer the questions. While Rodger did not submit his EdPuzzle assignment, he completed the questions and spent approximately the same amount of time on the assignment as Arminda. All three students also developed their skills with Jamboard. After initial struggles to use it at first, by their third try were able to use it effectively. The principal difference between the students' performance with these technologies was with Rodger. He was the only one of the three that did not complete a Nearpod applied learning assignment about the German annexation of Austria, nor did he complete the Flipgrid video assignment.

The student's performance with educational technologies to support UDL-informed lessons is an interesting finding of the case study. This was particularly the case with students' general reaction to Nearpod. As already mentioned, all case study students successfully navigated Nearpod to complete their HATs. After teaching a lesson about contextualization, I used Nearpod again and assigned the students a review assignment about contextualization and the global economic depression after World War I. Students had to complete different tasks within Nearpod, such as a graphic organizer to identify contextual issues surrounding the German annexation of Austria. The organizers completed by Arminda and Conan are in Figures 38 and 39, respectively. Also integrated into the Nearpod assignment was an opportunity to post additional primary resources they found about the annexation. Arminda and Conan's contributions to the collaborative posterboard are in Figure 38.

Figure 38

Arminda's Context Graphic Organizer

Please use your tools to write in 3 Big C context issues and 2 little c context notes (as best you can).

-Great depression

-Wide world economic downturn

-unemployment world wide

-Rise of Hitler and the Nazi party

-Austria and German join hands

Figure 39

Conan's Context Graphic Organizer

Please use your tools to write in 3 Big C context issues and 2 little c context notes (as best you can).

GLOBAL Great Depression

Hitler took full control of Germany

World trade dropped by 65%

Germany is controlled by dictator

American banks demanded repayment of loans
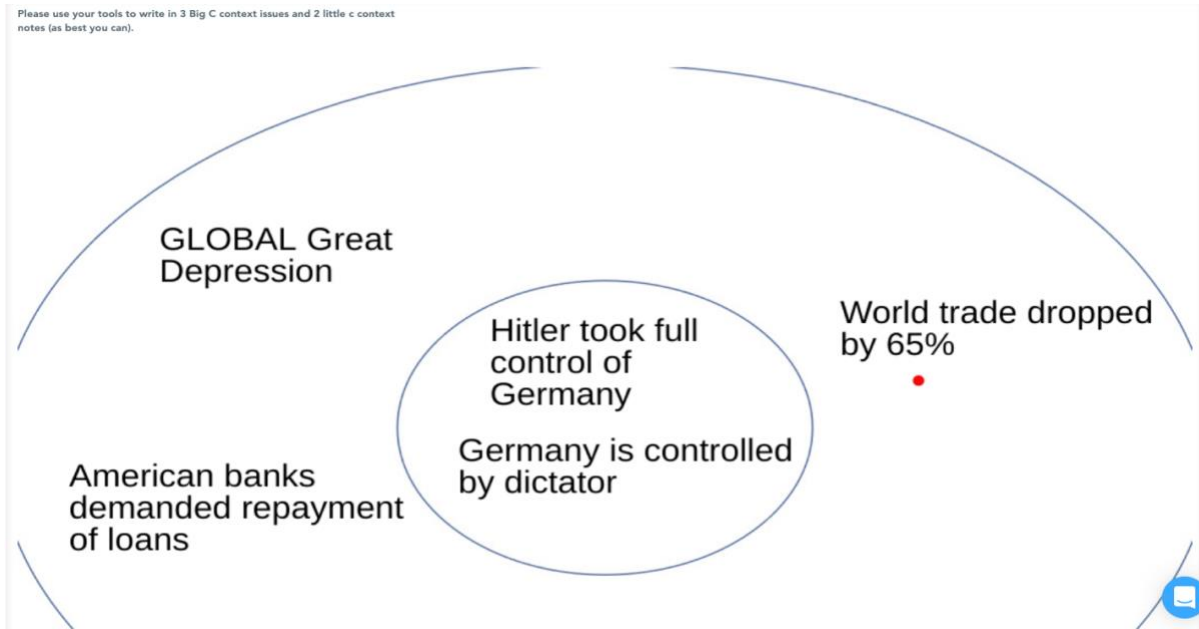
Figure 40

Collaborative Poster Board in Nearpod
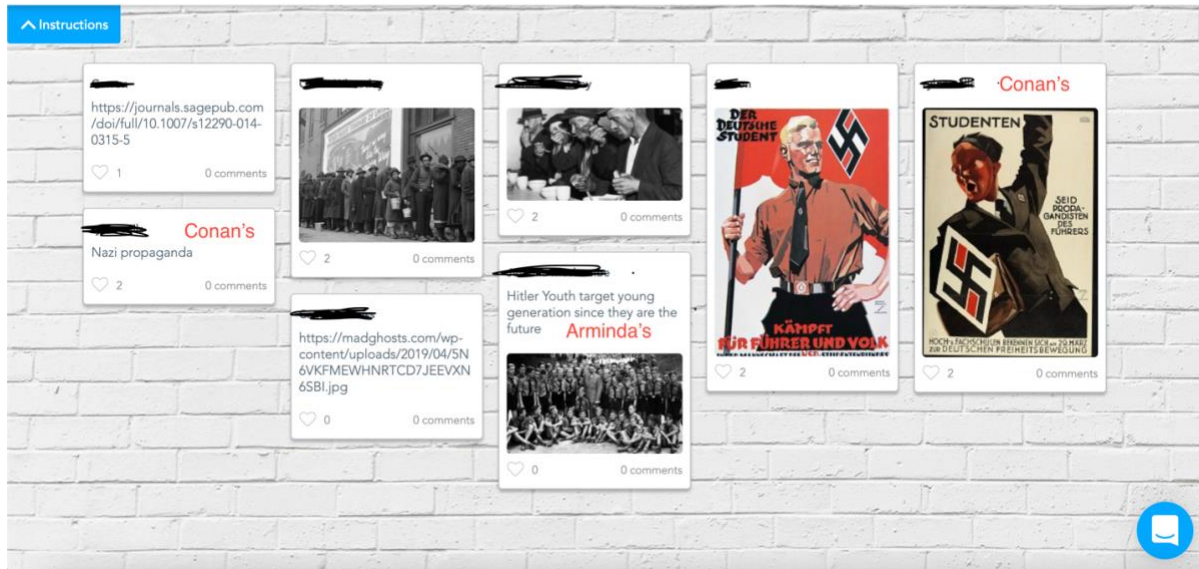
The students' regular use of Nearpod led me to consider the value of creating more UDL-informed assignments in Nearpod. The relative ease of integrating graphic organizers that the students could complete effectively, as seen by what Arminda and Conan produced in the first two slides, could be helpful for educators. While the organizers presented in the figures are not necessarily sophisticated, the students could use various creative tools to complete them in Nearpod. Tools like these allow the students to offload certain cognitive demands and create mental models they might use later. The fact that Nearpod made these easy for teachers to create, and for students to access, is an important opportunity for executing UDL-informed instruction alongside guided participation. Ostensibly, students could complete more complex organizers with more thoughtful lesson designs. Likewise, the collaborative poster board in the Figure 40 highlights the different ways the students could contribute, either by posting a simple comment as Arminda did or by incorporating images as Conan did.

For online teaching purposes, Nearpod seemed to have a wider variety of instructional tools available for teachers to design engaging classroom tasks. Teachers historically would have had to use different programs to complete online posterboards, digital graphic organizers, and online quizzes about historical videos or slides. While using multiple tools may not always be a major logistical problem for some teachers, Nearpod has all these different tools available to teachers so they could easily design assignments. Further, Nearpod has a built-in report generator for each class of students so that teachers would have a repository of assignments and student performance to track how students did. Students then had a similarly large array of creative tools to assist them with understanding content and expressing their responses. This seemed to help all the students to complete assignments created in Nearpod. And even though Rodger did not complete the one Nearpod assignment, he did complete the two HATs in Nearpod, suggesting that even with his significant learning challenges, the software might have potential in future lessons.

Historical Thinking for Case Study Students

My third research question was, "How did this intervention impact high school students with or being monitored for disabilities in the development of historical thinking skills?" While regular class lessons exposed students to historical thinking skills, the students did not get an in-depth experience learning these in only four short sessions. This may account for the inconsistency of results related to historical thinking among the case study students between the HATs, interviews, and survey results.

Collectively, the students could discuss the procedure and the utility of lateral reading six weeks after its introduction. This skill seemed important enough to the three of them that they remembered it when being interviewed and when responding to the survey. The lesson the

students had about lateral reading may have been the most concrete, given that I used a SHEG module on how to think through analyzing a website. I completed a full think-aloud in front of all the students on Google Meet, so they watched me as I questioned the different attributes of a sample website. However, even while they could recall in their interviews what lateral reading was and why it was important, that awareness did not lead to significant gains in their second HAT scores. While Rodger improved on his second HAT in lateral reading, neither Conan nor Arminda improved. Further, Arminda remained at the basic level, offering an answer that was less detailed than her first HAT. So, while lateral reading appeared through to have been apprehended by these students, it was not understood enough that the students could demonstrate consistent improvement when assessed.

Outside of lateral reading, Conan and Rodger struggled to comprehend other historical thinking skills. While both said, on the survey, that the other skills were important, they could not recall details about any of the three skills in interviews. Conan apologized for not remembering but said he could not describe any. Arminda recalled the operational details of contextualization. During the contextualization lesson, Arminda commented about the availability of technology for Austrians during the German annexation, which I later called out as a good example of contextualization to the full class. She remembered this example and was able to reference it in her interview. The fact that she had created that example might have helped her to remember the skill, even though it was taught nearly eight weeks prior. Even though the other two skills, corroboration, and sourcing, had been taught closer to the time of the interviews, none of the three students could demonstrate recall of those skills. However, it is worth noting that Conan improved on his second HAT in his demonstration of corroboration in the photo analysis question. He scored at the *Proficient* level on that task but simultaneously

could not discuss the skill when asked directly about it in the interview. He could demonstrate the skill but was unable to explain it fully.

The students also struggled to integrate historical thinking skills into their intervention group discussions. In preparation for the fourth intervention group discussion, I asked the students to try to use the historical thinking skills they had learned in class when writing their required insights and questions. None of the case study students did so. Only Odin, a non-case study student, tried to do this and asked a question incorporating the skills. Arminda and Conan both were able to react to Odin's question, but individually they had not transferred what they had learned in class to what they were being asked to do in the discussion. Both Arminda and Conan had insights that, when evaluated, showed elements of historical thinking but did not fully apply any of the four skills.

The mixed results with historical thinking left more questions than answers regarding the case study students. The only consistent finding was students' acknowledgment that lateral reading is essential. Given the impetus for this research was a concern about students' ability to evaluate information better online, this was a positive development. Further, to be fair to the students, there was limited modeling to students of how to apply historical thinking within the HATs or discussion, so their incomplete application of it was understandable. More lessons that integrate explicit practice with historical thinking skills might be necessary to help these students comprehend, recall, and then apply historical thinking skills.

Online Learning During COVID-19

My fourth research question was, "How did online instruction and other factors related to the COVID-19 pandemic impact the learning experience of students?" This question was formulated after consideration of the unique nature of completing dissertation work amidst the

COVID-19 pandemic. All three case study students were functioning in a learning environment shaped by the pandemic. They had to navigate online settings even as they had challenges with learning in a traditional classroom. The students had some shared difficulties learning online, but each had unique responses to this learning environment. Dr. Marizpan's pedagogical choices also influenced the students' experience.

Dr. Marzipan's strongest teaching attributes seemed blunted by the online setting. She tried to relate to her students online but had limited time with them and did not have access to informal times with students, as she might normally have in a school building. Even though Dr. Marzipan was generous in offering extra help time on Fridays, Arminda was the only student who ever attended. In addition, this was the first time this group of students had been together, so they did not know each other and did not have experience working together. Dr. Marzipan chose not to address this and did not ask students to introduce themselves, nor did she incorporate activities where the students would interact with each other. On many days, even though she was an engaging presenter, her class seemed like an expanded presentation with limited interpersonal engagement.

The district allowed the students to leave their videos and sound off to protect student privacy. This potentially focused Dr. Marzipan on content delivery because attempts at engagement were often stilted. If Dr. Marzipan asked a question, she was most frequently asking a screen of black boxes that represented the students, and she could not tell if they were paying attention. Further, if students were paying attention, they had to unmute themselves to answer. The whole sequence of her asking and a student answering a question frequently created a long disruption in the general teaching flow. Dr. Marzipan thus bypassed attempts at engagement to maintain her teaching pace. This was understandable, but it limited relationship-building within

the classroom. Outside of the intervention group, there were only two instances in the ten weeks where the students in the regular class were put into small groups and allowed to talk with limited teacher involvement. These were during the UDL-informed lessons that I led. Most of the other class discussion, including any informal banter, was directly mediated by Dr. Marzipan. Two students could not have a visible side chat as they might in a classroom to build social bonds. Google Meet did not allow for direct messaging between students in a class, preventing them from asking each other questions through the conferencing software. There seemed to be no social pockets that had developed in the class where intermental learning could occur.

While the intervention group discussion environment allowed for some intermental learning opportunities as students discussed historical content, it seemingly did not improve informal interpersonal engagement. While I required the students to appear on screen so they could see each other, time constraints always limited their opportunity to have small talk. They only had 45 minutes to meet and conduct their discussion, with some students arriving late and limiting their small talk further. When the intervention group discussions began, students introduced themselves politely and often shared what they had done on weekends. But these introductions took less than two minutes. Getting more time to chat informally may have been helpful. Students like Conan and Rodger reported that they were generally nervous about public speaking, and Rodger barely spoke in the structured discussions. Several students tried to involve Rodger in the structured discussion, but he usually passed when they asked him to comment. As noted earlier, while Conan spoke more than Rodger, he constrained himself to more specific types of contributions, such as adding on to what others said and asking fewer questions as the discussions continued.

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There was rarely a distraction or off-topic comment in the intervention group discussion. That may have been because the students were online and being recorded. This may have been a benefit of having an online group instead of being face-to-face in a classroom where other students might create more distractions. When another reviewer examined the transcripts of the discussion, he marveled at the students' focus, thinking it was unique that high school students were entirely on task without anyone going off-topic. Interestingly though, this on-topic behavior was strikingly like what Okolo et al. (2007) also reported in that study's classroom discussions of historical content.

Some pedagogical and technological modifications made in response to the pandemic seemed to benefit Conan. He earned an "A" grade for the class. For instance, having time to turn in notes meant that Conan could take what he started in class and complete using assistive technology later in the day. During class, he could use speech-to-text without being detected; he did not want other students to know that he used it to take notes. So, he left his video off, and they would not see him using speech-to-text. Learning specific historical topics was still challenging for him, however. He reported in his interview that he was less engaged on issues he was not interested in and cited the Russian Revolution as one topic that bored him. He also shared that even though he liked using different technologies, using those tools might make him good at technology but not necessarily good at history. I interpreted this as an interesting reflection about teachers selectively using technology. Socially, online education was a challenge for Conan. He missed a school announcement about online club meetings and did not get to participate that year. Besides the class, Google Meets, and Zoom discussions, he had no opportunities to talk to other students at Newton. Ultimately, even with those social limitations,

the online environment seemed to aid Conan's learning experience. He performed better in high school social studies than he did in middle school, potentially because of online affordances.

Rodger did not seemingly benefit from being in this online setting, as he did not pass the class. Rodger's case was unique for this group since this class was the only class he was taking online. He was at the Newton High School building for every other class and succeeded in at least one class, band. Additionally, he was taking this history class from the school cafeteria. This meant he was sitting in a large room with about one hundred other students. Given his discomfort with speaking in public, his limited contributions are unsurprising. However, he sat at home for the intervention group discussions and rarely spoke there, so being in the cafeteria might not have made a major impact on his participation. In his second interview, Rodger further indicated that he succeeded in band class because he could do everything he needed within the class. Interestingly, he was likelier to do in-class assignments than applied learning in history class. Perhaps if he had been in a face-to-face world history class, his teacher could have better supported him with assignment completion by providing consistent supports for Rodger's executive functioning. Rodger also did not appear to use technology to address his learning needs as fully as Conan did with tools like speech-to-text.

Arminda seemed motivated to learn in social studies and earned a "C" grade. Her primary challenge in learning in this online setting was handling her family responsibilities. Had Arminda been able to attend school without distractions, she may have done better, as she generally did excellent work. Having to remain in her household was a significant constraint since her siblings repeatedly distracted her during regular class time and small group discussions. Arminda was fortunate to have Dr. Marzipan for social studies, as she was tolerant of late assignments, which benefitted Arminda. Arminda's use of technology did not suggest that it gave her an advantage

or helped her compensate for personal learning challenges. While she did use some of the features of Nearpod, for instance, to answer a question without typing, for the most part, it was pedagogical choices like flexible due dates and not technology itself that helped her to navigate the pandemic learning experience.

Summary

Examining all three cases together provided additional insights into this intervention's effects. Regarding peer-mediated and structured small group discussion, two of the three students seemed to benefit, in slightly varying degrees, from the application of the protocol. They improved their talk quantity and their talk quality. This included a student with diagnosed disabilities on an IEP who reported challenges with public speaking. However, the protocol did not promote improvement from the one student with the most significant diagnosed impairments. This may indicate a need to reconsider how to revise the protocol to serve similar students. Similarly, the intervention's effect appeared to be relatively minimal regarding the impact of UDL-informed lessons. Only one student, Conan, again, a student with a diagnosed impairment, demonstrated a noticeable change when he participated more in class activities during UDL-informed lessons than in non-UDL lessons.

The comprehension of historical thinking skills was more challenging to determine. While all three case study students reported that they understood why lateral reading was essential, they were generally unable to demonstrate how they could apply the skill when tasked with doing so in the HAT. Further, some results on the HAT did not correspond with what they reported in interviews. Individual students could either remember a skill but not apply it or somehow could apply it but had no recall of it. This might be attributable to the short time provided for practice or the misalignment between what they learned about in class and how they

were asked to recall it. Finally, the online COVID learning environment uniquely affected each student. The main trend was that each student lost interpersonal engagement and opportunities for intermental activity beyond the intervention group discussion. Even then, the discussion was focused on history content only. While the online environment seemed to help one IEP student succeed in the least restrictive environment, another other IEP student was more challenged and failed the course. The third student, who was undiagnosed, received an average grade in social studies but had problems she reported in other classes that online learning might have caused.

CHAPTER SIX: DISCUSSION, LIMITATIONS, AND CONCLUSIONS

Discussion

In this chapter I present a discussion of my cross-case analysis results from Chapters Four and Five alongside considerations of the research literature presented in Chapter Two. This cross-case study examined an intervention's impact in a high school world history class for students with or being monitored for disabilities. The case study students' experience presents a unique opportunity to reflect on multiple educational disciplinary arenas, such as CHAT, UDL, technological affordances, and historical thinking. Figure 41 shows the different arenas of scholarship that intersected during this study.

Figure 41

Disciplinary Intersections in this World History classroom
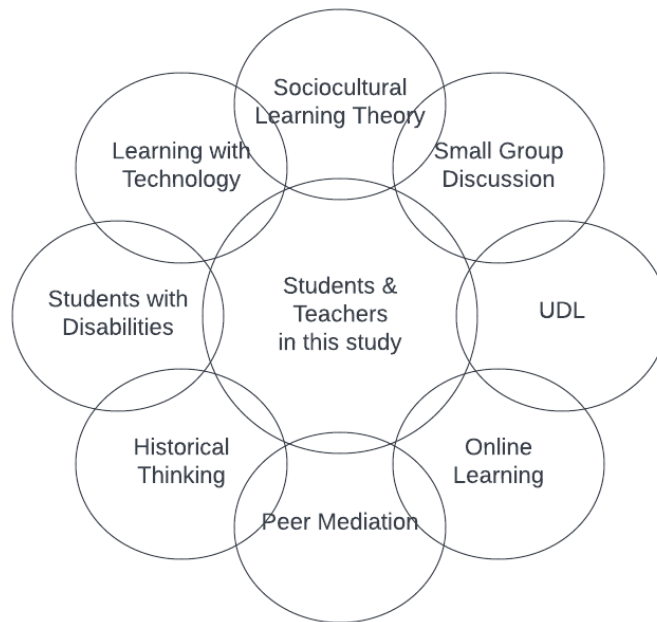
I also expand discussion to include reflection on the larger group of students in the world history class, in addition to the case study students. I begin with a review of peer mediation and

small group discussion, examining what the results of this intervention suggest. I next examine

UDL's operationalization in this high school environment. I then review the experience of trying

to integrate historical thinking before looking at the intersection between online learning, CHAT,

and sociocultural theory. Following my discussion, I explain the limitations of this study. Then I

provide my conclusions, including implications for theory, research, and practice.

Peer Mediation and Small Groups

During the ten-week term, outside of the four intervention discussion sessions, students

only worked in small groups twice during regular class time. Dr. Marzipan consistently stated

that instruction needed to be standards-based; she focused on historical content acquisition

through direct instruction techniques. During my time in her classroom, Dr. Marzipan did not use

discussion as an instructional practice, even though social studies research has shown its

effectiveness (Reisman et al., 2018). Given COVID limitations, Dr. Marzipan may have felt that

those discussion activities were ineffective given prior student responses on Google Meet. Still, I

wondered if she did not see the academic value of student discussion in her classrooms, like

other teachers observed in discussion research (Mercer & Littleton, 2007).

This seemed to be the case given how she responded to the two UDL-informed group

activities I designed that we used in the regular class. My goal for both sessions was to

encourage peer-mediated learning. I gave the students explicit discussion instructions and then

sent them off to groups, with Dr. Marzipan and I shadowing one group each. However, during

these sessions, Dr. Marzipan took over her groups, helping them complete their tasks and then

checking in with my groups to ask if we were finished. I was initially confused by this, seeing

that the students were conversing well about the topics and seemed to relish the engagement

time. I interpreted this as Dr. Marzipan being concerned about returning to the academic course

content and thinking the small groups were slow. Part of my rationale is that the groups were on task and not disruptive, which might have been a typical reason to limit small group classwork. Again, this aligns with what researchers have found about teachers' operationalization of small group discussion, even with its potential benefits for students, specifically SWD (De La Paz & Wissinger, 2017; Okolo et al., 2007; Resnick et al., 2018; Vaughn et al., 2011).

The students themselves observed their teachers' reluctance to use small groups in reporting their experience at Newton. In their interviews, Conan and Arminda told me that having small group conversations in their Newton classes was unusual. They also reported that even when they had small group work, the teachers did not give clear instructions, and so the students felt that the small groups were generally ineffective. Arminda disliked most small groups because her classmates would not do work. Conan did not like them either, although he had reported that he was someone who did not do the work and let others complete the work for him. I understood, based on these reports and student responses in our regular class, why initially teachers may have been skeptical of doing more of these discussions. In the first regular class small group, one student, Maya, initially acted incredulous when I asked her to lead the group. She shouted back at me when I said she would be leading. However, once I explained why I wanted her to lead, she settled into the opportunity and thoughtfully guided her peers through questions about our lesson on contextualization.

Observing the group, it was remarkable how well the students discussed the concept of contextualization and provided pertinent examples of it. Maya helped moved the students through questions, with each student providing a unique insight. One student discussed how individuals had limited perceptions of leaders and thus imagined they might be more trusting. Arminda voiced her opinion here about the availability of technology, even newspapers, that

would impact decision-making back in 1930s Austria. Also of note, the discussion allowed SWD to listen to their classmates talk through the ideas, which studies show can be helpful (De La Paz & Wissinger, 2017; Okolo, et al., 2007; Wu et al., 2013). It seemed that the students simply needed some clear modeling of the process, the freedom to engage, and oversight of their work so that they followed through, at least initially as they grew comfortable. Considering the scope of student learning needs and what the case study students reported, they might have appreciated more interpersonal engagement in small groups, as, once they settled, they operated effectively discussing the content with each other. Providing these opportunities allowed crucial intermental activity so they could voice their thoughts, get responses from their peers, and process topics from their classes.

The success in the regular class was somewhat replicated within the intervention group discussion I conducted outside of class. The students there had few issues speaking with each other within the protocol. My coding partner was impressed that these students maintained their on-task behavior for the duration of the historical discussion. Reading the third discussion transcript, he marveled at how the six students sustained their engagement even though they were only 14 years old. Notably, this type of experience with student discussions has been reported before (Okolo et al., 2007; Wu et al., 2013) so my intervention group students were not necessarily unique. However, I think this general behavior resulted from both good task design and training and the student's inclinations toward discussion. I implemented good sociocultural theory practices by modeling how these students should participate (Littleton & Mercer, 2013; Mercer & Littleton, 2007). I led the second discussion so the students could observe me as a group member performing the facilitator role. I directed attention to each student, demonstrating how to work each participant into the discussion. After the discussion, I gave each student

specific feedback on their performance and provided the full group feedback on their collective performance, as research suggests is important for a peer-mediated environment (Resnick et al., 2018; Wexler et al. 2015). Ultimately, the intervention students learned the cultural tool of peer-mediated discussion and were able to function on their own as a collective.

As the intervention group discussions continued, the students improved in their ability to engage with each other. Discourse analysis of the transcripts suggests that most students reviewed their feedback and grew to understand processes and how they should build off their work in prior discussions. Newark, who spoke the most and dominated the first discussion, scaled his contributions back so other people could speak. He adapted to the group and tried not to overwhelm the others, even as he loved talking about history. Gareth contributed sparsely to the first two conversations but increased his speaking when he took on the discussion leader role. Among the case study students, Conan's desire to do a high-quality summary motivated him to take notes and capture ideas accurately. Arminda continued to increase her questions and often ensured that discussion continued in quieter moments. While these changes did not happen immediately, it was apparent that students were learning about discussion roles and apprehending how they each would use the cultural tool of historical discussion and be involved as peer leaders.

This said, the students did not understand all facets of the discussion, and peer-mediated talk had some limits. They rarely held each other accountable within the discussion when other members did not contribute or forgot to prepare. In survey responses, some students expressed frustration at other group members for not speaking. The students also did not fully grasp how to help each other. For example, if a student was struggling to participate, like Rodger, none of the others offered any support for how to get more involved. Additional modeling in such situations

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would help them learn how to prompt new thoughts or encourage a classmate. In earnest, my one attempt to do this with Rodger in the second discussion was a failure, and so I should have found a way to try again to help them all for future discussions. Also, a dedicated review of the template, which included sentence stems they could have used, may have taught them different question forms to practice in the discussion.

The intervention group discussion was initially designed to be used in the regular classroom but, given changes in instruction due to the pandemic, it had to be modified to serve a smaller set of students. Even with the challenges in the intervention group, enough progress was made to hint at the protocol's potential. Especially during the pandemic, it might have helped develop classroom relationships that fostered engagement. It could have offered students time to reflect on what Dr. Marzipan had taught them and allowed them to vocalize their insights, agreements, or concerns, true intermental opportunities that would have led to more intramental processing of the content. This might have even supported greater collective learning activity and helped students perform better.

UDL in Action

Research literature had previously suggested the UDL framework (Greer et al., 2014) as an essential resource to teach students online effectively. As I examined the course's history content, considered learner variability, and tried to work with Newton's constraints in designing lessons, I found the UDL framework was helpful as a guide to consider learner needs more comprehensively. I also frequently reflected on the importance of the "D" in UDL, the *design* work (Connor et al., 2019), which reminded me to think deeply about the right instructional methods to use. When examining the cross-case analysis in Chapter Five, however, and how Rodger was not successful in this class even though several UDL-informed lessons and

assignments were thoughtfully crafted with his capabilities in mind, it made me think that the UDL framework might not be enough for supporting all learners. The other case study students had mixed success, with only Conan demonstrating some improvement in participation through UDL-informed lessons. This should be an important consideration for the ongoing analysis of UDL's utility in high school learning environment, although as a qualitative case study, it is important to recognize all the variables and the constraints of this effort.

There was also broader learning about facets of UDL, some of which can be gleaned from student feedback. In asking the case students about the UDL-informed lessons, they reported that these lessons were generally helpful. When I interviewed the students, they shared what they thought were the differences between the lessons I taught (the UDL-informed ones) and the regular lessons. The case study students reported that the primary difference they noted was that the UDL-informed lessons that I taught were more deliberate in pace. Conan mentioned my lesson pace because when Dr. Marzipan taught, he said he was "scrambling" to keep up with her lectures. He specifically said that I was "slower." Arminda did not use the term slower but said that the difference in the lessons was that I focused on teaching processes step-by-step, so the lessons appeared more deliberate.

This perception of slowness was an interesting observation from the UDL lessons. My lessons were based on teaching skill acquisition, such as how to perform lateral reading. When I taught lateral reading, I did a think-aloud as I reviewed a website, so the students could listen to how I thought through my questioning of the website's accuracy. When I reviewed sourcing with the students, I walked through a list of questions about a source and explained why I would ask those questions. This teaching approach emanated from the UDL framework; I shaped my lessons and associated tasks to help students build toward becoming expert learners outside of

school. Apprehending historical thinking skills would give the students the tools to succeed in higher-level classes. But I had to show them how to apply these skills, which meant using various modeling techniques, such as the think-alouds, so they could observe how I was using those skills to complete an activity. I complemented activities like the think-aloud with multiple visual representations of materials, such as videos and graphic organizers. Often these included clear details of process steps for a different historical thinking skill. Further, I integrated used collaborative group activities in the regular class where they could hear each other's thoughts about what I had taught, and they could process and reflect on the content.

Whether technology is required to implement UDL successfully has been a critical debate among UDL scholars (Edyburn, 2010). In this study, teaching inclusive lessons without complementary technology would have been challenging. This class is a good case for examining the relationship between emerging technologies and high school students since most of these students only experienced this class through technology. They never physically met their instructors anywhere except in Google Meet. Students like Conan had also become accustomed to certain existing technologies and had frequently used them to support their learning needs.

I introduced three technologies to the students with varying degrees of success. The students initially struggled when using Jamboard, a whiteboard application built to permit collaboration in a classroom setting and to make it easier to integrate images during notetaking. I continued to incorporate it into lessons to facilitate practice, and by its third use, all students, with and without disabilities, were starting to use it effectively. Nearpod, a presentation tool, was used on four separate occasions, both with applied learning assignments and in class. Students could use Nearpod almost immediately, and they regularly experimented with its varied features,

including its collaborative posterboard and alternative means of student response, such as answering questions orally instead of in writing.

The only technology that students struggled with was EdPuzzle, which was only used once and might have been more effective with students had they had as much practice as with Jamboard and Nearpod. That difference made me think about how many repetitions students need with these tools in UDL-informed lessons. Since I did not have much time with my lessons, practice was infrequent, and I wondered if having full class periods to teach might have sped up students' ability to use the technology. I also wondered how much technology a teacher should try to use in a term, given how much the technology mediated these students' experiences already, and that they would not be able to practice all tools regularly. Overall, however, the students' extended engagement with the technology seemed to support the value of its inclusion with UDL-informed lessons. Conan's experience might be the best example of this – he improved in social studies because he could use a variety of technology tools in the classroom. Without these tools, like when he was in middle school, Conan would have been less able to practice his historical thinking and civic reasoning skills. This said, the technology was not a panacea, and not all students were responsive to the technology used. As previously mentioned, Rodger did not use all the technologies. While he participated in class when I assigned technology-driven tasks more than in tasks without technology, my use of technology did not automatically guarantee his engagement. While it helped activate these UDL-informed lessons, technology still had practical limits with specific SWD.

Finally, the teacher logistics of UDL implementation should not be overlooked. To teach my lessons, I needed substantial preparation to use each technological tool correctly while also recalling the applicable historical content and facilitating the class. For my fourth lesson, which

included a Nearpod, I worked in an office where I had three monitor screens, my iPhone, and a separate laptop running simultaneously. I needed to see my lesson plan, the students in the Google Meet, the sign-in page for the Nearpod, and the Nearpod presentation as the students saw it. I had several historical texts out on my desk to ensure I had the background information on the primary sources about Cuba we were going to discuss. I have not had a more cognitively demanding teaching experience. Similarly, each lesson I designed required careful consideration of tools, methods, and the subject matter. I was fortunate only to teach four lessons for the entire term, to a small group of eleven students, and with lessons that only took up half of a given class period. Considering the typical course load of a high school classroom teacher, with five-six class sections of approximately 25-30 students each, designing and implementing UDL-informed lessons would be far more challenging than what I experienced as an instructor in this study.

Teaching Historical Thinking

In one of the seminal works about online civic reasoning (Wineburg & McGrew, 2019), student participants started questioning online sources with greater aptitude after only two intervention sessions. However, those participants were undergraduate students at a top private university. Helping K-12 students might require more time and intervention. SHEG scholars never argue that teaching historical thinking is an easy task. However, based on my experience teaching lessons on historical thinking, I am convinced that teaching historical thinking needs broader development and research at the K-12 level to determine how to help all students succeed. Further, in recognizing the sophisticated ways that students will access web-based materials and learning online (DeSchryver & Spiro, 2008; DeSchryver, 2017; Spiro, 2006; Spiro & DeSchryver, 2009), comprehensive approaches need to be honed to address new learning processes.

Developing a curriculum based on SHEG materials is still a work in progress. What existed in 2021 were materials that could be appended to an existing curriculum. For example, the HATs available on the SHEG website were a broad compilation of potential assessments that SHEG assumes teachers will use to augment their curriculum. I first thought I could quickly use these materials and assessments with Newton's pre-existing curriculum. However, after this experience, I think the historical thinking materials need more detailed explanations for teachers on how to use them.

For example, there is also no clear guidance on how a teacher is supposed to teach these historical thinking skills and whether they are sequential or can be taught as a topic might permit. I tried to align skills with appropriate topics; contextualization came first, followed by lateral reading, sourcing, and finally, corroboration. I attached contextualization to a *TIME* magazine article about Hitler, linked lateral reading to Holocaust denial, connected sourcing to photos from the Vietnam War, and coupled corroboration with an understanding of the Cuban Revolution. I also mentioned close reading in my broad overview of historical thinking when I first taught. I tried to maintain a logical connection between skill development and fostering understanding of historical content for the students. My experience was that this somewhat worked, and many teachers might be able to apply the skills thoughtfully to content. Still, a more detailed crosswalk from SHEG of how to teach these skills across a curriculum would help all practitioners, particularly novices who are just starting in the field.

Another problem I encountered in using the SHEG materials was that they have a larger collection of American historical documents and HAT materials but more limited resources for teaching world history. Twelve units of material are available for American history with 110 lessons that track with typical high school American history survey courses. SHEG also had 87

different American history HAT assessments. By comparison, there are only three units for world history. Of the 51 world history lessons, only 18 are about events in the 20ᵗʰ century. Also, only 40 world history HATs are available, of which 24 are from the twentieth century. Had I been assigned to an American history class my experience may have been smoother due to the existing materials. I also think the alignment with lateral reading would have been more substantial, given that more websites tie to American history narratives written in English than what is available for world studies.

During the intervention, I adapted primary sources to support the variability of students. While Monte-Sano et al. (2011) give broad guidelines for this, it was not easy to do. As I rewrote documents with the Lexile Analyzer, I had to eliminate complex words frequently. Since these were world history documents, they contained geographic names that the Analyzer would continually flag as too challenging. When I was done, the remaining document was missing elements critical to understanding the historical content. While I could easily give students the adapted version of the text in addition to the original, I was concerned that doing so would increase the size of reading packets and deter overall student engagement. The packets already contained several documents and images because I wanted students to have ample context for their tasks. Ultimately, I was never quite sure if I was doing this quite right and it would have been helpful to have a guide for reframing primary sources, precisely world history sources, to help SWD.

The lack of improvement by the case study students on the second HAT gave me pause regarding how HATs are operationalized in teaching historical thinking and online civic reasoning. Based on the case study student experience, it may have been worthwhile to have more guidance on preparing students to take a HAT. This would have aligned with good

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sociocultural applications, as I needed to better teach these specific cultural tools to the students (Wink & Putney, 2002). An original aim of this study was that the students would do better on the HATs based on their work with the intervention group discussion. However, it became apparent that the students had done nothing like the HAT before, and some of their challenges may have been their lack of experience with the process, regardless of how well they were doing in the intervention group. While SHEG does not encourage teaching to the test, a more comprehensive model for approaching the HATs with students would be useful for educators.

CHAT, Sociocultural Theory, and Learning Online

The online learning environment in which this study was conducted prompted several interesting observations valuable for ongoing research into sociocultural theory, or more specifically, CHAT, one of its later evolutions. The first observation was whether anyone – students, teachers, the district, etc. – considered the object of this activity system or the ultimate learning goal of the class. Kaptelinin and Nardi (2007) argued that the object of an activity system, something that has its roots in Vygotsky (1978) but was reconceptualized by later scholars, was an important analytical tool to consider. That explained that when all system members understood the object, it would help provide the class with its reason to exist and complete its work. The object of the activity is the sense-maker and helps underscore the why of what the class, teachers, and students, were doing. This is visualized in Engeström's triangle (1991) in Figure 37, which he conceptualized to explain the more complex interactions at work in a system. He included the influence of the community, its rules, and how the students and teacher (the subjects in the triangle) divvied up the work in the system. Engeström (2001) later honed this concept by tying it to Bateson's (1972) theory of learning levels. That effort led to Engeström contemplating the double bind of a classroom activity system, where students and

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teachers might be locked into limited learning because they are not collectively working toward

the goal of expanding knowledge. Engeström (2001) even indicated that reaching new levels of

learning, of answering true whys of learning activity collectively, were rare.

Figure 42

Engeström's Activity Triangle (1991)
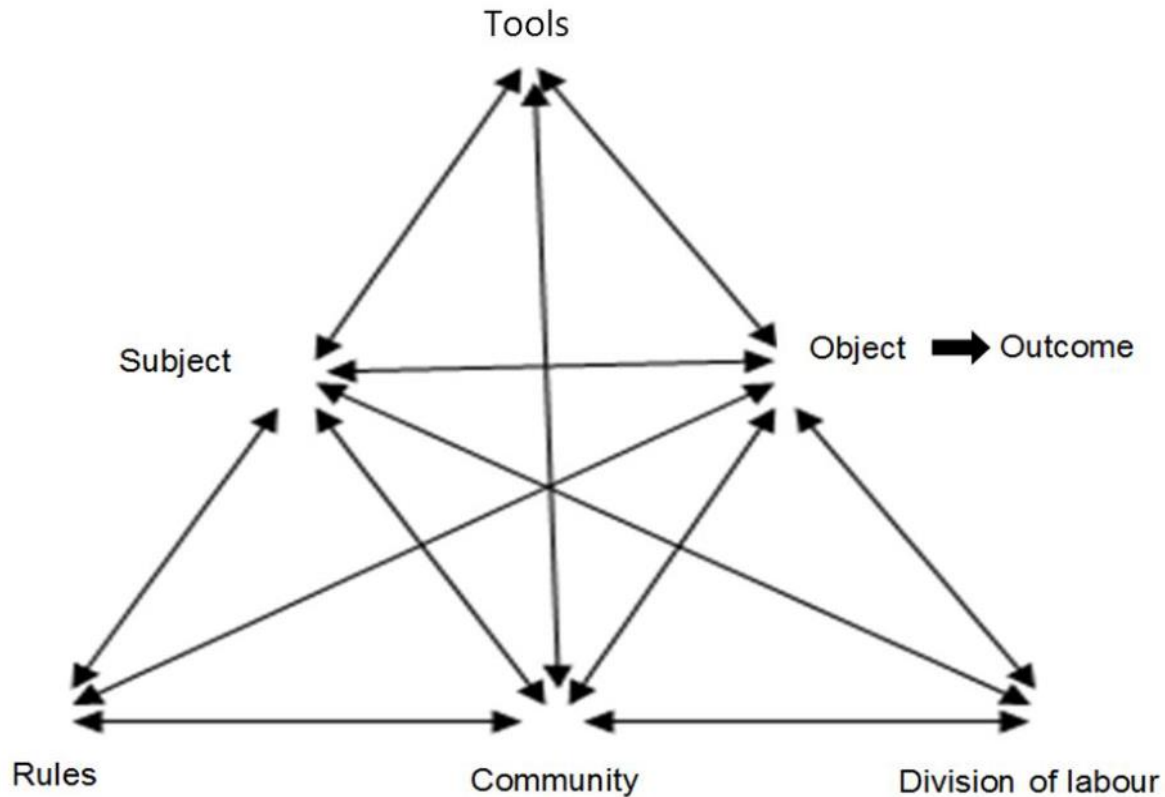
Note. Reprinted from Engeström, Y. (1991). *Non scolae sed vitae discimus*: Toward overcoming the encapsulation of school learning. *Learning and Instruction, 1*, 243–259. Reprinted with permission.

The students at Newton seemed to be clearly in this bind. They were meeting in this class

to learn world history, but I could not see the students and Dr. Marzipan working collectively to

reach new understandings of world history. Now, I personally did not expect Dr. Marzipan to do

something different than most other educators. What she did in class might have been the best

that could be expected, given Engeström's note about how rare higher levels were and the

challenges of pandemic teaching. However, it seemed that the double bind was more pronounced in this setting because of the extremely limited collective work of the class. That made me wonder about what Dr. Marzipan could have done to address this if anything. According to Engeström, she and the students would have had to answer larger questions about the world. One way that Engeström suggests doing this is through engagement with another activity system (e.g. – another class, a senior citizen's community) that might share a similar object of activity. On the surface, I did not think that was possible. I was curious if Dr. Marizpan could have tried to connect to some other group that was grappling with learning world history and thus bring the students into some form of dialogue about it. Maybe another activity system would have also been trying to make sense of the global impact of COVID. But then I also considered what would be the ultimate value of that engagement for the students, given the work it would require of Dr. Marzipan. Maybe it was simply sufficient for Dr. Marzipan to do what she did here.

Yet, I struggle with calling what the class did sufficient because it seemed strange for Dr. Marzipan to continue to ask students questions about long-dead Russian dictators to learn about world history during a generational global calamity. When considering the expanded learning model that Engeström (2001) proposed, I more than once wondered what our point was in this classroom if not to push the students to contemplate the massive world history event confronting them. Even though Dr. Marzipan sporadically reminded students of the wider application of historical content, that application was usually subordinated to content standards. While those content standards might be, in one sense, the tools in Engeström's triangle through which the students were supposed to engage the object of activity, learning world history, they seemed insufficient here; potentially, they were an obstacle to authentically engaging the global

circumstances in which this course took place, or a more authentic why for learning world history.

The second observation was whether eliminating most interpersonal dialogue between students in the class prevented the class from achieving its learning aim. I wondered if the students, who could not exchange insights in class, could fully process the content being taught. The class did have norms and rules. In this case – the norm was for Dr. Marizpan to lecture about world history, and then the students complete class notes and applied learning assignments. To an extent, that worked as students received their grades for the term as students in any class would. Still, I wondered if the students or teachers learned world history, the object of activity, with these norms and without interpersonal discussion. There was no means for two students to have a visible side chat as they might in a classroom. Google Meet did not allow for direct messaging between students in the class, which prevented them from asking questions to each other. In short, there was no opportunity for intermental processing, so students could not ask questions informally to each other to get different perspectives, which they could then take and process intramentally. At one point I started using the chat function of Google Meet to add commentary about historical topics, and students would engage me via the chat, sometimes adding details and comments in response to mine, and occasionally asking follow-up questions. Yet Dr. Marzipan seemed to think this was distracting, so I stopped doing it, even as I intuited it was providing an essential intermental space.

As an educator, I struggled to observe these limitations because while this activity system, the class, respected the norms as a collective to achieve some level of learning on Engeström's scale, there was greater opportunity for collective engagement that might have pushed the students and the teacher (the objects of activity) to learn more. At the least, I could

have kept that Google chat going. But I also could have designed lessons and discussions to address those larger learning aims. I also think Dr. Marzipan and I limited ourselves to the standards and did not rethink what the students could collectively achieve in this online space. Reports have shown that students and adults wanted more discussions of meaning during the pandemic (Pitawanich, 2022). Some of the students' best work came when they were engaged in dialogue that connected to the present. Their reaction to the assignment about children in the Holocaust, purposefully designed to inquire about their experience in the pandemic, produced the most creative and authentic responses. Students could compare their experiences in the pandemic with teenagers who experienced the Holocaust. The students were also able to adopt historical perspectives and empathy. They recognized how much better living in the pandemic was than enduring more dire circumstances in 1940s Germany. I saw this again in the discussion of lateral reading. Students had recently observed the insurrection at the U.S. Capitol when advocates for President Trump stormed government buildings, and various media portrayed this event in wildly different ways. This global event may have made teaching lateral reading more salient for them, as discussions of misinformation were frequent on the news. But even as I saw the hunger for engagement, especially within two small group discussions I did in the regular class, I retreated into trying to get through the semester, and not pushing for more discussion outside the intervention group.

Several other observations emerged from the intervention group in their peer-mediated discussions. These appeared because the intervention group became separate from the regular class and semi-independent, which was not the original intent of the study. First, I noticed that while here I had more control of the group as an activity system, I personally struggled to consider the true object of our activity in the intervention group. In fact, I allowed my concerns

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with the student's schedules to override encouragement of this work toward a higher learning aim. I did not reinforce that this discussion could be important for their longer-term social participation. When I introduced the task to the regular class, Newark had commented -–"sounds like we are stealing from you here," when I mentioned they would receive an incentive, because he liked talking about history. I did not dispute him, maybe explaining to him that having more discussion about historical topics between students was a privilege not afforded to everyone else on earth. I wondered if I had engaged Newark this way, naming an aspirational value of the discussion as opposed to chuckling at his comment, if the students in the group may have sought an even higher level of engagement with the work. Also, had I better emphasized the collective nature of their discussion, and how working together may have led us to new knowledge, it may have inspired better overall performance. Roth and Lee (2002) related a similar approach with science education, and had I followed it, maybe I would have seen different overall results from specific students.

Within the intervention group, I also learned how difficult it was to perform guided participation (Rogoff, 1991) and transfer knowledge about certain cultural tools, like group leadership, without regular engagement and modeling with the students. In the two intervention group discussions led by non-case study students, I relied on two boys, Odin and Gareth, who demonstrated strong executive functioning. It was hard to guide them on how to moderate the small group, though. In a physical classroom, there would be more opportunities to chat about upcoming work informally. As a high school teacher, I would have stood over student groups and nod my head as they navigated their talk to help them in their early stages of learning the process. Online, I decided to turn off my camera so the students would forget I was there. While Odin led the first intervention group discussion well, he had minimal guidance from me during

this discussion. I did slightly better with Gareth and then Arminda, and I crafted a new cultural tool, a leader guide form, to support them during the intervention group discussion so they would have a ready reference to the language and thinking about what to do in the discussion.

While these difficulties existed, these students did seem to have situational awareness that their intervention group discussion was a research project which was different and potentially meaningful. The students were all consistently present, and even in their most challenging discussion, they all tried to engage. Even when the discussion slowed down, someone usually would try to interject a new question to keep things going. They acted as if they had responsibility for how the discussion ran. No one was rude, and leaders were cordial if a student did not contribute. Those leaders would even return to students that passed on prior responses to see if they wanted to try again. Reviewing the transcripts, the survey, and the interview comments reinforced my consideration of the intervention group as its own activity system where the students collectively tried to achieve a learning object. Since I did not completely reinforce this early on, I wondered if they arrived at this understanding because of the control that they had here and they did not have elsewhere. Since the students had so little control in the rest of their learning environment and even their personal lives – most could not attend school, could not be in their regular classroom, or could not even meet up with each other socially – this discussion room where they had relatively minimal adult oversight was a unique space that allowed them to act collectively, and maybe, even if they did not quite know it, learn something unique.

Limitations

This study has several limitations which may have implications for future research. This study focused on three unique students' experiences in a high school in Oregon. While the study

is more robust because it is cross-case, as opposed to a single study, it is nevertheless a single account of experiences with an intervention in one class among all their educational experiences. This study also focused on only one section of one course at Newton High School. I had limited exposure to teachers and materials outside of what was brought into this class through Dr. Marzipan, so while references are made to school and district curriculum, and even Dr. Marzipan's academic department, I primarily saw these enacted through one teacher who may or may not be truly representative of the community. While qualitative researchers do not necessarily seek to make their findings generalizable (Hoyt & Bhati, 2007), the lack of insight from Dr. Marzipan's other classes, the larger school, or the broader Newton community confines what might be learned from this study.

This study was also conducted during a remarkable circumstance – emergency remote online teaching caused by the COVID-19 pandemic. While that provides a window into seeing learning and development within a unique environment, such a widespread disruption to education is unprecedented. The sudden shift to online learning was difficult for teachers and districts to execute, and the lack of preparedness for online teaching was extraordinary. Districts now have new tools to support educators, teachers have experience with instructing online, and students and parents have a general understanding of the machinations, as well as the limits, of virtual learning. All individuals will have adjusted to the various stresses of a pandemic environment, challenging as they are, in their particular and personal ways. This study happened in such a unique situation that one must interpret these findings primarily within this context.

<center>**Conclusions**</center>

Implications for Theory

       Vygotsky (1978) could not have predicted a space like the Google Meet classroom, where students are put into small boxes on a screen and allowed to blot out their images so that the teacher cannot see their faces. However, scholars have recognized that instructors could still shape and transmit knowledge by creating different cultural tools and using guided participation, as Rogoff (1991) explained thirty years ago. Pettersson (2020) argued that CHAT, an evolution of Vygotsky's original sociocultural theories, could be helpful to educators in arranging a digital learning environment. Her research suggested that if educators attended to a greater discussion and understanding of the object of an activity, or the meaning of a classroom activity system, digital education could produce high-quality learning. Her concern was that in digitization efforts, too much time was often devoted to implementing new digital tools. Using CHAT would allow teachers to prioritize the why of learning and situate tools properly for optimal learning.

       Reflecting on my study's results, Pettersson's insights on CHAT make sense. It seemed during COVID that school districts like Newton gave significant attention to the means of continuing classes, which led to the proliferation of web conferencing software like Google Meet and the expansion of learning management systems like Google Classroom. This initial emphasis was certainly important because teachers needed to be able to work with students, given the conditions imposed by the pandemic. However, in looking at the wider reports of learning losses (Engzell et al., 2021; Patrinos et al., 2022), and considering several comments by the case study students, maybe teachers spent too much time on the tools and the how of making classes happen (and the relief of being able to do so) and did not spend enough time talking with students about why it was important they continue to learn. Further, it seemed obvious that students lacked

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frequent ties between what they were learning and the larger society. Even the district's

terminology, *applied learning,* appeared to need greater clarification for the students – how was

that work *applied*?

In the same vein, does CHAT's emphasis on the interpersonal and collective engagement

of students as subjects of an activity system also provide an answer as to why, even though some

students may have still completed classes, there were those learning losses? Also, was something

important missing from the learning environment in this class and others like it because

significant interpersonal dialogue opportunities were absent? While critics of online learning

have indicated that it was the modality that caused many of these issues, could understanding

what CHAT and sociocultural theory say about students accessing intermental and intramental

states help improve future learning endeavors in both online and physical learning environments?

Given reports about the significant socio-emotional learning needs of students returning from the

pandemic conditions (Blad, 2022), can CHAT provide educators with a heuristic, as Pettersson

(2020) suggests, for corrective action?

Conversely, in reflecting on the practicalities of teaching through this case study, both in

the intervention group and with the entire class, I wondered if CHAT is too idealistic regarding

learning levels, whether a class operates online or not. While I have occasionally critiqued Dr.

Marzipan in this study, I also believe that Dr. Marzipan was an excellent instructor working

diligently to provide these students with enthusiastic and informed teaching in difficult

circumstances. She was not personally immune to the cumulative effects of the pandemic, having

to take care of herself and her family while teaching. When again considering what it would have

required for this class to reach those higher levels of learning as Engeström (2001) suggested, I

wondered about how applicable CHAT ultimately was for contemporary educators. I found it

difficult to steer my small intervention group of only six students toward a higher learning aim over a short ten-week term. Could this really translate to the physical high school classroom, where that effort would need to be made with classes five times the size?

This case study suggests, like prior examinations (Nussbaumer, 2011; Roth & Lee, 2007), that CHAT requires further exploration and potential evolution, particularly given the growth of digital learning environments. While arguably all educators need to consider the larger aims of what they are teaching, in this study the disconnect of learners from the object of learning activity seemed more pronounced in the two digital spaces observed. While Pettersson's (2020) suggestion about a renewed focus on the object of activity, the ultimate goal of the class or system, might provide some guidance, this study also hinted at the potential that the higher learning aspirations of CHAT theorists might be difficult to attain.

A final theoretical implication exists for the UDL framework, given that despite deliberate and thoughtful intention to lesson and material design, and consideration of prior successful research (King-Sears et al., 2020), the student with the most significant disabilities was still unsuccessful, both in the class itself and in the intervention. On several occasions, I found myself starting to create materials specifically for this student to help them, but often stopped because making specialized items was not operating *universally*. I felt, in these instances, that I was failing the student by retreating to that position and felt that O'Connor et al. (2019)'s argument regarding a need to deemphasize the *universal* part of the UDL framework might be salient. Within a high school environment, where in certain cases the variation between student ability may be far more pronounced than what is found in elementary classrooms, where it seems most UDL research is conducted (Daley, 2020; Okolo et al., 2019), adherence to the

UDL framework might be of greater disservice to specific students if teachers are not designing materials that account for more extensive disabilities.

Implications for Research

In addition to the potential implications for theoretical understanding, several areas in this study should inspire further research. The first is investigating peer-mediated small group discussion's efficacy in high school classrooms. Training students in small group discussions allowed most intervention group students to talk more and stay on the topic throughout this case study. The students' ability to stay on task was similar to what prior research effort (Okolo et al, 2007) reported, and seems to contradict what teachers have reported about is difficult about small groups. Certainly, hurdles remain in getting all students more comfortable with discussion protocols, but in this study, students committed to long conversations about historical topics that increased in sophistication over time. While different school settings may undoubtedly produce more challenges with students participating in discussions, researchers could test where and how students might benefit. Extensive and successful work has been done on this with advancing this work with elementary school students already (Chinn & Anderson, 1998; Chinn et al., 2001; Clark et al., 2003; Dong et al., 2009; Li et al., 2007; Reznitskaya et al., 2009; Wu et al., 2013). As such, extending this work further with high school students is important to assuring that this method is integrated across the K-12 curriculum. There are also additional instructional models, such as Resnick et al.'s (2018) guidance for *Accountable Talk*, which researchers might also use for protocol guidance. Ultimately, we know that students can participate well in peer-mediated small groups and that constant training, modeling, and instructor feedback can improve their skills. However, that needs to be researched for a more extended period, keeping in line with

Mercer (2008) and Twiner et. al (2014) suggesting that more temporal analysis of classroom talk would be beneficial.

The second area for analysis is the intersection of historical thinking instruction with support for SWD and, potentially, the alignment of historical thinking instruction with UDL. SHEG is one organization of several that has done an excellent job creating assessments that allow teachers to focus student attention on skills development. These assessments are short, allowing teachers not to overwhelm students with long texts that are particularly disadvantageous for SWD. Moreover, the fact that primary source materials can be altered to serve this aim was a helpful suggestion by researchers (Monte Sano et al., 2011). However, this approach needs to be honed and perhaps integrated with other approaches to support SWD. This is where the UDL framework might be helpful. The general alignment between UDL and SHEG's work is strong. Both have the aim of producing competent life-long learners. SHEG's focus on online civic reasoning was designed to help students evolve into consciously critical citizens, and researchers might undertake more investigation into how this can be done for all students. This could help restructure social studies from a subject where many learners struggle with the curricular content to one in which they feel confident using the skills gained to improve their adult lives.

However, it is also possible that a more specific approach would be necessary for students with SWD, and another route for researchers is to further employ the self-regulated strategy (SRSD) model developed and refined by Harris and Graham (2009), in the instruction of historical thinking skills. While SRSD was originally developed to support writing instruction (Harris & Graham, 1996), its wider application has served students in other content areas. Pertinent to this study's experience, one of the challenges working with one case study student was his motivation to complete work. SRSD was designed to directly address student motivation

(Harris & Graham, 1996, 2009), so a crosswalk between historical thinking instruction and SRSD might provide a path for researchers to support SWD better in the application of this curriculum. SRSD components, such as discussion, teacher modeling, memorization, and support, while present in part in existing historical thinking pedagogy, might be improved through SRSD integration, but this would need to intentionally be investigated.

The third area for further research might focus on specific technologies and SWD. I tested four technologies (Jamboard, EdPuzzle, Flipgrid, and Nearpod) over this ten-week term. Of those four, Nearpod had significant potential as a well-designed tool for use in both face-to-face and online environments for students with and without disabilities. Having used Nearpod for nearly eight years, I was impressed by the recent augmentations their developers made to help with instruction, particularly the ability to record directions for students and give students the means to answer questions orally. I am personally interested in further exploring Nearpod's inherent flexibility, as I can see where if optimized further, Nearpod may provide social studies instructors with a content creation and manipulation tool that would be effective for all students, but particularly for SWD.

Implications for Practice

The case study students' experience was that their former teachers poorly designed and managed small group discussions. Research generally supports this idea (DeFrance & Fahrenbruck, 2016; Gillies, 2011; King 1999; Palincsar & Herrenkohl, 2002). The intervention demonstrated that a group of ninth-grade students, including two diagnosed SWDs, could stay on task and navigate historical topics. Teachers should be encouraged to work through peer-mediated tasks as opportunities for students to hone relationships with their classmates. Students might develop rich dialogue with peers, but they also can learn when a discussion is challenging,

as it was for one SWD in this study. All students might have to work through group dynamics where other students are not doing work or are argumentative. Those are important interactions for high school students to navigate, as students need intermental experiences with their peers to process new cultural content.

Teachers also might learn from their students' talk. By reviewing student discussion transcripts, they can see how students interpret content, mediate interpersonal challenges, or privilege certain topics without a teacher's immediate supervision. The students in this case study reported being intrigued by the level of feedback they received on their talk. Teachers may not frequently review what students say in discussions, most likely because traditionally the means for recording and transcribing discussions were logistically difficult. But given the affordances of varied technologies, teachers can record and transcribe discussions between students. This provides not only an opportunity for a teacher to see students' thinking more comprehensively through their talk, but also permits students to gain insights into how they talk with peers from a knowledgeable instructor. This can be broadly useful, but potentially even more valuable within disciplinary areas like historical thinking. Further, for SWD, small group discussion can offer opportunities to listen to more vocal peers, feel less threatened about participation, and develop mental models of how to talk more over time. A teacher being able to offer more direct feedback on specific comments made by SWD could be even more helpful in supporting their growth in extended discussions.

Historical thinking pedagogy could be further operationalized by practitioners and holds promise for teaching SWD. Focusing on pure content acquisition might provide some important social capital for students and has been privileged at length in state policy regarding social studies curriculum. However, longstanding results on the NAEP (2020; 2014) might suggest that

current practices may not be working for the broader population of students. It may be perceived as too abstract for many learners, without a direct connection to their everyday life. Further, content acquisition in social studies also relies heavily on the frequent reading of complex texts (De La Paz & McArthur, 2003), which have traditionally stymied SWD. By comparison, a historical thinking curriculum, which highlights skills development and relies on teachers using multiple representations of historical artifacts as well as modified texts, can provide SWD greater potential to succeed academically and acquire skills they can use outside of the classroom. As seen in this study, SWD agreed about the value of lateral reading, as it tied directly to navigating their everyday world. However, those students still demonstrated limited performance on their HATs, so more practitioners need to experiment with historical thinking and lateral reading to expand the research base for similar students. It might prove, upon repeated examination, that students can use these skills to far greater effect on assessments like the NAEP and more expansively in their life as citizens.

On a separate note, teachers' ability to handle relational opportunities in online settings with students seemed important, confirming what was noted in existing research (Adams et al., 2019). While educators may not face an online learning scenario like that caused by the pandemic again, Newton's structure of online learning limited a teacher's ability to relate to their students. But teachers should still attempt to know their students in online environments, even in small ways. This includes teachers taking more time to understand the tools available to them to use technologically and how those tools could support SWD better. For example, it was unclear if anyone understood how Conan's success was heavily mediated by access to specific technologies. In a face-to-face environment, he had less access to any of his tools for expression or engagement, leading to his characterization by his middle school English teacher as

disengaged. His turnaround grade-wise in the online environment can be understood as a case for all teachers to realize that this online environment, and the tools he had access to, finally gave him a chance to shine. It was sad, however, that among the case study students, even with this success, his teacher of record knew his experience the least.

Final observations

This study was motivated by concern for how SWD could navigate misinformation and new technologies. Students' performance in this study demonstrated that SWD, with guidance, could be thoughtfully critical of information sources. These students could recognize the importance of lateral reading and, in certain instances, define how they might find more accurate information. However, that ability was nascent, and more development is needed to support these students to apply online civic reasoning and historical thinking skills productively and to uncover instructional methods to support students with more significant disabilities that struggle even with UDL-informed lessons and materials.

A UDL-informed, structured, peer-mediated, small-group discussion was used in this study to help students engage with different historical content. Again, SWD showed minor improvement in their discussion ability and believed that they did better in these discussions over time. However, a student with more significant disabilities did not improve in these same discussions. Again, more research would be necessary to redesign this discussion protocol to serve similar students better.

Researchers and practitioners might continue to refine methods for teaching historical thinking and online civic reasoning and engage in research with more diverse and larger student populations. These skills are critical to students so they can function in a society where misinformation continues to be propagated, even more rapidly than when this study was

conceived. Educators must provide opportunities for their students to not just hear about but regularly apply these skills across their K-12 experience. The UDL framework might be one approach for integrating these skills into the curriculum. This case study provides descriptive information about the successes and limitations of UDL-informed lessons centered on historical thinking for high school students. Researchers might want to review the range of historical thinking materials, like SHEG's or Peter Seixas' Historical Thinking Project (www.historicalthinking.ca), as resources for educators. Using the UDL framework, they might help reimagine the methods developed by SHEG to be more inclusive, such as by devising a comprehensive way to modify primary source materials for use by SWD.

Educators should also look at how new technologies can also be used in service to all learners. They could research methods for how students might use technology, like Nearpod, to interpret primary resources. While students only utilized a small sample of new technologies in this study, the response of the case study students to new technologies indicates a willingness to experiment with and use new technologies to complete assignments and potentially extend class engagement. This provides another avenue for UDL-informed thinking to support students in high school courses. However, as noted by the experience of one case study student, the use of new educational technologies neither guarantees engagement or achievement.

Finally, this study offered additional insight into the ongoing understanding of sociocultural theory and CHAT, particularly as it was applied to a pandemic-mandated online learning environment. While that insight is limited to the experience of a small set of students, it nevertheless prompts a conversation about the importance of what a learning environment ultimately aspires to do, known in CHAT as the object of the activity. While this study raised additional questions are raised about the applicability of CHAT constructs in these online

environments, the experience of case study students in their intervention group discussions also highlights the potential importance of interpersonal communications and inspiring intentional and collective work for high school students.

In considering next steps for research, I think it will be important to test structured, peer-mediated, small group discussion processes over a longer period with a wider set of students. Can a student with more significant disabilities improve in talk quality given more opportunities in a structured and peer-mediated small group over an entire school year? Further, would these small groups, used in a physical classroom as opposed to an online environment, succeed more for SWD? It would also be important to understand more regarding the process by which teachers learn to use small group discussions. How might teacher educators, for instance, support a teacher's learning, testing, and normalizing successful small group protocols for high school students? When it comes to historical thinking and online civic reasoning, how might that longer period, with more dedicated time for skills instruction, support SWD to apprehend these skills such that it is demonstrable on evaluations like the HAT? Are there systematic approaches that might lever the UDL framework, and select technologies, like Nearpod, that might produce better results for students? And for online teaching and learning, are there potential models, similar to those conceptualized by scholars like DeSchryver (2014), where students like Conan can be guided to continued success in an online forum? This study prompted multiple strands of exploration for ongoing research, and hopefully, these can lead to better learning opportunities for all students.

REFERENCES

Adams, D., Simpson, K., Davies., L., Campbell, C., & Macdonald, L. (2019). Online learning for university students on the autism spectrum: a systematic review and questionnaire study. *Australasian Journal of Educational Technology*, 35(6), 111-131. https://doi.org/10.14742/ajet.5483

Anderson, T. & Shattuck, J. (2012). Design-Based Research: A Decade of Progress in Education Research? *Educational Researcher*, 41(1), 16-25.

Archibald, A. (2019, October 8). Working memory and developmental language disorder. DLD and Me. Dldandme.org

Artiles, A.J. (2013). Untangling the racialization of disabilities: An intersectionality critique across disability models. *DuBois Review*, 10, 329-347.

Ashby, R., & Lee, P. (1987). Children's concepts of empathy and understanding in history. In C. Portal (Ed.), *The history curriculum for teachers* (pp. 62–88). Basingstoke, UK: Falmer Press.

Awumey, V., Lederle, C., & Moats, S. (2021). *Guide to Student Research and Historical Argumentation.* College Park: Library of Congress. Retrieved from: https://www.nhd.org/sites/default/files/NHD_LoCTeacherGuide_082521_digital_webready.pdf

Baer, D. M., Wolf, M. M., & Risley, T. R. (1968). Some current dimensions of applied behavior analysis. *Journal of Applied Behavior Analysis*, *1,* 91–97.

Bakhtin, M. M. (1986). *Speech genres and other late essays* (C. Emerson & M. Holquist, Eds.; V. W. McGee, Trans.). Austin: University of Texas Press.

Barbieri, M. & Light, P. (1992). Interaction, gender and performance on a computer-based task. Learning and Instruction, 2(1992), 199-213

Barden, O. (2012). "…if we were cavemen we'd be fine": Facebook as a catalyst for critical literacy learning by dyslexic sixth form students. *Literacy*, 46(3), 123-132.

Barden, O. (2014). Facebook levels the playing field: Dyslexic students learning through digital literacies. *Research in Learning Technology,* 22. https://doi.org/10.3402/rlt.v22.18535

Barnes, D. & Todd, F. (1977). *Communication and Learning in Small Groups*. London: Routledge and Keegan Paul.

Barnes, D. & Todd, F. (1995). *Communication and Learning Revisited*. Portsmouth, NH: Heinemann.

Barton, K. C., & Levstik, L. S. (2004). *Teaching history for the common good.* Lawrence Erlbaum Associates Publishers.

Basham, J., Blackorby, J., & Marino, M. (2020). Opportunity in Crisis: The Role of Universal Design for Learning in Educational Redesign. *Learning Disabilities: A Contemporary Journal*, 18(1), 71-91.

Bernard, H.R. (1994). Research methods in anthropology: qualitative and quantitative approaches (second edition). Walnut Creek, CA: AltaMira Press.

Berry, R. (2006). Inclusion, Power, and Community: Teachers and Students Interpret the Language of Community in an Inclusion Classroom. *American Educational Research Journal*, 43 (3), 489-529. https://doi.org/10.3102/00028312043003489

Blatchford, P., Bassett, P. & Brown, P. (2011). The Effect of Class Size on Classroom Engagement and Teacher-Pupil Interaction: Differences in Relation to Pupil Prior Attainment and Primary vs. Secondary Schools. *Learning and Instruction*, 21(6), 715-730.

Blad, E. (2022, February 24). Educators See Gaps in Kids' Emotional Growth Due to Pandemic. *EducationWeek*. https://www.edweek.org/leadership/educators-see-gaps-in-kids-emotional-growth-due-to-pandemic/2022/02

Boeije, H. (2010). *Analysis in Qualitative Research*. London: Sage.

Breakstone, J., Smith, M., Wineburg, S., Rapaport, A., Carle, J., Garland, M., & Saavedra, A. (2019). Students' civic online reasoning: A national portrait. Stanford History Education Group & Gibson Consulting. https://purl.stanford.edu/gf151tb4868

Brown, A. (1992). Design experiments: Theoretical and methodological challenges in creating complex interventions in classroom settings. *Journal of the Learning Sciences*, 2(2), 141-178.

Burbules, N. C. (1993). *Dialogue in Teaching: Theory and Practice*. London: Teachers College Press.

Burns & Myhill, 2004. Interactive or inactive? A consideration of the nature of interaction in whole class teaching. *Cambridge Journal of Education,* 34(1), 35-49. DOI: 10.1080/0305764042000183115

Bursztyn, L., Rao, A., Roth, C. & Yanagizawa-Drott, D. (2020). Misinformation During a Pandemic. University of Chicago Becker Friedman Institute for Economics. Working Paper 2020-44. Retrieved from SSRN: https://ssrn.com/abstract=3580487

Calhoon, M. B. (2005). Effects of a peer-mediated phonological skill and reading comprehension program on reading skill acquisition for middle school students with reading disabilities. *Journal of Learning Disabilities*, 38, 424–433.

Calhoon, M. B., & Fuchs, L. S. (2003). The effects of peer-assisted learning strategies and curriculum-based measurement on the mathematics performance of secondary students with disabilities. *Remedial and Special Education,* 24, 235–245.

Carson, R. (October 14, 2018) Retirement Savers are Losing $17 Billion a year from Fake News and Conflicts of Interest. *Forbes*. https://www.forbes.com/sites/rcarson/2018/10/14/retirement-savers-are-losing-17-billion-a-year-from-fake-news-bad-adviceconflictsofinterest/?sh=7db261a8bec7#5e635549bec74

CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from: http://udlguidelines.cast.org

Cazden, C. B. (2001). *Classroom discourse: The language of teaching and learning* (2nd ed.). Portsmouth, NH: Heinemann.

Chinn, C. & Anderson, R. (1998). The structure of discussions that promote reasoning. *Teachers College Record*, 100(2), 315-368.

Chinn, C., Anderson, R., & Waggoner, M. (2001). Patterns of discourse in two kinds of literature discussion. *Reading Research Quarterly*, 36(4), 378-410.

Ciullo, S., Collins, A., Wissinger, D., McKenna, J., Lo, Y., & Osman, D. (2020). Students with learning disabilities in the social studies: A meta-analysis of intervention research. *Exceptional Children*. DOI:10.1177/0014402919893932

Clark, A., Anderson, R., Kuo, L., Kim, I., Archodidou, A., & Nguyen-Jahiel, K. (2003). Collaborative reasoning: Expanding ways for children to talk and think in school. *Educational Psychology Review*, 15(2), 181-198.

Clark M. (1997). Teacher Response to Learning Disability: A Test of Attributional Principles. *Journal of Learning Disabilities*, 30(1) 69-79. Teacher Response to Learning Disability: A Test of Attributional Principles https://doi.org/10.1177/002221949703000106

Clark, C., Schmeichal, M., & Garrett, H. (2020). Social Studies Teacher Perceptions of News Source Credibility. *Educational Researcher*, 49(4), 262-272. DOI: /10.3102/0013189X20909823

Clarke, A.E. (2005). *Situational Analysis: Grounded Theory after the Postmodern Turn.* Thousand Oaks, CA: Sage.

Cole, M. (1998). Can cultural psychology help us to think about diversity? *Mind, Culture, and Activity, 5*, 291–304.

Collins, K.M.T., Onwuegbuzie, A.J., & Sutton, I.L. (2006). A model incorporating the rationale and purpose of mixed methods research in special education and beyond. *Learning Disabilities: A Contemporary Journal,* 67-100.

Collins, A. (1990). Toward a Design Science of Education. Technical Report No. 1. Office of Educational Research and Improvement, Washington DC.

Common, E. & Lane, K. (2017). Social Validity Assessment in J. Luiselli (Ed.) *Applied Behavior Analysis Advanced Guidebook*, pp. 73-92. Academic Press. doi.org/10.1016/B978-0-12-811122-2.00004-8

Commonsense Media (2019). Teen News Engagement: Key Findings and Toplines. Retrieved from:https://www.commonsensemedia.org/sites/default/files/uploads/pdfs/2019_cs-sm_summarytoplines_release.pdf

Connor, D., Ferri, B., Dehaiman, L., & Olander, L. (2019). Culturally cognizant research and culturally sustaining practice: promoting authentic inclusive classrooms for diverse learners. In M. J. Schuelka, C. J. Johnstone, & G. Thomas *The Sage handbook of inclusion and diversity in education* (pp. 159-172). SAGE Publications Ltd, https://dx.doi.org/10.4135/9781526470430.n16

Creswell, J.W. (2013). *Qualitative Inquiry & Research Design: Choosing Among Five Approaches*. Thousand Oaks, CA: Sage Publications.

Creswell, J.W. (2014). *Research Design: Qualitative, Quantitative, and Mixed Method Approaches* (4th ed). Los Angeles, CA: Sage

Creswell, J. W., & Plano Clark, V. L. (2011). *Designing and conducting mixed methods research* (2nd ed.). Thousand Oaks, CA: Sage.

Creswell, J.W. & Miller, D.L. (2000). Determining validity in qualitative inquiry. *Theory into practice*, 39(3), 124-130. DOI:10.1207/s1543042tip3902_2

Curtis, M. & Green, A. (2021). A Systematic Review of Evidence-Based Practices for Students with Learning Disabilities in Social Studies Classrooms. *The Social Studies*. DOI: 10.1080/00377996.2020.184715

Dahlstrom-Hakki, I., Alstad, Z., & Banerjee, M. (2020). Comparing synchronous and asynchronous online discussions for students with disabilities: The impact of social presence. *Computers & Education*, *150*, 103842.

Daley, S. (2020). Supporting High School Transitions: The International Baccalaureate Program's Potential Contribution to Inclusive Practices" [Unpublished manuscript].

Daniels, H. (2011). *Vygotsky and psychology.* In U. Goswami (Ed.), *The Wiley-Blackwell handbook of childhood cognitive development* (p. 673–696). Wiley-Blackwell.

DeFrance, N. & Fahrenbruck, M. (2016). Constructing a Plan for a text-based discussion. *Journal of Adolescent and Adult Literacy*, 59(5), 575-585. DOI:10.1002/jaal.477

De La Paz, S. (2005). Effects of historical reasoning instruction and writing strategy mastery in culturally and academically diverse middle school classrooms. *Journal of Educational Psychology*, 97, 137–156.

De La Paz, S., Morales, P., & Winston, P. (2007). Source Interpretation: Teaching Students With and Without LD to Read and Write Historically. *Journal of Learning Disabilities*, 40 (2), 134-145

De La Paz, S. (2013). Teaching and Learning in History: Effective and Reform-Based Practices for Students with Learning Disabilities. *Learning Disabilities: A Contemporary Journal*, 11(1) 89-105.

De La Paz, S. & McArthur, C. (2003). Knowing the how and why of history: expectations for secondary students with and without learning disabilities. *Learning Disability Quarterly*, 142-154.

De La Paz, S. & Wissinger, D. (2015). Effects of Genre and Content Knowledge on Historical Thinking with Academically Diverse High School Students. *The Journal of Experimental Education*, 83(1), 110-129. DOI: 10.1080/00220973.876228.

De La Paz, S., Monte-Sano, C., Felton, M., Croniger, R., Jackson, C., & Piantedosi, K. (2017). A historical writing apprenticeship for adolescents: Integrating disciplinary learning with cognitive strategies. *Reading Research Quarterly*, 52(1), 31-52. **doi.org/10.1002/rrq.147**

De La Paz S., & Wissinger D. (2017). Improving the Historical Knowledge and Writing of Students With or At Risk for LD. *Journal of Learning Disabilities*. 50(6), 658-671. DOI:10.1177/0022219416659444

Delkic, M. (2022, May 10). Trump's banishment from Facebook and Twitter: A Timeline. *The New York Times.*

DeSchryver, M. (2012). *Toward a theory of web-mediated knowledge synthesis: How advanced learners used the web to construct knowledge about climate change behavior* (Doctoral dissertation).

DeSchryver, M. (2014). Higher order thinking in an online world: Toward a theory of web-mediated knowledge synthesis. *Teachers College Record,* 116, 1-44.

DeSchryver, M. & Spiro, R. (2008). New forms of deep learning on the web: Meeting the challenge of cognitive load in conditions of unfettered exploration. *In R. Zheng (Ed.), Cognitive effects of multimedia learning (pp. 134-152).* Hershey, PA: IGI Global.

Dias, E., & Healy, J. (2022, January 23). For Many Who Marched, Jan. 6 Was Only the Beginning. *The New York Times*.

Dimitrov, D. & Rumrill, P. (2003). Pretest-posttest designs and measurement of change. *Work*, 20(2), 159-165.

Dong, T., Anderson, R., Lin, T., & Wu, X. (2009). Concurrent student-managed discussions in a large class. *International Journal of Educational Research*, 48(2009), 352-367.

Donovan, S. & Bransford, J. (2005). *How Students Learn: Science in the Classroom.* Washington: National Academies Press.

Dudley-Marling, C. (2004). The social construction of learning disabilities. *Journal of Learning Disabilities*, 37, 482–489.

Dymond, S., Renzaglia, A., Rosenstein, A., Chun, E., Banks, R., Niswander, V., & Gilson, C. (2006). Using a Participatory Action Research Approach to Create a Universall Designed Inclusive High School Science Course: A Case Study. *Research & Practice for Persons with Severe Disabilities,* 31(4), 293-308.

Dubner, S. (2020, November 25). Freakonomics "Does Advertising Actually work?" [audio podcast].Freakonomics Radio. https://freakonomics.com/podcast/advertising-part-2/

Edyburn, D. (2010). Would you recognize Univeral Design for Learning if you saw it? Ten propositions for new directions for the second decade of UDL. *Learning Disability Quarterly*, 33(1), 33-41. DOI:10.2307/25701429

Emilohvich, C. and Souza Lima, E. (1995). The many facets of Vygotsky: a cultural-historical voice from the future. *Anthropology and Education Quarterly*, 26(4) 375-383.

Engeström, Y. (1991). *Non scolae sed vitae discimus:* Toward overcoming the encapsulation of school learning. Learning and Instruction, 1, 243-259.

Engeström, Y. (1999). Activity theory and individual and social transformation. In Y. Engeström, R. Mittinen, & R.L Punamäki (Eds.), Perspectives on activity theory (pp. 19-38). Cambridge: Cambridge University Press.

Engeström,, Y. (2001). Expansive Learning at Work: Toward an activity theoretical reconceptualization. *Journal of Education and Work*, 14(1), 133-156. https://doi.og/10.1080/13639080020028747.

Engeström,, Y., & Sannino, A. (2012). Whatever happened to process theories of learning? *Learning, Cultural, and Social Interaction*, 1(2012), 45-56. DOI: 10.1016/i.lcsi.2012.03.002

Englert, S., Mariage, T., Okolo, C., Shankland, R., Moxley, K., Courtad, C., Jocks-Meier, B., O'Brien, J., Martin, N., & Chen, H-Y. (2009). The Learning-to-Learn Strategies of Adolescent Students with Disabilities. *Assessment for Effective Intervention*, 34 (3), 147-161

Engzell, P., Frey, A., & Verhagen, M. (2021). Learning loss due to school closures during the COVID-19 pandemic. *PNAS,* 118 (17) 1-7. https://doi.org/10.1073/pnas.2022376118

Evans, R. (2006). The Social Studies Wars: Then and Now. *Social Education,* 70(5), 317-321.

Fernandez, M., Wegerif, R., Mercer, N. & Rojas-Drummond, S. (2002). Re-conceptualizing "Scaffolding" and the Zone of Proximal Development in the Context of Symmetrical Collaborative Learning. *Journal of Classroom Interaction*, 36(2/1), 40-54.

Ferretti, R., MacArthur, C., & Okolo, C. (2001). Teaching for historical understanding in inclusive classrooms. *Learning Disabilities Quarterly*, 24, 59-71.

Ferretti, R., MacArthur, C., & Okolo, C. (2007). Students' Misconceptions About U.S. Westward Migration. *Journal of Learning Disabilities,* 40, 145-153.

Flanagan, N (2018, March 20). "We Need Civic Online Reasoning in our Schools" *Education Week*. https://www.edweek.org/teaching-learning/opinion-we-need-civic-online-reasoning-in-our-schools/2018/03.

Freeland, J. & Noell, G. (2002). Programming of maintenance: An investigation of intermittent reinforcement and common stimuli to create indiscriminable contengencies. *Journal of Behavioral Education*, 11(1), 5-18. https://doi.org/10.1023/A:1014329104102

Fuchs, D. & Fuchs, L.S. (1994). Inclusive schools movement and the radicalization of special education reform. *Exceptional Children*, 60, 294-309.

Garwood, J., Ciullo, S., Wissinger, D., & McKenna, J. (2020) Civic Education for Students with Learning Disabilities and Emotional and Behavioral Disorders. *Intervention in School and Clinic,* 1-5. DOI/10.1177/1053451220944143

Gee, J. (2005). *An Introduction to Discourse Analysis*. New York, NY: Routledge.

Gersten R. & Okolo, C. (2007). Teaching history – in All Its Splendid Messiness – to students with LD: Contemporary Research. *Journal of Learning Disabilities*, 40(2), 98-99.

Gillies, R. (2011) Promoting thinking, problem-solving and reasoning during small group discussions. *Teachers and Teaching*, 17(1), 73-89. DOI:10.1080/13540602.2011.538498

Glaser, B.G. & Strauss, A.L. (1967). *The discovery of grounded theory: Strategies for Qualitative research*. New York: Aldine de Gruyter.

Glesne, C. (2011). *Becoming qualitative researchers: An introduction* (4th edition). Boston: Pearson Education.

Goldenberg, C. (1993). Instructional Conversations: promoting conversations through discussion. *The Reading Teacher*, 46. 316-326.

Gindis, B. (1995). The social/cultural implications of disability: Vygotksy's paradigm for special education. *Educational Psychologist*, 30(2), 77-81.

Gindis, B. (2003). Remediation through education: Sociocultural theory and children with special needs. In A. Kozulin, B. Gindis, V. S. Ageyev, & S. M. Miller (Eds.), *Vygotsky's educational theory in cultural context* (pp. 200–221). Cambridge, England: Cambridge University Press.

Graham, S., Harris, K., MacArthur, C. A., & Schwartz, S. S. (1998). Writing instruction. In B.Y.L.Wong (Ed.) *Learning about learning disabilities*(2nd ed., pp. 391-424). New York: Academic Press.

Greer, D., Rowland, A., Smith, S. (2014). Critical Considerations for Teaching Students with Disabilities in Online Environments. Teaching Exceptional Children, 46(5), 79-91.

Gutierrez, K., & Rogoff, B. (2003). Cultural Ways of Learning: Individual Traits or Repertoires of Practice. *Educational Researcher*, 32(5), 19-25. DOI: 10.3102/0013189X032005019

Harniss, M., Caros J., & Gersten, R. (2007). Impact of the design of U.S. History textbooks on Content Acquisition and Academic Engagement of Special Education students: An experimental investigation. *Journal of Learning Disabilities*, 40(2), 100-110. DOI: 10.1177/00222194070400020101

Harris, K., & Graham, S. (1996). Making the writing process work: Strategies for composition and self-regulation. Cambridge, MA: Brookline Books.

Harris, K. & Graham, S. (2009). Self-regulated strategy development in writing: Premises, evolution, and the future. *Teaching and Learning Writing*, II(6), 113-135. DOI: 10.1348/978185409X422542

Heafner, T. L., Fitchett, P. G. (2012). National trends in elementary instruction: Exploring the role of social studies curricula. *Social Studies*, 103(2), 67-72. https://doi.org/10.1080/00377996.2011.592165

Heath, S. (1983) *Ways with Words: Language, Life and Work in Communities and Classrooms*. Cambridge: Cambridge University Press.

Hess, D. (2004a). Discussion in Social Studies: Is it worth the trouble? *Social Education*, 68 (2), 151-156.

Hess, D. (2004b). Using video to create a vision for powerful discussion teaching in secondary social studies. In J. Brophy (Ed.), Using video in teacher education (pp. 53-72). Bradford, UK: Emerald Group.

Hess, D. (2009). *Controversy in the classroom: The democratic power of discussion*. New York, NY: Routledge.

Holmes, K. & O'Loughlin, N. (2012). The experiences of people with learning disabilities on social networking sites. *British Journal of Learning Disabilities*, 42(1), 1-5. https://doi.org/10.1111/bld.12001

Hoyt, W. T., & Bhati, K. S. (2007). Principles and practices: An empirical examination of qualitative research in the Journal of Counseling Psychology. *Journal of Counseling Psychology*, 54(2), 201.

Individuals With Disabilities Education Act, 20 U.S.C. § 1400 (2004)

Igira, F. & Gregory, J. (2009). Cultural Historical Activity Theory. In Dwivedi, Y.K., Lal, B., Williams, M.D., Schneberger, S.L., & Wade, M. (Ed.), *Handbook of Research on Contemporary Theoretical Models in Information Systems* (pp. 434-454). IGI Global. DOI: 10.4018/1978-1-60566-659-4.ch025

John-Stiner, V.,Panofsky, C.P., & Smith, L. (1994). *Sociocultural approaches to language and literacy: An interactionist perspective*. Cambridge: Cambridge University Press.

Johnson, E. (2008). Ecological Systems and Complexity Theory: Toward an Alternative Model of Accountability in Education. Complicity: An International Journal of Complexity and Education, 5(1), https://doi.org/10.29173/cmplct8777

Johnson, D. & Johnson, R. (2009). An Educational Psychology Success Story: Social Interdependence Theory and Cooperative Learning. *Educational Researcher*, 38(5), 365-379. https://doi.org/10.3102/0013189X09339057

Journell, W. (2017). Fake News Alternative Facts, and Trump: Teaching Social Studies in a Post-Truth Era. *Social Studies Journal,* 38, 8-22.

Kaptelinin, V., & Nardi, B. (2007). Acting with technology: Activity theory and interaction design. *First Monday*, *12*(4). https://doi.org/10.5210/fm.v12i4.1772

Kawulich, B.B. (2005). Participant Observation as a Data Collection Method. Forum Qualitative Social Research, 6(2). https://www.qualitative-research.net/index.php/fqs/article/view/466/996

Kent, S., Wanzek, J., Swanson, E. A., Vaughn, S. (2015). Team-based learning for students with high-incidence disabilities in high school social studies classrooms. *Learning Disabilities Research & Practice*, 30(1), 3–14. https://doi.org/10.1111/ldrp.12048

Kennedy, M., Thomas, C., Meyer, J., Alves, K., & Lloyd, J. (2014) Using Evidence-Based Multimedia to Improve Vocabulary Performance of Adolescents with LD: A UDL Approach. *Learning Disability Quarterly*, 37(2), 71-86. DOI: 10.1177/0731948713507262

King, A. (1999). Discourse patterns for mediating peer learning. In A. O'Donnell & A. King (Eds.), *Cognitive perspectives on peer learning* (pp. 87–116). Mahwah, NJ: Erlbaum.

King-Sears, M., Johnson, T., Berkeley, S., Weiss, M., Peters-Burton, E., Evmenova, A. Menditto, A., Hursh, J. (2015). An exploratory study of universal design for teaching chemistry to students with and without disabilities. *Learning Disability Quarterly*, 38, 84–96. DOI:10.1177/0731948714564575

King-Sears, M. & Johnson, T. (2020). Universal Design for Learning Chemistry Instruction for Students With and Without Learning Disabilities. *Remedial and Special Education*, 41(4), 207-218. https://doi.org/10.1177/0741932519862608

Kirschner, P. & van Merriënboer, J. (2013) Do Learners Really Know Best? Urban Legends in Education, *Educational Psychologist*, 48:3, 169-183. DOI: 10.1080/00461520.2013.804395

Ko, T., & Hughes, M.T. (2015). Reading Comprehension Instruction for Adolescents with Learning Disabilities: A Reality Check. *Education Sciences*, 5, 413-439. DOI: 10.3390/educsci5040413.

Kohlmeier, J. & Saye, J. (2019) Examining the relationship between teachers' discussion facilitation and their students' reasoning. *Theory & Research in Social Education*. 47(2), 176-204. DOI: 10.1080/00933104.2018.1486765

Kortering, L., McClannon, T., & Braziel, P. (2008). Universal Design for Learning: A Look at What Algebra and Biology Students With and Without High Incidence Conditions are Saying. *Remedial and Special Education*, 29(6), 352-363.

Kozulin, A. (1986). The concept of activity in Soviet psychology: Vygotsky, his disciples and critics. *American Psychologist, 41*, 264–274.

Kumpulainen, K. & Wray, D. (Eds.) (2002). *Classroom interaction and social learning: from theory to practice.* London: Routledge.

Kunsch, C. A., Jitendra, A. K., & Sood, S. (2007). The effects of peer-mediated instruction in mathematics for students with learning problems: A research synthesis. *Learning Disabilities Research and Practice*, 22, 1–12.

Lee, P. J. (1983). History Teaching and Philosophy of History. *History and Theory*, 22(4), 19–49. DOI:10.2307/2505214

Lee, P. & Ashby, R. (2000). Progression in historical understanding among students ages 7-14. In P. Seixas, P. Stearns, & S. Wineburg (Eds.), *Teaching, learning and knowing History* (pp. 199–222). New York, NY: New York University Press.

Leming, J., Ellington, L., Porter, K. (eds.) (2003). *Where did Social Studies Go Wrong*? Washington, DC: Thomas B. Fordham Foundation.

Levesque, S., & Clark, P. (2018). Historical thinking: Definitions and educational applications. In S. A. Metzger, & L. M. Harris (Eds.). *The Wiley international handbook of history teaching and learning* (pp. 119–148). (1st ed.). Hoboken, NJ: Wiley-Blackwell.

Li, Y., Anderson, R., Nguyen-Jahiel, K., Dong, T., Archodidou, A., Kim, I., Kuo, L., Clark, A., Wu, X., Jadallah, M., & Miller, B. (2007). Emergent leadership in children's discussion groups. *Cognition and Instruction*, 25(1)., 75-111.

Lin, T., Anderson, R., Jadallah, M., Nguyen-Jahiel, K., Kim, I., Kuo, L., Miller, B., Logis, H., Dong, T., Wu, X., & Li, Y. (2015). Social influences on children's development of relational thinking during small group discussions. *Contemporary Educational Psychology*, 41(2015), 83-97.

Lincoln, YS. & Guba, EG. (1985). *Naturalistic Inquiry.* Newbury Park, CA: Sage Publications.

Littleton, K., & Mercer, N. (2013). *Interthinking: Putting Talk to Work*. London: Routledge.

Lowenthal, P., Humprhey, M., Conley, Q., Dunlap, J., Greear, K., Lowenthal, A., Giacumo, L. (2020). Creating Accessible and Inclusive Online Learning: Moving Beyond Compliance and Broadening the Discussion. *The Quarterly Review of Distance Education*, 21(2), 1-21.

Luiselli, J., Worthen, D., Carbonell, L., & Queen, A. (2017). Social Validity Assessment of Mindfulness Education and Practices among High School Students. *Journal of Applied School Psychology*, 33(2), 124-135. https://doi.org/10.1080/15377903.2016.1264531

Luis, R. & Rapanta, C. (2020). Towards (Re-)Defining historical reasoning competence: A review of theoretical and empirical research. *Educational Research Review*, 31, DOI: 10.1080/00933104.2018.1486765

MacArthur, C. A., Ferretti, R. P., & Okolo, C. M. (2002). On defending controversial Viewpoints: Debates of sixth graders about the desirability of early 20th-century American immigration. *Learning Disabilities Research & Practice, 17*(3), 160–172. https://doi.org/10.1111/1540-5826.00042

Manheady, L., Harper, G. & Sacca, M.K. (1988). Peer-mediated instruction: A promising approach to meeting the diverse needs of LD adolescents. *Learning Disability Quarterly*, 11, 108-113.

Mariage, T. (2000). Constructing Educational Possibilities: A Sociolinguistic Examination of Meaning-Making in "Sharing Chair." Learning Disability Quarterly, 23, 79-103.

Mastropieri, M. A., Scruggs, T. E., Spencer, V., & Fontana, J. (2003). Promoting success in high school history: Peer tutoring versus guided notes. *Learning Disabilities Research and Practice*, 18, 52–65.

Maxwell, J.A. (2013). *Qualitative research design: An interactive approach*. Thousand Oaks, CA: SAGE Publications.

McCulley, L. V, Katz, S., & Vaughn, S. (2013). Reading Instruction and Students With Learning Disabilities. In *Advances in Special Education* (Vol. 25). https://doi.org/10.1108/S0270-4013(2013)0000025005

McElhone, D. (2012). Tell us more: Reading comprehension, engagement, and conceptual press discourse. *Reading Psychology*, 33(6), 525–561

McGrew, S. (2019). Learning to evaluate: an intervention in civic online reasoning. *Computers & Education,* 145. https://doi.org/10.1016/j.compedu.2019.103711

McGrew, S. & Byrne, V. (2020). Who is Behind this? Preparing high school students to evaluate online content. *Journal of Research on Technology in Education,* DOI: 10.1080/15391523.2020.1795956

221

McGrew, S., Smith, M., Breakstone, J., Ortega, T. & Wineburg, S. (2019). Improving university students' web savvy: An intervention study. *British Journal of Educational Psychology*. 89, 485-500.

McGrew, S., Breakstone, J., Ortega, T., Smith, M., & Wineburg, S. (2018). Can students evaluate online sources? Learning from assessments of civic online reasoning. *Theory & Research in Social Education*, 46(2), 165-193. https://doi.org/10.1080/00933104.2017.1416320

Mercer, N. (2000). Words and Minds: How We Use Language to Think Together. London; Routledge.

Mercer, N. (2008). The Seeds of Time: Why Classroom Dialogue Needs a Temporal Analysis. *Journal of the Learning Sciences,* 17(1), 33-59. https://doi.org/10.1080/10508400701793182

Mercer, N., Hennessy, S., Warwick, P. (2019). Dialogue, thinking together, and digital technology in the classroom: Some educational implications of a continuing line of inquiry. *International Journal of Educational Research*, 97 (2019), 187-199. http://dx.doi.org/10.1016/j.ijer.2017.08.007

Mercer, N. & Littleton, K., (2007). Dialogue and the development of children's thinking: a sociocultural approach. London, UK: Routledge.

Michaels, S., O'Connor, C., & Resnick, L. (2007). Deliberative discourse idealized and realized: Accountable Talk in the Classroom and Civic Life. *Studies in Philosophy and Education*, 27, 283-297.

Miles, M. B., & Huberman, A. M. (1994). *Qualitative data analysis: An expanded sourcebook* (2nd ed.). Thousand Oaks, CA: Sage Publications, Inc.

Mol, S., & Bus, A. (2011). To Read or Not to Read: A Meta-Analysis of Print Exposure from Infancy to Early Adulthood. *Psychological Bulletin*, 137(2, 267-296. DOI: 10.1037/a0021890

National Center for Education Statistics. (2014). 2014 Civic Assessment. National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education, Washington, D.C.

Nelson, T., Kagan, N., Critchlow, C., Hillard, A., Hsu, A. (2020). The Danger of Misinformation in the COVID-19 Crisis. Missouri Medicine, 117(6), 510-512.

Newberg, Oregon. (2022, April 16), Quick Facts. U.S. Census Bureau.
https://www.census.gov/quickfacts/fact/table/newbergcityoregon,US/PST04022

Newberg Senior High School Profile. (2022, April 16). Public School Reviews.
https://www.publicschoolreview.com/newberg-senior-high-school-profile

Nussbaumer, D. (2012). An overview of cultural historical activity theory (CHAT) use in classroom research 2000 to 2009. *Educational Review*, 64(1), 37-55.
https://doi.org/10.1080/00131911.2011.553947

O'Connor, C. & Joffe, H. (2020). Intercoder Reliability in Qualitative Research: Debates and Practical Guidelines. *International Journal of Qualitative Methods*, 19, 1-13.

Ok, M. W., Rao, K., Bryant, B. R., & McDougall, D. (2017). Universal design for learning in pre-k to grade 12 classrooms: A systematic review of research. *Exceptionality*, 25, 116–138.

Okolo, C.M. & Ferretti, R. (1998). Multimedia Design Projects in an Inclusive Social Studies Classroom: "Sometimes People Argue with Words Instead of Fists." *Teaching Exceptional Children,* 31(1), https://doi.org/10.1177/004005999803100107

Okolo, C.M., Ferretti, R. & MacArthur, C. (2007). Talking About History: Discussions in a Middle School Inclusive Classroom. *Journal of Learning Disabilities*, 40(2), 154-165.

Okolo, C.M., & Ferretti, R.P. (2013). History instruction for students with learning disabilities. In H. L. Swanson, K. Harris, & S. Graham (Eds.). *The Handbook of Learning Disabilities* (2nd ed., pp. 463-488). NY: Guilford.

Okolo, C.M., Clemente, I., Daley, S. (2019). Research about Universal Design for Learning: Moving beyond what we think we know. In K. Graziano (Ed.), Proceedings of the Society for Information Technology & Teacher Education: International Conference (pp. 2601-2607). Las Vegas, NV, United States: Association for the Advancement of Computing in Education (AACE). Retrieved November 30, 2022. from https://www.learntechlib.org/primary/p/208018/.

Okilwa, N. & Shelby, L. (2010). The Effects of Peer Tutoring on Academic Performance of Students with Disabilities in Grades 6 through 12: A Synthesis of the Literature. *Remedial and Special Education*, 31(6), 450-463. doi.org/10.1177/0741932509355991

Open Learn. (2016). *Social Constructivism.*
https://www.open.edu/openlearn/education/educational-technology-and-practice/educational-practice/exploring-childrens-learning/content-section-5.1

Palincsar, A., & Herrenkohl, L. (2002). *Designing collaborative contexts. Theory into Practice*, 41, 26–35.

Parker, W. (2003). *Teaching Democracy: Unity and Diversity in public life*. New York, NY: Teachers College Press.

Patrinos, H., Vegas, E., & Carter-Rau, R. (2022). An Analysis of COVID-19 Learning Loss. Policy Research Working Paper: 10033. World Bank, Washington, DC. https://openknowledge.worldbank.org/handle/10986/37400

Pew Research Center (2017, October). The Future of Truth and Misinformation Online. https://www.pewresearch.org/internet/2017/10/19/the-future-of-truth-and-misinformation-online/

Pew Research Center (2020, July) Americans Who Mainly Get Their News on Social Media Are Less Engaged, Less Knowledgeable. file:///Users/daleynews/Downloads/PJ_2020.07.30_social-media-news_REPORT.pdf

Pharris-Ciurej, N., Hirschman, C., Willhoft, J. (2012). The 9th grade shock and the high school dropout crisis. *Social Science Research*, 41(3), 709-730.

Pettersson F. (2020). Understanding digitization and educational change in school by means of activity theory and the levels of learning concept. *Education and Information Technologies*, 26 (2021), 187-204. https://doi.org/10.1007/s10639-020-10239-8

Pitawanich, C. (2022, January 13), We're drowning: Teachers struggling with continued challenges in latest COVID surge. KGW News. https://www.kgw.com/article/news/education/teachers-struggling-latest-covid-surge/283-aa449933-ec15-40cf-9683-87dc735af3aa

Quantz, R. (2001). On Seminars, Rituals, and Cowboys. *Teachers College Record,* 103(5) 892-922.

Rao, K., Smith, S., Edyburn, D., Grima-Farrell, C., Van Horn, G., & Yalom-Chamowitz, S. (2018). *UDL reporting criteria*. Retrieved from https://udl-irn.org/udl-reporting-criteria

Reisman, A. (2015). Entering the Historical Problem Space: Whole-Class Text-Based Discussion in History Class. *Teachers College Record*, 117, 1-44.

Reisman, A., Kavanagh, S., Monte-Sano, C., Fogo, B., McGrew, S., Cipparone, P., & Simmons, E. (2018). Facilitating Whole-Class Discussions in History: A Framework for Preparing Teacher Candidates. *Journal of Teacher Education*, 69(3), 278-293. https://doi.org/10.1177/0022487117707463

Reisman, A., Cipparone, P., Jay, L., Monte-Sano, C., Kavanagh, S., McGrew, S., & Fogo, B. (2019). Evidence of emergent practice: Teacher candidates facilitating historical discussions in their field placements. *Teaching and Teacher Education*, 80, 145-156. https://doi.org/10.1016/j.tate.2018.12.014.

Reznitskaya, A., Kuo, L., Clark, A., Miller, B., Jadallah, M., Anderson, R., & Nguyen-Jahiel, K. (2009). Collaborative reasoning: a dialogic approach to group discussions. *Cambridge Journal of Education*, 39(1), 29-49.

Richardson, J. (2015). Academic Attainment in Students with Dyslexia in Distance Education. *Dyslexia: An International Journal of Research and Practice,* 21(4), 323-337. https://doi.org/10.1002/dys.1502

Rice, M.F., & Dykman, B. (2018). The Emerging Research Base on Online Learning and Students with Disabilities. In K.Kennedy (Ed.) *Handbook of Research on K-12 Online and Blended Learning* (2nd Edition, pp 189-207). Pittsburgh, PA: ETC Press.

Rogers, R. (2011). *An Introduction to Critical Discourse Analysis.* (2nd edition). New York, NY: Routledge.

Rogoff, B. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York, NY: Oxford University Press.

Rogoff, B. (1991). Social interaction as apprenticeship in thinking: Guided participation in spatial planning. In L. B. Resnick, J.M. Levine & S.D. Teasley (Eds.), *Perspectives on socially shared cognition* (p. 349-364). This chapter adapts materials presented in Rogoff's "Apprenticeship in Thinking: Cognitive Development in Social Context" (New York: Oxford University Press). American Psychological Association. https://doi.org/10.1037/10096-015

Rogoff, B. (1993). Children's guided participation and participatory appropriation in sociocultural activity. In R. Woxniak & K. Fischer (Eds.), *Development in context: Acting and thinking in specific environments* (pp. 121-153). Hillsdale, NJ: Erlbaum

Rojas-Drummond, S. Mercer, N. & Dabrowski, E. (2001). "Collaboration, scaffolding and the promotion of problem-solving strategies in Mexican pre-schoolers.' *European Journal of Psychology in Education*, 16(2), 179-196.

Rose, D. & Meyer, A. (2002). Teaching Every Student in the Digital Age: Universal Design for Learning. Alexandria, VA: ASCD.

Roth, W. & Lee, S. (2002). Science Education as/for Participation in the Community. *Science Education*, 88 (2), 263-291. DOI: 10.1002/sce/10113

Roth, W. & Lee, Y (2007). "Vygotsky's Neglected Legacy": Cultural-Historical Activity Theory. *Review of Educational Research*, 77(2), 186-232. doi.org/10.3102/0034654306298273

Roth, W-M., & Tobin, K. G. (2002). *At the elbow of another: Learning to teach by coteaching*. New York: Peter Lang.

Saldaña, J. (2016). *The Coding Manual for Qualitative Researchers*. Thousand Oaks, CA: Sage Publications.

Santa Barbara Discourse Group, 1992. Do you see what we see? The referential and intertextual nature of classroom life. *Journal of Classroom Interaction,* 27(2), 29-36.

Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., Burroughs, H., Jinks., C. (2018) Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity,* 52(4), 1893-1907. doi: 10.1007/s11135-017-0574-8.

Saye, J., & Social Studies Inquiry Research Collaborative. (2013). Authentic pedagogy: Its presence in social studies classrooms and relationship to student performance on state mandated tests. *Theory & Research in Social Education*, 41(1), 89–132

Saye, J., Stoddard, J., Gerwin, D., Libresco, A., & Maddox, L. (2018). Authentic pedagogy: examining intellectual challenge in social studies classrooms. *Journal of Curriculum Studies*, 50(6), 865-884, doi.org/10.1080/00220272.2018.1473496

Scruggs, T., Mastropieri, M. & Marshak L. (2012). Peer-Mediated Instruction in Inclusive Secondary Social Studies Learning: Direct and Indirect Learning Effects. *Learning Disabilities Research & Practice*, 27(1), 12-20.

Scruggs, T. E., Mastropieri, M. A., Berkely, S., & Graetz, J. E. (2010). Do special education interventions improve learning of secondary content? A meta-analysis. *Remedial and Special Education*, 31, 437–449.

Scruggs, T.E., Mastropieri, M.A. & Marshak, L. (2012). Peer-Mediated Instruction in Inclusive
    Secondary Social Studies Learning: Direct and Indirect Effects. *Learning Disabilities:*
    Research and Practice, 27(1), 12-20. DOI: 10.1111/j.1540-5826.2011.00346.x

Scott, S., & Palincsar, A. (2013). Sociocultural theory. Retrieved from:
    http://dr-hatfield.com/theorists/resources/sociocultural_theory.pdf

Seidman, I. (2013) *Interviewing as Qualitative Research: A Guide for Researchers in the Social*
    Sciences. New York, NY: Teachers College Press.

Seixas, P. (2015). A Model of Historical Thinking. Educational Philosophy and Theory (2015),
    1-13. DOI: 10.1080/00131857.2015.1101363

Seixas, P. (2017). Historical consciousness and historical thinking. In M. Carretero, S. Berger, &
    M. Grever (Eds.). *Palgrave handbook of research in historical culture and*
    education (pp. 59–72). London, England: Palgrave Macmillan.

Seixas, P., & Morton, T. (2013). *The big six: Historical thinking concepts*. Toronto: Nelson
    Education.

Siegel, J. (2017). Teaching the Presidential Elections Using Media Literacy in the LD
    Classroom. *Journal of Media Literacy Education*, 9(2) 91-104. DOI: 10.23860/JMLE-
    2019-09-02-06

Smith, J.A. & Osborn, M. (2008) Interpretative phenomenological analysis. In J.A. Smith
    (Ed.) *Qualitative Psychology: A practical guide to research methods* (pp. 53-80).
    London: Sage.

Smith, M., Breakstone, J., & Wineburg, S. (2018). History Assessment of Thinking: A Validity
    Study. *Cognition and Instruction*, 37(1), 118-144.
    DOI: 10.1080/07370008.2018.1499646

Spiro, R. (2006). The post-Gutenberg world of the mind: Radical new learning, thinking,
    teaching, and training with technology…bringing the future near. *Educational*
    Technology, 46(1), 3-4.

Spiro, R., & DeSchryver, M. (2009). Constructivism: When it's the wrong idea and when it's
    the only idea. In S. Tobias & T. M. Duffy (Eds.), *Constructivist instruction: Success or*
    failure? (pp. 106–123). Routledge/Taylor & Francis Group.

Stanford History Education Group (2020). Historical Thinking Chart updated 6.23.2020.
https://sheg.stanford.edu/history-lessons/historical-thinking-chart

Stanford History Education Group (2020, November 24). History Assessments.
https://sheg.stanford.edu/history-assessments

Stenhoff, D. & Kraft, B. (2007). A Review of the Effects of Peer Tutoring on Students with Mild
Disabilities in Secondary Settings. *Exceptional Children*, 74(1), 8-30.
doi.org/10.1177/001440290707400101

Strauss, A.L. (1987). *Qualitative methods for social scientists*. Cambridge: Cambridge
University Press.

Strauss, A.L., & Corbin, J. (1998). *Basics of qualitative research: Techniques and procedures
for developing grounded theory* (2nd edition). Thousand Oaks, CA: Sage.

Stringer, E.T. (2014). *Action Research* (4th edition). Thousand Oaks, CA: Sage.

Swenson, S., & Ryder, R. E. (2016). Dear Colleague: Virtual Schools. Department of Education
Office of Special Education and Rehabilitative Services. Retrieved from
https://www2.ed.gov/policy/speced/guid/idea/memosdcltrs/dcl–virtualschools–
08-05-2016.pdf

Tharp, R. & Gallimore, R. (1998). 'A theory of teaching as assisted performance' in D. Faulkner,
K. Littleton, and M. Woodhead (eds) *Learning Relationships in the Classroom*. London:
Routledge.

The Historical Thinking Project (2022). www.historicalthinking.ca

Thorp, R. & Persson, A. (2019). On historical thinking and the history educational challenge.
Educational Philosophy and Theory, 52(8), 891-901.
doi.org/10.1080/00131857.2020.1712550

Twiner, A., Littleton, K., Coffin, C., & Whitelock, D. (2014). Meaning making as an
interactional accomplishment: A temporal analysis of intentionality and improvisation in
classroom dialogue. *International Journal of Educational Research,* 63 (2014), 94-106.
http://dx.doi.org/10.1016/j.ijer.2013.02.009

Twiner, A. Littleton, K., Whitelock, D., & Coffin, C. (2021). Combining sociocultural discourse analysis and multimodal analysis to explore teachers' and pupils' meaning making. *Learning, Culture, and Social Interaction*, 30 (2021), 1-12. https://doi.org/10.1016/j.lcsi.2021.100520

Underwood, J. & Underwood, G. (1999) "Task effects in cooperative and collaborative learning With computers" in K. Littleton and P. Light (eds.) *Learning and Computers: Analysing Productive Interaction*. London: Routledge.

U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1998-2018 Civics Assessment.

van Drie, J., & van Boxtel, C. (2008). Historical reasoning: Towards a framework for analyzing students' reasoning about the past. *Educational Psychology Review*, 20(2),87–110.

VanSledright, B. A. (2013). *Assessing historical thinking and understanding: Innovative designs for new standards*. New York: Routledge.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Cambridge, MA: Harvard University Press.

Weatherly, N. (2008). A comparison of Maintenance-training methods for children diagnosed with autism. Dissertations. 820. https://scholarworks.wmich.edu/dissertations/820.

Wells, G. (1999). *Dialogic Inquiry: Towards a Socio-cultural Practice and Theory of Education* (*Learning in Doing: Social, Cognitive and Computational Perspectives).* Cambridge: Cambridge University Press. DOI:10.1017/CBO9780511605895

Wells, G. (2000). Dialogic inquiry in education: Building on the legacy of Vygotsky. In C. D. Lee & P. Smagorinsky (Eds.), *Vygotskian perspectives on literacy research*: Constructing meaning through collaborative inquiry (pp. 51–85). Cambridge, England: Cambridge University Press.

Wells, G. & Meija-Arauz, R. (2006). *Dialogue in the classroom. Journal of the Learning Sciences*, 15(3), 379-428.

Wertsch, J. V. (1991). *Voices of the mind: A sociocultural approach to mediated action*. Cambridge, MA: Harvard University Press.

Wexler, J., Reed, D., Pyle, N., Mitchell, M. & Barton, E. (2015). A Synthesis of Peer-Mediated Academic Interventions for Secondary Struggling Learners. *Journal of Learning Disabilities,* 48(5), 451-470. DOI: 10.1177/0022219413504997

Wineburg, S. (1999). Historical Thinking and other Unnatural Acts. *Phi Delta Kappan*, 80(7) 488-499.

Wineburg, S. S. (2001). *Historical thinking and other unnatural acts: Charting the future of Teaching the past*. Philadelphia, PA: Temple University Press.

Wineburg, S. (2020). What is it about the Internet that makes smart people look, well…less so? [PowerPoint slides] Retrieved from: https://drive.google.com/file/d/1hPVi-Wc-SXK8lqHi-wI6YfPyAU7MnxD9/view

Wineburg, S. & Martin, D. (2004). Reading and Rewriting History. *Educational Leadership*, 61 (1), 42-45.

Wineburg, S. & McGrew, S. (2019). Lateral Reading and the Nature of Expertise: Reading Less and Learning More when Evaluating Digital Information. *Teachers College Record*, 121(11), 1-40.

Wineburg, S., Martin, D., & Monte-Sano, C. (2011). *Reading like a historian*. New York, NY: Teachers College Press.

Wineburg, S.,Breakstone, J., Smith, M., McGrew, S., & Ortega, T. "Civic Online Reasoning: Curriculum Evaluation" (working paper 2019-A2, Stanford History Education Group, Stanford University, Stanford, 2019).

Wineburg, S., McGrew, S., Breakstone, J., & Ortega, T. (2016). Evaluating information: The cornerstone of civic online reasoning. Retrieved from Stanford Digital Repository: https://sheg.stanford.edu/upload/V3LessonPlans/Executive%20Summary%2011.21.16.pf

Wineburg, S., Breakstrone, J., Ziv, N. & Smith, M. (2020). "Educating for Misunderstanding: How Approaches to Teaching Digital Literacy Make Students Susceptible to Scammers, Rogues, Bad Actors and Hate Mongers." Working Paper A-21322, Stanford History Education Group, Stanford University, Stanford, CA). Retrieved from https://purl.stanford.edu/mf412bt5333.

Wissinger, D. R., & de La Paz, S. (2016). Effects of critical discussions on middle school students' written historical arguments. *Journal of Educational Psychology*, 108(1), 43–59.

Wissinger, D., & De La Paz, S. (2016). Using small-group discussions to enhance the historical arguments of middle school students. *Journal of Educational Psychology*, 108, 43–59. https://doi.org/10.1037/edu0000043

Wink, J, & Putney, L. (2002). *A Vision of Vygotsky*. Boston: Allyn & Bacon.

Wolf, M. (1978) Social validity: the case for subjective measurement or how applied behavior analysis is finding its heart. *Journal of Applied Behavior Analysis*, 11(2), 203-214.

Yin, R. (2009). *Case Study Research: Design and Methods*. Thousand Oaks, CA: Sage.

Zhang, X., Anderson, R., Miller, B., Nguyen-Jahiel, K., Lin, T., Zhang, J., Jadallah, M., Scott, T., Sun, J., Latawiec, B., Ma, S., Grabow, K., and Hsu, J. (2016). Improving children's competence as decision makers: Contrasting effects of collaborative interaction and direction instruction. *American Educational Research Journal*, 53(1), 194-223.

APPENDIX A: STUDENT INTERVIEW PROTOCOL AND CODEBOOK

First Interview

Section I: Demographic Information

> Name:
> Age:
> What they had for breakfast that morning (ice breaker question):

Section II: Experiences with learning

> What has been their general experience of learning:
>
> General feelings about school during COVID-19:
>
> What do they wish could be done more/less at school?

Section III: Experience with Social Studies

> What have your experiences been in learning social studies?
>
> When you look at historical artifacts what do you think about them?
>
> What do you think about being engaged as an American citizen?
>
> Has school helped to show you this so far?
>
> Do you think you can pick out what things online are based on factual information and which aren't?
>
> What do you think are the best parts of social studies classes?

Section IV: Experience working in peer mediated settings

> Tell me about your experiences working in small groups? Is it productive or…
>
> Tell me about your experience being involved in small group discussions:

Do you like to be asked to lead a group?   Does that change how you participate?

Second Interview

Introduction: (NAME) it is important for me to note at the start of this interview that I'm not a teacher in the truest sense. Like, I wanted you to succeed in class, but I also could only help so much because as a researcher I was watching what happened. In this interview, almost nothing I say will be shared with teachers, so I'm looking for you to be as honest and forthright as possible as it will help more people long term if you're 100% honest. You won't get in trouble and answers you give will not impact your completing the study work.

Section I: General feeling at the end of the school year

You just finished your school year. Can you give me a sense of how you feel at the moment?

What are you looking forward to doing this summer?

What may have been your biggest achievement this year?

What do you think was disappointing or you wish could have gone better?

Section II: Experiences with learning in class

You were present for every day of your Social Studies class – that's outstanding. Can you tell me something in the class you liked learning about? Why?

There were probably a few topics in class that you didn't like as much. Can you share any topics that you didn't find particularly interesting? Why?

You had to take this class online for the full semester. What did you appreciate about that and what was difficult?

(Questions for Student 2)

At times it seemed that your wifi was choppy. How often was that a significant problem for what you were trying to learn in class?

I noticed that you weren't as quick in being able to take notes in the Google Docs but you almost always were able to complete them after class. Can you explain in your own words why this is?

Is there anything that would make it easier for you or that made it easier for you in class to take notes?

What did you generally think for the assignments that we provided in this class overall?

Were there any assignments you thought were better designed to meet your learning style than others? Can you share that with me what they were?

During the times that I taught, NAME, we learned about topics like contextualization, corroboration and sourcing.

Do you remember that when we spoke about contextualization, we met as small groups and we talked about some photos of Hitler meeting with people before World War II, and we looked at a Time Magazine with Hitler on the cover. What did you think of that conversation?

Do you remember when we spoke about sourcing, that we again went into small groups and talked about photojournalists and what the meaning of their photos were? What did you think of that conversation?

Do you remember when we talked about corroboration, you had an assignment where you had to match you Vietnam photo with additional materials. We then talked in class, using Nearpod and some quotes people had to read, to talk about matching up stories. What did you think of that conversation?

During the times I taught, we learned about trusting sources online and something called lateral reading. I shared a website with you and asked you as a class to think about how to question it properly. Can you share with me something that you think you learned from that class or discussion?

When I taught class, NAME, did you notice anything different about these lessons as opposed to other lessons in the class?

Section III: Classroom Tools

(NAME) we used a few new classroom tools over the course of the semester. Some you used and some you didn't.   Can you tell me a bit what you thought about:

Nearpod

Google's Jamboard

EdPuzzle

Flipgrid

Did you need more time to complete tasks with the Google Docs that Ms. Miele set up?   Can you talk about the pros and cons of working with Google Docs?

Is there a particular reason that you preferred to be ON/ NOT ON camera during class? Do you think that being ON / OFF camera helped or hurt how well you participated?

Section IV: Experience in the discussion

Did you like being able to talk with your classmates in a small group like this?

You seemed to struggle with completing the template, can you explain to me what the challenge with the template was?

Tell me about what you thought of the feedback that you received on the conversations.

Written
Video
Audio
Group

How did you use this feedback to prepare for the next conversation? Or did you?

Did you find yourself during the conversations wanting to participate more?

Was there anything about being in the conversations that you appreciated?

Was there anything in the conversations that you found especially boring or hard? What was it?

Did you find this format to be helpful? Do you think this format could be used in more classrooms when school isn't online anymore?

Section V: Overall Summaries

How do you feel about social studies after completing this class?

Was there anything that Dr. M. and I could have done for this class to help you to be an even better student?

What is one thing that you wish that other teachers and adults understood about learners like you that they could consider when they prepare to teach?

Codebook (Revised, Version 3)

1. **Category/Code: Impact of Covid (COV)**

Code for this when you come across a **direct indication** of the impact of COVID on the life of the student. While the student experience is almost entirely mediated by the COVID-19 pandemic, this code is looking for where a student clearly indicates that something they are experiencing is attributable, in their opinion, to COVID-19.

For example:

"Yes, I have not seen my uncle because he doesn't have his vaccine and is worried about his father, who he lives with, getting COVID-19."

Do not code for COV when there is an *indirect attribution* to COVID-19.

For example:

"I found the way the teacher uses the Zoom tools in class to be really useful for my learning."

While we understand in this instance that they would not be experiencing these Zoom tools in this instance without the COVID-19 pandemic, we are going to, for this first round, not code this type of response as COV.

2. **Category/Code: Impact of Online Learning (ONL)**

Code for this when you come across an indication of the student's experience with online learning. This should be when they talk about positive and/or negative features of their educational experiences mediated by online. This might include conversations regarding hardware or systems that directly is utilized for the purposes of attending classes.

For example:

"Due to having all of my classes at home via Zoom, I have not had the opportunity to meet many of my classes face-to-face."

OR

"I have been pleased by the fact that I can submit my classwork late because I only have class online twice a week."

Note that ONL can be coded alongside other codes, such as COV, TECH+/-, PPED or NPED

3. Category/Code: Impact of Family/Sociocultural Experiences (SOC)

Code for this when you come along incidents where students talk about the influence of their family and/or their sociocultural background and how it impacts their learning and/or their life experience. They may be referencing their economic circumstance, their relationship with their parents, or their cultural impacts

For example:

"I really wanted to be better at attending my math class, but it was hard to do so as my father expected me to watch my twin brothers at that time every day."

OR

"I was doing fine with classes but then my mother had to change our Wifi contract because we could not afford what Comcast was charging us anymore."

*Note that SOC can be dual coded with other categories as well.

4. Category/Codes: Technology and learning (TECH) + or --

Code for this when you see evidence of students talking about the specific role of a technological tool on their learning or education. This is more precise than what ONL is looking for in that this code is trying to ascertain the specific impact of specific technologies, such as Google Docs or Speech to Text. It does not pertain to more generic technologies or services (e.g. – Wifi) that have to be used to facilitate learning (that is ONL).

For example:

"Nearpod was really useful for me because I appreciated that every slide was a different, separate thought."

The study is also attempting to track whether the impact of the technology <u>was positive or negative for the student</u>. In this case, we want to add one of two SUBCODES in this instance – a PLUS or MINUS (which can be symbolized as a + or a --)

For the above example, "Nearpod was really useful for me because I appreciated that every slide was a different, separate thought"

We would list this as TECH PLUS or TECH+ because the student is indicated that the technology is useful to them.

If a student said the following:

"Speech to Text is so frustrating: I often have to repeat myself, which makes the work go from what probably would be 10 minutes to more like 30."

Then this specific statement could be classified as TECH MINUS OR TECH -- (please use a double dash). Here the student is indicating a challenge with the technology that makes work more difficult.

This study will total the PLUS and MINUS to comment on whether technology tools affected students.

Note that TECH+/- can be coded at the same time as other codes, like ONL

5. <u>Category/Code: Historical Thinking (HIST)</u>

This code should be used any time a student offers evidence that they are using a practice or process of historical thinking within discussions of historical content, civic life, and/or classroom activities. Historical thinking skills include corroboration, contextualization, sourcing, close reading, or lateral reading. It should not be applied to more general or generic comments that are made by the student.

You can use this chart from the Stanford History Education Group (SHEG) to identify some of the types of questions that a student could ask per these categories:

<u>Corroboration:</u> What do other documents say? Do other documents agree? If not, why? What are other possible documents? What documents are most reliable?

<u>Contextualization:</u> When and where was this created? What was different then? What was the same then? How might the circumstances in which this was done/made affect its content?

<u>Sourcing:</u> Who wrote this? What is their perspective? When was it written? Why was it written? It is reliable? Why or why not?

<u>Close Reading:</u> What claims does the author make? What evidence does the author use? What language (words, phrases, images, symbols) does the author use to persuade the audience?

<u>Lateral Reading:</u> How does the website/internet source compare or contrast with other sources? What can I find about this website from other websites? Who made this specific website and what can I find out about them?

This study is not attempting to determine the evidence of each of these specifically, so there is no need to score for the separate categories. Broad familiarity with Historical Thinking will be sufficient to track whether it is evident in the provided quotes.

If a student were to say the following:

"I was really struck by how that magazine was showing how people thought back in 1939 – they had no idea that Hitler was going to be as bad as he became. Certainly, it was interesting to see how they thought."

You would code for HIST because this can be considered evidence of Contextualization, or the examination of how thinking was different during this time period.

Take note: a student commenting on a piece of historical knowledge of itself doesn't constitute thinking along these lines.

For example:

"I thought the Hitler segment was interesting."

There is no evidence of the SHEG categories in this statement. This statement by itself shows no demonstration of the skill set.

6. **Category/Code: Positive Self (POS)**

This code should be used whenever a student demonstrates that they are making an attribution to a perceived positive trait of theirs. This can be in reference to their performance in school, their schoolwork, their relationship with friends and family, or their general qualities.

For example:

"I am an excellent video editor."

OR

"I handle myself really well in small groups."

7. **Category/Code: Negative Self (NOS)**

This code should be used whenever a student demonstrates that they are making an attribution for a perceived negative trait of theirs. This can be in reference to their performance in school, their schoolwork, their relationship with friends and family, or their general qualities. The range for what defines negative should be construed as something that appears to diminish the student's self-image.

For example:

"I cannot be a leader for a group because I am just terrible with names."

OR

"Well, I have always been the lazy one in my family, so my father doesn't rely on me."

8. Category/Code: Student Agency (AGN)

This code should be used whenever a student speaks about or notes an instance where they took responsibility or initiative for their learning or their life experiences. This should correspond to an action and not simply a state of being or perception.

For example:

"No one taught me how to do that, I learned how to use that software on my own because I love to experiment with new tools."

OR

"My parents didn't expect me to help my siblings with my homework, but I thought it was important and so I sat down with them to help with their math."

Note that this might coincide with other codes, such as POS, and that is okay.

9. Category/Code: Positive Pedagogy (PPED)

Code for this whenever a student is speaking about the work of an educator or educators in their experience and treating it in a positive sense. This goes for when they are speaking about the study, OR when they are speaking about teachers in general. By positive, meaning it was helpful to the student, and in their wording, might assisted with their learning (even if indirectly). This also includes when a student is talking about what they think a teacher should do to effectively teach them.

For example:

"I appreciated that the teacher was talking slow in class, because it really was easy for me to take effective notes."

OR

"What I think would be more effective would be if the teachers used some form of game in class to help us to remember."

Note that this can be either when a quote is talking about what did happen or what they hope would happen.

10. Category/Code: Unhelpful Pedagogy (UPED)

Code for this whenever a student is speaking about the work of an educator or educators in their experience and treating it in a sense where they see the pedagogy (or lack of pedagogy) as unhelpful. By either their wording or their description of a teacher's action or inaction, they identify things that might have impeded their learning (even if indirectly). This also includes when a student is talking about what they think a teacher should NOT do to effectively teach them.

For example:

"Every day in class Ms. Brown showed us the same type of PowerPoint again and again and made little effort to connect with us as students or check on our learning."

OR

"What I would hope teachers don't do is continue to demand that we just sit and listen for the entire class period when we really want to talk about the topic."

NOTE

Careful attention should be paid, for both PPED and NPED, on the difference between something that a student enjoys and something that helps their learning. Something that is enjoyable might still impede their learning and something that is not enjoyable might still be good for learning.

For example:

"You know, I did find the templates that Ms. Milly assigned to be annoying, but at the same time, they were important to get me through the topic since there was a lot of detail that sometimes confused me."

This would be an example of PPED, since the templates **were helpful** to the learning of the student, even though the student *did not particularly enjoy* the use of those templates.

11. **Category/Code: Universal Design for Learning (UDL)**

Code for this category if a student makes a reference that aligns with the principles of Universal design for learning, namely, having multiple means of engagement, action and expression, or representation. These are broad references to categories from the UDL Framework.

By reference, this can either be what the student identifies as something a teacher has done with them, or what they think would be useful for their learning in a potential future condition.

Multiple Means of Engagement is operationalized here for when an instructor is providing students more opportunities for student involvement in the course of teaching and learning.

Multiple Means of Representation is operationalized here to mean when the instructor provides varied tools, visuals, or methods to have students see or hear content.

Multiple Means of Action and Expression is operationalized here to mean when the instructor allows students different ways to complete work or show their understanding of content.

Example Multiple Means of Engagement –

"The teacher ended up using these different tasks in class to get us involved in the content. Like, they tried to do a presentation, then they showed us a video, and then we got to be in small groups."

You can see in this example that the teacher is providing opportunities for the students to be involved with the learning. This is an example of when a student is speaking about what has already been done or they experienced.

Example: Multiple Means of Representation –

"What I really think we need is to be able to have a mixture of ways to learn about what we are supposed to do. Like, some people really appreciate videos, and other people want text, and still other people want PowerPoints. Why not offer all three?"

You can see in this example the student is speaking about the different potential ways they would get new media to learn from. This is also an example of something hyptothetical and not what they experienced in a class already.

Example: Multiple Means of Action & Expression –

"It was pretty clear that we could submit the project in a few different ways – Ms. Brown said we could either give her a poem or that we could create a video in FlipGrid – that was pretty cool how we weren't stuck to one thing."

Note: this code might overlap with PPED, NPED, or TECH+/-- .

12. Category/Code: Classmate Impact (COI+/-)

Code for this category if the student is making a comment regarding the impact of their friends or classmates on their learning. This category helps with understanding where the influence of peers helps or hinders learning in this specific environment.

The study is also attempting to track whether the impact of the community was positive or negative for the student. In this case, we want to add one of two SUBCODES in this instance – a PLUS or MINUS (which can be symbolized as a + or a --)

For the example, " "I thought we were doing okay as a group, and Gareth helped as the leader to keep moving the conversation forward."

We would list this as COMMUNITY PLUS or COI+ because the student is indicated that the someone in their learning group/community was productive or acted in a way that was beneficial to their learning.

But if a student said the following:

"We were having a productive conversation in class until Newton decided that he wanted to get Ms. Brown off track."

Then this specific statement could be classified as COMMUNITY MINUS OR COI-- (please use a double dash). Here the student is indicating a challenge with their community/classmates that makes work/learning more difficult.

This study will total the PLUS and MINUS to comment on how the classroom community affected students.

13. Category/Code: Individual Learning Challenges (ILC)

Code for this category when a student EITHER

1. Makes a comment regarding how a perceived or real disability shaped their learning experience. This might include an indirect comment regarding their difficulties with a perceived learning task.

OR

2. It seems apparent from the quotes that a potential disability is hindering their ability to apprehend or react to the question or situation.

Since this study worked with students who were operating with Individualized Education plans, the rater should be aware that these students are classified as having disabilities by their schools. While the rater does not need to know the type or extent or disabilities the interviewees had, those may be in evidence during the course of the interview.

For example:

"I was handling class pretty okay until the teacher started expecting us to keep up with the reading on the PowerPoint. There was so much content on there and my dyslexia prevented me from keeping up so I kept missing things when she moved the slides."

OR

"Questioner: So why do you think that you didn't speak in the group at all this time?

"Student: Um, er, hmmmmm

(Pause for 35 seconds)

"Questioner: Do you want me to repeat the question?

(Pause for 40 seconds)

"Student: mmmmmm…"

"Questioner: We can move on to the next question"

Figure 43

Coding Rounds 1 & 2

Section								
1								
Sentence #	Shawn Codes	Matt Codes	Agreement (Y/N/Percent)					
1	Tech--	ONL	**					
2	SOC/Tech--	ONL/SOC		50%				
3	Tech--	ONL	**					
4	ONL/Tech--	ONL/AGN		50%		(Tech - more specific aspect of tech)		
5	NPED	AGN	**				Tech is a subset of ONL)	
6	No Code	No Code	X			Student is contextualizing		
7	NPED	(NPED)	X					
8	Tech--	NOS/Tech--		50%				
9	NPED	NPED	X					
10	PPED/Tech+	NOS/PPED		50%				
11	ILC	NOS (ILC)	NO			How can I make this clearer...		Foreigness
12	AGN	AGN	X					
Section								
2								
Sentence								
1	AGN/POS	POS	X					
2	POS/AGN	POS/ILC	X					
3	No code	No code	X					
4	No code	No Code	X					
5	POS	ILC				No code?	POS	
6	No Code	No Code	X					
7	POS/ONL	ILC/POS/AGN	X					
8	ILC	ILC	X					
9	ILC	ILC	X					
10	ILC	ILC	X					
11	ILC	ILC	X					
12	No Code	ILC	X					
13	No Code	ILC	X					
14	AGN	PPED		&		Revisit		
15	AGN	PPED		&			Look at the PPED	
			15-Dec					

Figure 44

Coding Rounds 3 & 4

Section 3								
Sentence	Shawn's Codes		Matt's Codes		Agree?	Partial Agree	Disagree	Consensus
1	ILC		ILC		X			
2	ILC/UPED		ILC	UPED		X		X
3	ILC/AGN		No Code				x	X
4	ILC/COI-		COI-/ILC				x	X
5	No Code		No Code		X			
6	No Code	*	No Code		X			
7	NOS/ILC	*	NOS		X			
8	NOS		NOS		X			
9	NOS		NOS		X			
10	POS		POS		X			
11	No Code		No Code		X			
12	POS		No Code				x	X
13	POS	0	POS		X			
14	POS		No Code				x	X
15	ILC / NOS		NOS/ILC		X			
16	ILC		ILC		X			
17	ILC		ILC		X			
18	ILC / Tech +		ILC/Tech +		X			
Totals								
Section 4								
Sentence								
1	PPED		PPED		X			
2	PPED/COI+		PPED/COI+		X			
3	No Code		No Code		X			
4	PPED		PPED/UPED/COI-					X
5	NPED/COI-		COI-/UPED		X			
6	COI-		COI-		X			
7	COI (+ & -)	*	COI + & -		X			
8	Tech+		Tech+		X			
9	PPED/UDL		PPED/UDL		X			
10	Tech+/UDL		Tech+		X			
11	AGN		AGN		X			
12	No Code	*Confusing	AGN					X
13	AGN		AGN		X			

APPENDIX B: TEACHER INTERVIEW PROTOCOL

Interview Protocol
Interview format based on Seidman, 2013. Interview questions developed by researcher.

Preface:
Thank you for agreeing to be interviewed. As the cooperating teacher for this intervention, your insights on the value of the intervention and your observation of the student experience, based on your experience with high school students in general and these students in particular are valuable for understanding the impact of this work. You will be asked a series of questions over the course of three interviews to get your perspective of this work and the impact it is having/not having with these students. Your thoughtful responses will be appreciated.

First Interview

Demographic Information:
- Role(s):
- Grade/ages levels:
- Training/licensure:
- How long have you been teaching?
- Where did you get your degrees/training in education?

1. Can you explain your general philosophy of teaching?
    How did you develop this specific philosophy?

2. What do you think are the most important aspects of teaching history/civics/social studies?

3. How did your experience as a student in history classes influence how you teach history now?

4. Do you feel that your preparation to be a teacher helped shape how you teach history and/or civics?

5. How do you feel that students with learning disabilities normally experience history/civics/social studies?

6. Do you notice any appreciable difference in how students experience social studies if they have a learning disability?
7. If so, how do you typically plan/address those student experiences in how you plan curriculum and teach your class?

8. When you think about your teaching practice, what role does peer-mediated activity normally play?

9. How often do you allow students to engage in small group discussion?

10. When you allow students to engage in small group discussion, how do you normally prepare them?   At the beginning of the year? During the school year?

11. Do you normally track and assess student participation in small group discussion?

12. What do you think the result of greater student participation in peer-mediated activity and discussion might be?

13. Would you feel that way about all classes or is this class in particular?

14. Do you have concerns about future student-led discussions after this intervention?

15. How do you feel that STUDENT 1 will respond to this intervention?
        i.   What are they like as a learner?
        ii.   How are they doing in history?
        iii.   Can you tell me what you think about the prior knowledge of the student?
        iv.   Can you tell me their role in the classroom up to this point?

How do you feel that STUDENT 2 will respond to this intervention?
How do you feel that STUDENT 3 will respond to this intervention?

Second Interview

1. How do you feel like STUDENT 1 is as a learner from what you've been able to observe from the classes you've had with them?

2. How do you think STUDENT 1 is doing in history, when you think about their overall grade and performance?

3. When you look at STUDENT 1, can you tell anything about what you think their prior knowledge in history; do you see that he has something that he's calling on to handle topics or address questions?

4. We can think about students occupying roles in a classroom; would you have any sense, based on how you've typically looked at students: What role do you think STUDENT 1 plays in the 11 students at the class?

5. How do you think STUDENT 1 will respond to the discussion intervention?

REPEAT above questions for STUDENT 2 and STUDENT 3.

**Specific to STUDENT 1: If you were to hear that, that today in the conversation STUDENT 1 was picked to do a summary of the entire thing right and, but this is, but then STUDENT 1 responded, "I think I'll pass," what do you think about STUDENT 1 taking a pass like this?

**Specific to STUDENT 2: A student who has expressive concerns like STUDENT 2, what's our goal, as you know it, for teachers of civics and history with a student like that? What do you think is practically the best we can hope for from STUDENT 2?

**Specific to STUDENT 3: Would you imagine, I mean if you think about the young women in your class, I mean STUDENT 3 the only one who chose to do this particular task, then they're there every week with a bunch of 14-year-old boys; what do you think that says about STUDENT 3?

Third Interview

Section I: Questions about the Student themselves

1. Can you give me a reflection on:

   STUDENT 1?

   STUDENT 2?

   STUDENT 3?

2. How do you think the student did in history, broadly speaking?

   STUDENT 1?

   STUDENT 2?

   STUDENT 3?

3. Can you reflect on any signature moment for these students in your class this past semester?

   STUDENT 1?

   STUDENT 2?

   STUDENT 3?

4. Did you notice any change with any of these students in their behavior or confidence with speaking between the beginning of the class and the end of the class?

5. Did you notice any change in performance with any student between the beginning of the class and the end of the class?

Section 2: On the varied tasks of the intervention

6. What was it like to co-teach?   Especially considering this specific environment?

7. Did you notice any things that I did differently from how you would do them normally in a classroom?   Any things you'd do from here on?   Any things you'd avoid?

8. I taught four times formally in your class – does anything stand out about the content and/or the methods of those lessons that I taught?

9. How might we have done this differently if we were teaching things in a face-to-face environment?

10. We didn't use the discussion protocol in class because of shortened time, but do you think, upon reflection, that there was any way to situate that in a class that was taking place online?

11. What did you think of the different types of technology that we utilized in the class?   Did you like any of the tools or did they make things more difficult as an educator?

12. A lot of the tools/methods I used were designed with a Universal Design for Learning framework. Meaning that I didn't try to differentiate for unique students like STUDENT 1 but tried to make things that all students could use. What do you think of that type of model?

13. How did you feel that COVID and the online teaching impact this specific group?

14. How did you feel that this group being online while friends were in school may have impacted this group?

Figure 45

Classwork Participation Tracker, Screen 1

	5/18	5/20	5/25	5/27	6/1	6/3	6/8	6/10	6/15
Conan	Talked (First!) and wrote responses in Jamboard, Waited after class to ask question about completing work for the project.	Nothing today		Is writing the answers down – taking the 3 answers that I gave and starting on 4	Tried to disagree with Carson but got confused Responds to Holly's cold call	Kept getting ejected by his wifi.	Is taking notes on the screen today; stops taking notes around 12:35.	Nothing today	Stayed late to review his work.
Arminda	**Absent**	Answers question regarding where people went back to. ("they couldn't		Tried to answer Berlin question (wrong); answered question about	Spoke for the group a lot.	Comment in opening of class	Is taking notes on the screen. Makes a comment about the whites making	Responds after Holly has trouble getting responses from Mario and Conan about Rowlatt acts.	Nothing today

Figure 46

Classwork Participation Tracker, Screen 2

		because of the stuff wasn't there" Raises her hand for a comment and then waits Looked up information about Palestine and Israel on her own. Has good information about it; "Pakistan" not "Palestine" Includes the TikTok video about it.		why the cartoon had one person (correctly) Cars and people Jumps in again to say what the North Korean is thinking in cartoon (tries to answer but doesn't get opinion) Dominoes answer			rules for people in South Africa for people who are not native to those spaces. References Sarafina movie in separate comment at 12:36; stops taking notes at about 12:35		

Figure 47

Classwork Participation Tracker, Screen 3

Rodger	Wrote a response on the chat. Shook his head (was on the video the entire time) indicating that he thought the Nazis were guilty (only response we got in class). May have used jamboard but I couldn't tell because he didn't write on his page.	Responds "Russia" to question about who controlled Poland postwar		Is writing the answers down and taking a stab at #4 (the one that I didn't give)	Answered the cold call from Holly after the video	Said hello	Isn't initially taking notes; doesn't end up taking notes in class itself (nothing by the end)	Does raise his hand about religion ("untouchables"); otherwise nothing.	Nothing

Additional notes on performance:

6.8.21: See typed notes for screen shots.

6.17.22: Final presentation day

Conan – presented first (we goaded him into it). He did this just fine even though like usual he was nervous and had some challenges with just keeping to his script.

Arminda – did Congo – really long presentation – lots of personal information – (Holly does cut her off). (see screen shots)

Rodger – did a presentation well.   He had a very banal slide deck but he got through it and he answered questions (see screen shot).

APPENDIX D: HISTORICAL ASSESSMENT OF THINKING

Figure 48

HAT Rubric

HAT Rubric	Name:		
Question			
1	Proficient (3)	Emergent (2)	Basic (1)
2	Proficient (3)	Emergent (2)	Basic (1)
3	Proficient (3)	Emergent (2)	Basic (1)
Notes			

HAT Rubric	Name:		
Question			
1	Proficient (3)	Emergent (2)	Basic (1)
2	Proficient (3)	Emergent (2)	Basic (1)
3	Proficient (3)	Emergent (2)	Basic (1)
Notes			

HAT Rubric	Name:		
Question			
1	Proficient (3)	Emergent (2)	Basic (1)
2	Proficient (3)	Emergent (2)	Basic (1)
3	Proficient (3)	Emergent (2)	Basic (1)
Notes			

First HAT

Note: Some transitional slides were omitted for space purposes.

Figure 49

First HAT, Slide 1

Figure 50

First HAT, Slide 2

Review the following reading

On the next slide, there will be a story about the treatment of the Armenians from 1916. Please read that story and answer the questions on the slide that is after it. The first part of the next slide tells you who told the story, and what he was.

▷ ●————————————————————————— 00:00

Lesson: HAT Period 4   2/14   *nearpod*

Figure 51

First HAT, Slide 3

Lieutenant Said Ahmed Mukhtar al-Ba'aj, an Ottoman officer, defected to the Russian Army. In December 1916, the officer testified about his role in the deportation of Armenians.

"In July 1915 I was ordered to accompany a group of deported Armenians. It was the last batch. There were 120 men, 700 children and about 400 women. I took them to Ghumush-Khana. Here the 120 men were taken away, and, as I was informed later, they were all killed. I was ordered to take the women and children to Erzinjian. On the way I saw thousands of bodies of Armenians unburied. Several gangs met us on the way and wanted me to hand over to them women and children. But I refused. I did leave about 300 children with families who were willing to take care of them.

"My leader ordered me to proceed with the group to Kamack. The authorities refused to take charge of the women and children. I fell ill and wanted to go back, but I was told that as long as the Armenians were alive I would be sent from one place to the other.

"However I got my group with another group of deported Armenians. A friend of mine, Mohamed Effendi, led that group. He told me later on after leaving Kamack they came to a valley. A gang stopped the group. They ordered Mohamed and his team to keep away. They shot every one of the Armenians and threw them in the river."

(This excerpt is abbreviated - for the full document, ask Mr. Daley)

▷ ●———————————————————————— 00:00

Lesson: HAT Period 4   3/14   *nearpod*

Figure 52

First HAT, Slide 5

After considering the story, please answer the following questions: 1. Why do you think that this story was written? Explain.   2. Do you think that this story is reliable? Why or why not?

Please enter your answer here.

Lesson: HAT Period 4   5/14   nearpod

Figure 53

First HAT, Slide 6

Figure 54

First HAT, Slide 7

Figure 55

First HAT, Slide 9

Figure 56

First HAT, Slide 10

Review the following website

You are going to look at a website on the following slide.

Take your time and review it and then answer the questions on the slide that follows.

You can go back and forth between the slides to determine the answers.

(Also, as I said in class, you can open up other tabs if necessary to answer questions).

If you want to have the website read to you, then you can use this free resource:

Talkify: https://talkify.net/web-reader-read-any-website-aloud

▷ ●── 00:00

Lesson: HAT Period 4   **10/14**   ⌿nearpod

Figure 57

First HAT, Slide 11

Figure 58

First HAT, Slide 13

First HAT Scoring Framework

Instructions: use the following as a guide for scoring student response for the first HAT:

For the written segment (Question 1)

Proficient Response (3)

1. I think this story was written because Said was trying to explain to other countries what he had witnessed during the genocide. He had an opportunity to speak to other countries, like Russia and Britain, and he could share with them the experiences of the tragedy and the death firsthand.

2. I think that the story is reliable because it said that Said had defected which means he was trying to get away from the Turkish/Ottomans and now that he had, he was able to tell the truth about what happened. He may have been so upset with what he had seen that he found a group he could tell the truth to.

   OR

1. I think that this story was written because Said may have wanted to explain how he was not responsible for what took place during the genocide. He's speaking to opposing armies like the British and the Russians and maybe he was trying to explain how he personally wasn't responsible so they wouldn't think he was a killer too. Since he was in a different country he could have been arrested for the deaths.

2. I think this story is unreliable because this guy may not have been trustworthy. Said was an army officer for the Ottomans who defected, which means he switched sides. People who switch sides during a war may be a little less trustworthy. He could have been telling this story to protect himself as everyone else in the story does bad things except for him.

Emergent Response (2)

1. I think this story was written because the British and maybe the Russians wanted to get this guy's story about what was happening to the Armenians, and he said that he had an experience so he gave them this story about it.

2. I think this story is reliable because he had first-hand experience and was able to share that with people who wanted to know like the British army who was interviewing him.

Basic Response (1)

1. I think this story was written because this guy wanted to tell what he experienced during the war.

2. I think this story is reliable because the guy would have no reason to lie.

<u>For the photo segment (Question 2)</u>

Proficient Response (3)

1. I think that this photo cannot prove that the genocide took place because it is only a picture of people who are walking somewhere. I think that a photograph that had a picture of dead people or that was clearly showing that this was with Turkish people committing a crime could prove that genocide took place.

2. I think a few things make this photo not trustworthy. While the description of the photo said that this is "an iconic image of the Armenian genocide" the date is "probably 1915" and we do not know for sure when it was taken. We also do not know who Armin Wenger was from the description or why he took this photo.

Emergent Response (2)

1. I think this photo cannot prove that genocide took place because we do not really see anything in the photo that demonstrates people getting killed like I think would happen inside of a genocide experience.

2. I think that the fact that the description of this says that this photo was taken "probably" in 1915 is an issue. It would be better if we knew for sure when this photo was taken.

Basic Response (1)

1. I think this photo can prove that genocide took place because it is an old photo, and the description says that it is from a book about genocide.

2. I think that the photo is trustworthy because it was in a book about genocide and seems to be from the time that the genocide took place. So it was close enough.

<u>For the Website (Question 3)</u>

Proficient Response (3)

1. I think that the website is not trustworthy because when I went to look up anything about this website online, what I learned was that it was run by people who want to help deny the truth about the genocide.

    *They were able to indicate **<u>that they used lateral reading to look elsewhere</u>**.

Emerging Response (2)
1. I think that the website is not trustworthy because the site itself looks like a website that you shouldn't trust. None of the information pieces on the website have any evidence of

citations, and when I click on things, the information provided doesn't even allow for a second perspective.

Basic Response (1)
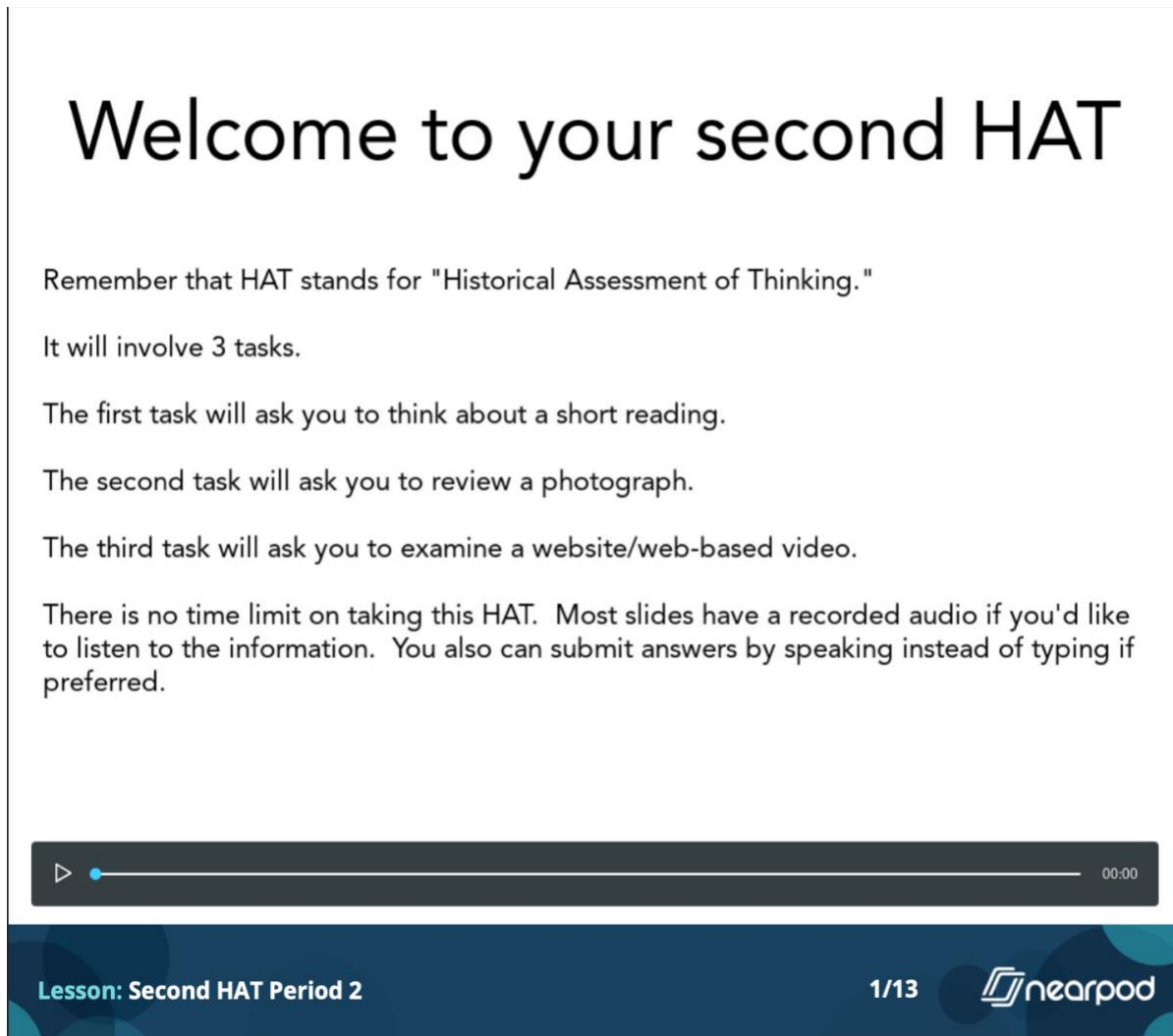
1. I trust the site (for any reason)
2. I don't trust the site, but I don't know why.

Second HAT

Note: Some transitional slides were omitted for space purposes.

Figure 59

Second HAT, Slide 1

Figure 60

Second HAT, Slide 2

Figure 61

Second HAT, Slide 3

Philip C. Roettinger was a member of the CIA (the United States's intelligence organization) and an active participant in the Guatemalan coup in 1954. Roettinger trained Guatemalan rebels to overthrow Guatemala's President, Jacobo Arbenz. In 1986, Roettinger discussed his feelings about the operation.

"I trained Guatemalans in Honduras to invade their country and remove their democratically elected President. I now think my involvement was a terrible mistake. The reasons the US gave were false. The consequences were disastrous.

Communism was not a threat we were fighting. The threat was land reform. Arbenz had taken over some unused land belonging to the United Fruit Company. The Boston-based company responded with a publicity campaign to make Guatemala appear Communist.

After the operation the new leaders burned books. They deprived three-fourths of Guatemala's people of the right to vote. They took apart reforms such as giving land to the people. Our mission led to the deaths of more than 100,000 Guatemalans.

The overthrow I helped plan in 1954 started an era of brutal military rule in Central America. Generals knew their actions would be ignored as they wiped out their opponents. They took money for themselves and their friends.

(This excerpt is abbreviated - for the full document, ask Mr. Daley)

▷ ●───────────────────────────────── 00:00

Lesson: Second HAT Period 2   **3/13**   *nearpod*

Figure 62

Second HAT, Slide 5

After considering the story, please answer the following questions: 1. Why do you think that this story was written? Explain. 2. Do you think that this story is reliable? Why or why not?

Please enter your answer here.

Lesson: Second HAT Period 2   5/13   nearpod

Figure 63

Second HAT, Slide 6

Figure 64

Second HAT, Slide 7

Information about the photographer/photo

Cornell Capa was born to a Jewish family in Budapest. In 1936, he moved to Paris, where his brother Andre (Robert Capa) was working as a photojournalist. Capa moved to New York to join the new Pix photo agency. In 1938, he began working at the Life Magazine.

In 1946, after serving in the US Air Force, Cornell became a Life staff photographer. After his brother's death in 1954, he joined Magnum, and in 1956 Capa took over as president of Magnum, a post he held until 1960.

While working for Life, Capa made the first of several Latin American trips. These continued through the 1970s and culminated in three books, among them Farewell to Eden (1964), a study of the destruction of indigenous Amazon cultures.

Capa covered the electoral campaigns of John and Robert Kennedy, Adlai Stevenson and Nelson Rockefeller, among others.

This excerpt is from https://www.magnumphotos.com/photographer/cornell-capa/

▷ ●————————————————————————— 00:00

Lesson: Second HAT Period 2　　　　　　　　　　　　7/13　　🔲 nearpod

Figure 65

Second HAT, Slide 9

After reviewing the photo and the information about it, please answer these questions: 1. Do you think this photo corroborates that Roettinger was correct in his explantion of the CIA overthrow of President Arbenz? Explain.   2. What about this photo makes you consider it as trustworthy or untrustworthy? Use the information provided to explain.

Please enter your answer here.

Lesson: **Second HAT Period 2**   9/13   nearpod

Figure 66

Second HAT, Slide 10

Review the following website

You are going to look at a video from YouTube about the Guatemalan Coup on the following slide.

Take your time and review it and then answer the questions on the slide that follows.

You can go back and forth between the slides to determine the answers.

You can also open up other tabs to ask questions about this YouTube video.

If you want to have the website read to you, then you can use this free resource:

Talkify: https://talkify.net/web-reader-read-any-website-aloud

▷ ●───────────────────────────────── 00:00

Lesson: Second HAT Period 2   10/13   *nearpod*

Figure 67

Second HAT, Slide 11

Figure 68

Second HAT, Slide 13

Second HAT Scoring Guide

<u>For the written segment (Question 1)</u>

Proficient Response (3)

1. I think this story was written so that the author could tell his perspective on an event that made him ashamed or uncomfortable years later. I think that it is reliable or mostly reliable because the individual was part of the group that was there and had first-hand knowledge, and he was reflecting on this years later when he was out of the organization and had a chance to look back at the impact.

2. I think that the story was written because the author wanted to make an apology for the awful things that he did during this time which caused problems for the people of Guatemala. I think it is mostly trustworthy and reliable because the author is admitting to doing terrible things and people don't usually accept that type of blame for major historical events like this.

3. I think the story was written because the author felt ashamed for what he did during the events in Guatemala. I do not know if it is reliable because I do not know enough about how this person left the CIA and maybe he was trying to settle a score or something with the CIA.

    Note: Points for anyone who actually looked up the author outside of the Nearpod.

Emergent Response (2)

1. I think this story was written because the guy wanted to tell the story of what happened during the CIA's work in Guatemala, and he had a first-hand account. I think it was trustworthy because this man was in the CIA.
2. I think this story was written because this man was looking back and wanted to offer a view on a major historical event that he was a part of. I do not think it was trustworthy because the man was in the CIA.

Basic Response (1)

1. I think this story was written because this guy wanted to tell what he did. It is reliable.

2. I think this story was written because this guy wanted to tell a story. It is not reliable.

<u>For the photo segment (Question 2)</u>

Proficient Response (3)

1. I think that this photo corroborates what was said about what happened by Roettinger because he talked about what the guy in Guatemala was trying to do with land and this

image is about land reform. So, there is a clear connection between the two. I think this photo is trustworthy because the photographer was an accomplished photojournalist, and the image is a straightforward picture of a sign that is written in Spanish in Guatemala.

2. I do not know if this photo corroborates what Roettinger says. Both Roettinger and the sign talk about land reform, but that is the only connection between the two. It does not indicate anything about the CIA or Communists. It only talks about land. So, I do not think it is enough information. I think the photographer is probably trustworthy because they worked for major magazines like Life and this picture is a direct picture.

**Points if they want to any site to look up information about the photographer.

Emergent Response (2)

1. I think this photo may corroborate what Roettinger said. He mentioned land reform and the photo shows something about land reform. There is a connection there. I think the photojournalist is trustworthy because he worked for a magazine.

2. I do not think that the photo corroborates what the guy said as I do not think it is enough information. The photojournalist is probably trustworthy as the photo is only of a sign.

Basic Response (1)

1. I think this photo affirms what happened in Guatemala. The photographer is trustworthy.

2. I think that the photo does not affirm what happened in Guatemala. The photographer is not trustworthy.

For the Website (Question 3)

Proficient Response (3)

1. YouTube itself is a host of many different videos. It by itself isn't necessarily trustworthy or not. The video itself is trustworthy because the creator of the video is a media agency for a nation that produces video content.

2. YouTube itself is a social media site, so it only puts stuff on its site (or lets people do that) but doesn't make content itself. The video itself is not necessarily trustworthy as the people that made it, who I looked up, are a national news program and that country is not typically very positive on things that the United States does. So they could be biased.

   *They were able to indicate that they used lateral reading to look elsewhere.

Emergent Response (2)

1. I think that the YouTube video is trustworthy because the video was well done and seemed to know a lot of facts and referenced history that I looked up so the facts seemed to match.

2. I think that the YouTube video was not trustworthy because it had bad music and graphics and I thought It was less than professional in how it was made.

3. I think that YouTube itself is trustworthy because it has some controls over its site, so the video on it must have been good because he probably cleared some controls.

Basic Response (1)

1. Something on YouTube is trustworthy.
2. A video on YouTube is not trustworthy, but I don't entirely know why.

Discussion Workbook

Figure 69

Discussion Workbook, Cover Page
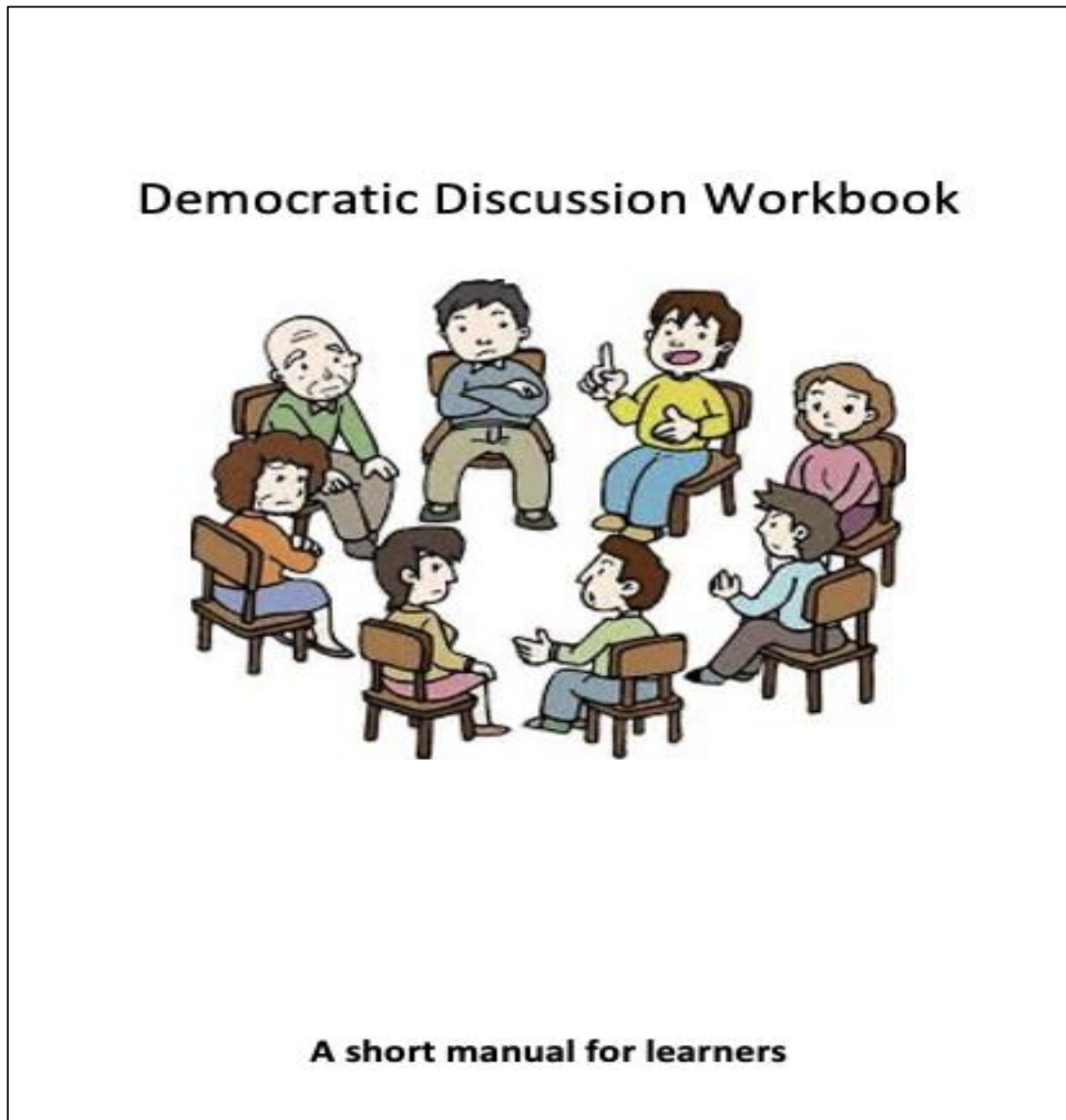
Figure 70

Discussion Workbook, Introduction Page

Introduction:

Last week you had the chance to be part of a small group conversation. In that conversation, you were given a series of questions by the teacher and asked to discuss them without the teacher present.

You did this job relatively well, although the conversation, like many small group conversations, was a little unbalanced. The questions also, being made by the teacher, were less about what you wanted to discuss and more about what the teacher thought you should discuss. This isn't a bad thing, but it potentially made things easier for some of you and harder for others.

From here on out, you are going to try to use a different format to have your conversations. Here is a graphic drawing of what we would like you to try for the next three discussions.
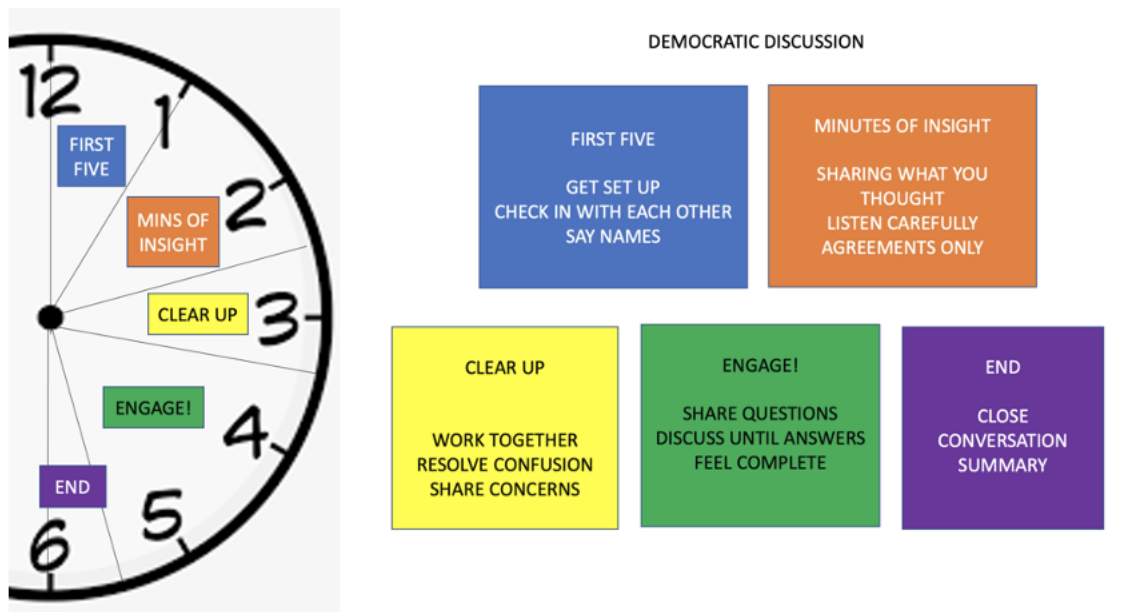
This format is a little different than what you might have experienced in other classes. It was designed, however, to help give you some sense of order for guiding other small group discussions in history and social studies classes, and to let you all develop historical reasoning skills to use outside of school. Let's examine what you must do.

Figure 71

Discussion Workbook, Coming to the Conversation Guide Page

Coming to the Conversation

Many small group conversations happen on the spur of the moment. A teacher gives you a series of questions and asks you to talk about them. You usually weren't home thinking about that small group conversation. With different subjects (math, science, etc.) what a small group does could be wildly different.

This means that different students have wildly different ways of thinking about discussions. Some students love talking to their classmates. Others hate it. Still others want to do better but struggle to do so.

All students would benefit, however, from having **a plan for small group discussions**. The first part of that plan is knowing that you'd have a small group discussion (which is on the teacher). However, based on your experience, it's a good bet that many teachers will use small groups. As such, the following template is something you can use whenever you are given readings for classes (especially social studies).

Template:

Name:

Toolkit Item

Name of the Reading(s):

Mr. Daley would like you to
use this for the
conversation

Insights on the Conversation (Page 9)

    1.

    2.

Questions for Information -- Optional* (Page 10)

    1.

Question for Discussion (Page 11)

    1.

    2.

    3.

Figure 72

Discussion Workbook, Leading Conversations, Page 1

Leading Conversations

Leading a conversation can be a little nerve-wracking, even for students that like to read. You went home, read the materials, prepared, and then suddenly, you're asked to be responsible for a group of people who may or may not have prepared like you did. Leading can be fun but can also be frustrating. Especially if the group doesn't have a clear way of doing things.

In this format, the leader is going to be the guide and servant for the whole group. They must take them through SPECIFIC steps of a conversation (listed below). Leaders are less concerned with speaking all of their prepared materials but using them to help other students to go

When the teacher asks me to lead a small group with no training

When the teacher shows me how to be a leader

through the process of discussion. Leading is about serving.

Leading is also about making sure that everyone is a responsible participant in the experience. In these conversations, the leader will give a score to their classmates on how they did in the conversation. The leader must be fair though. Since these conversations are recorded, the teacher will listen and determine if the leader was correct in how she scored the other students.

If the leader was accurate, then they will get a good score as well. If the leader was unfair, then their score will reflect that.
The leader needs to guide the group through a 30-MINUTE discussion. Here is a short video that explains the full overview of the discussion process (also listed below):

Figure 73

Discussion Workbook, Leading Conversations, Page 2

The leader needs to guide the group through a 30-MINUTE discussion. Here is a short video that explains the full overview of the discussion process (also listed below):

<u>0:00 - 5:00 -- First Five Minutes</u> -- **Check in** - see how everyone did with the assignment, make sure all students have their materials and are ready to talk. If someone isn't ready, they should say that so the group can help them.

<u>5:01 - 10:00 -- Minutes of Insight</u> --
Insights are where students share thoughts they had while completing the assignment. No one has to respond to these, and students can have several insights. All people should get a chance to share an insight.

<u>10:01 - 15:00 -- Clear Up</u> -- **Questions for Information** -- This part of the conversation may not take long at all, but in many cases, students will have questions - about words or ideas. The leader allows for the group to clear up any confusion that may prevent the conversation from being productive.

<u>15:00 - 30:00 -- Engage!</u> -- **Questions for Discussion** -- all students were asked to write down discussion questions. These are *open-ended questions* that group members ask each other about the reading. These may be questions asking for opinions, seeking agreement or disagreement, or trying to understand what may have happened in social studies, history or politics, etc. Some of these questions might not have clear answers.

<u>30:00 - 31:00 -- End</u> - **Concluding Thought** -- The leader will pick one person to offer a concluding thought to the conversation. This will allow the group to hear a summary of what happened in that conversation and see if they all agree. This responsibility should rotate and volunteering to do this is acceptable.

Figure 74

Discussion Workbook, Overview of Insights Page

Insights
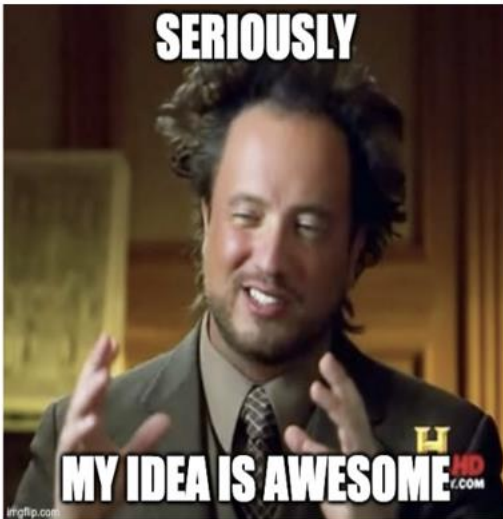
In the template it asks you about creating 2-3 insights from your reading or assignment.

Part of why we study history is to be able to derive lessons for our own lives. To do this, we have to engage the stories of the past.

An insight is where you have examined the material and you have a short (and sometimes incomplete) thought about what you have read.

In discussion, insights are used to get everyone involved in the talking.

<u>Examples might be:</u>

"In this reading about the Holocaust, I imagined what it would have been like for the families in houses around me to be yanked from their homes. I wondered what I might have done." (34 words)

"As I worked through the stories, I found myself thinking about what my grandfather may have experienced when he was fighting in Vietnam. He was always very quiet about his time there, and reading these horrible stories, I started to understand why." (42 words).

Within the conversation, Insights *aren't something* that other people respond to necessarily. The goal is just to allow everyone to offer their original perspective on the work.

Here is an overview [video about Insights](#).

Insight: Thought you have about the reading

The Voiceover

Figure 75

Discussion Workbook, Overview of Questions for Information Page

Questions for Information

Questions for information are an optional (meaning, you don't have to do them) but potentially important part of the process. There are simply things that, in history documents, students might not understand. For example, there are a lot of words (like Blitzkrieg) that are casually used which you may not understand. This is especially true in world history but also in government and economics.

But it's not just words, it's also what people sometimes talk about or reference in primary source materials. If you don't have "prior knowledge of those ideas, you may not be able to understand fully what is going on.

So you ask questions to clarify, like the following examples:

"In this discussion of the Centralia Massacre of 1919, there is a note about people called "Wobblies." I don't know anything about any group of people called the Wobblies. Who are they?" (32 words)

"The person who wrote this letter talked about traveling to Bohemia, but I don't know a country called Bohemia from looking at the map. Where is that? (30 words)

While you have more access to finding out the answers today than ever before, there are many times where you still won't be able to find the answer by just looking at the internet. So you can turn to your classmates to help.

Again, here is a video to help explain:

Figure 76

Discussion Workbook, Questions for Discussion Page

287

Figure 77

Discussion Leader Cheat Sheet, Page 1

Leader Discussion Cheat Sheet (Developed After Discussion 2)

Leader Cheat Sheet for Small Group Conversation

Use this form to help guide the conversation

Check In (Max of 5 minutes)

Checking in usually takes less than 5 minutes. It is a chance for everyone to say how they are doing today so you as the leader have an idea of how people are. You can ask them to answer a basic ice-breaker type question as well. Maybe like – "best movie you've seen recently" or "what you're looking to do over the summer."

Insights (Max of 5 minutes)

Insights also can take less than 5 minutes. However, you should try to push it to the mark.

Everyone should give an insight and they should read off what they had.

You shouldn't have to prompt everyone, but you might have to prompt people. I would start by letting people speak and then make sure you get everyone. You can use this short checklist

Rodger	
Newark	
Odin	
Arminda	
Conan	
Gareth	

When everyone is done, you might want to ask if anyone has a response to anything someone shared. Like, "was anyone surprised or interested in something anyone said" or "does anyone have a second insight they would like to share?

Questions for Information (Max of 5 minutes)

This can be quick. **Make sure you wait at least 20 seconds** after you ask if people have any as some people don't immediately share but might if you give a little bit of time.

Remember that if people don't get an answer that it's okay – you can just write it down and share with me after the conversation is over.

Figure 78

Discussion Leader Cheat Sheet, Page 2

Questions for Discussion (15 minutes – keep time on your phone)

Last time we had 3 questions that covered all 15 minutes. I think without me there you should be able to get through a question for discussion from everyone. Again, everyone might not have one.

Rodger	
Newark	
Odin	
Arminda	
Conan	
Gareth	

During discussion, which can be the hardest time for a leader, you must make sure of a few things:

1. That people are answering the question asked
2. That you let conversation go and not cut it off too quickly.
3. That you don't dominate the conversation

Don't put too much pressure on yourself. It isn't an easy task.

Summary (at the 30-minute mark)

At this point, ask one member of the group to summarize the conversation for the day.

You can then thank everyone for their participation and close.

Figure 79

Discussion Template, First Revision

Coming to the Conversation

Name:

Name of the Reading(s): Israel & Palestine OR Lateral Reading from Class (Nearpod Code is IGB5)

Insights on the Conversation (what things pop into your mind as you read/listen to these things?)

1.   I wondered about...

2.   I disagreed when they said...

3.   I was reminded about _____ when I
        read...

Questions for Information (Anything that confuses you and you want explained)

1.   The use of the word _____ confused me a little bit. Does anyone know how that might be used?

Questions for Discussion (Things you want to talk about with your classmates)

1.   I wondered if the Israelis were....

2.   When we talked about not trusting websites in class, did anyone think...

3.

Figure 80

Discussion Template, Second Revision

<u>**Discussion Template:**</u>

Name: Rodger

Name of the Reading(s): Israel & Palestine

Toolkit Item

Mr. Daley would like you to
use this for the
conversation

**Insights on the Conversation (Insights are BRIEF personal
responses to a reading or material from homework).**

Try to start with any of these for the conversation ahead:

1. **I liked when...**
2. **I discovered that…**
3. **I noticed that…**
4. **I wonder if…**
5. **I didn't like…**

<u>**Questions for Information**</u> **– These are ONLY if you didn't understand a word
or idea and what to ask for help (try it! – we all get a little confused).**

**1. In the reading I didn't understand what the word _____ meant.
Anyone know?**

?

<u>**Questions for Discussion**</u> **– What is something that you want to talk about
more?**

1. **This reading reminded me of _____. Did this remind
    anyone else of something they had experienced?**
2. **In the video, I would have liked to learn a little more
    about_____. Did anyone else feel that way?**

Figure 81

Discussion Team Cheat Sheet

Conversation Support "Cheat Sheet"

Tricks for what you can ask your peers during a group conversation

<u>During Insights:</u> Clarification Moves

1. That was an interesting insight, _____. **Can you explain more about it?**

2. I never thought of it like you did, _____. **How did that come to your mind?**

<u>During Questions for Discussion:</u>

Clarification Moves:

1. I would like to agree with that, but I need more information – **can you share a few other details?**

2. **Can you explain to me why you think that?**

Extension Moves:

1. **What you said made reminded me of _____, which we talked about in class. Does anyone else see that?**

GO FOR IT and ASK QUESTIONS LIKE THESE EARLY

Figure 82

Full Group Feedback Sample

Full Group Comments – Third Conversation

Wow this is going quickly! We are at our final conversation (summer is coming!).
Here is the updated conversation tracker in terms of time:

Some interesting features in this one:

a. Gareth, as leader, tripled his previous time – to his credit, he spoke three minutes less as a leader than when I did, so great work.

Third Conversation

b. A little less equal overall than last time – except for Newt, everyone increased their speaking time in the group, which meant that you clearly made up for my absence.
c. We missed Rodger – he isn't represented on here, but part of our goal would be to get Rodger some speaking time when he returns.
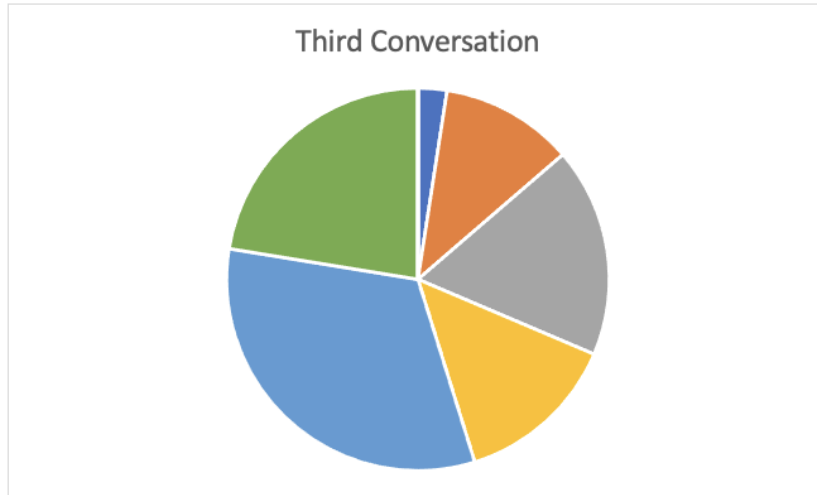
Dead Time – for the third straight conversation we have reduced our dead time. We went from having over 4 minutes of dead time to just under 43 seconds of dead time. That's pretty good – we are proving that we are okay with a little silence but still being productive.

Questions for information. **You rushed through these**. Arminda asked a question for information and was essentially skipped for a second question. Remember to take a few seconds to try to respond to questions, even if you don't know the answers.

Insights – **were great.** I thought you did a lot of good talking about this, although interestingly, you didn't take a few moments to respond to them. Some of you continued to add insights, which was good.

Some of you AREN'T using the template, which is important for getting insights/questions down. We need to get this taken care of for next week.

Discussion questions were pretty good. You answered them well…

Figure 83

Individual Discussion Feedback Sample

Response to the Small Group Conversation (Second conversation)

Name: Conan

Mr. Daley's Thoughts:

Hey, great job in the conversation. You were over your contribution goal by 1, and you spoke for 1 second less than your goal (and may just be an error on the transcription service). I saw that you also hit the goal of leading off a conversation by allowing your question to be one of the first. Well done on that.

Possibly more important is that you are showing a high level of historical reasoning. While you aren't asking questions about the document we are using, like "how did anyone find these?" or "would they be a lot different if they were written today?" what I appreciated is that you were trying to think about what these people were thinking about. Your question tried to understand the mindset of people living in the time, and that's a strong historical approach to take for a discussion question. Nice work.

I thought you responded well to one of your peers during the conversation. Feel free to just respond away. You probably were the best at not waiting for me to ask for someone to jump in, and that is helpful for a conversation. I thought you listened well too, **although I may want to see that in the notes that you write up in case you are asked to do a summary.**

Also, don't feel compelled to ask both of your questions at once. I think you did that when you asked your question. Try to focus on a singular question. One thing that was a bummer was that your WIFI was having some trouble, so on two occasions I couldn't understand you entirely. You may want to use the CHAT box to indicate to the group that you didn't finish your thoughts and might need a second to jump back in.

How many times did you speak in the discussion: 9
How much time did you speak in the discussion (out of 32 minutes): 3 minutes and 59 seconds

What I'd like you to do for next time (Monday the 24th):

1. Make sure you fill out **the template fully.** It seemed like last time you only put a few words down.

Goals:
1. I want you to speak at least 10 times (this would be 1 more time than last time)
2. I want you to speak for at least **5 minutes** of total time in the next meeting (you are trying to speak a little bit more)
3. I'd like to see you politely disagree with someone, just to play devil's advocate. The key word is politely, and you can even say, "let me play devil's advocate here…"

APPENDIX F: UDL-INFORMED LESSON PLANS

Lesson Plan 1: Contextualization

<u>Objectives:</u>

1. Review the concept of contextualization and why it is so important to historians
2. Evaluate the students' practice of this work via their Nearpod – review answers with the students during the presentation
3. Provide students with an opportunity to practice in small groups, "the work" of contextualization

UDL Features:

Representation

3.1 - Activate Background Knowledge
3.2 - Guide processing and visualization
2.2 – Clarify syntax and structure
2.5 – Illustrate through multiple media

Engagement

8.3 – Foster collaboration and community
7.2 – Optimize relevance, value, and authenticity

Action & Expression

4.2 – Optimize access to tools and assistive technologies
5.1 – use multiple media for communication (Jamboard)

Lesson Timing:

0 – 3 minutes

Reactions to the Homework?

Ask the students to share their insights from the Applied Learning on Hitler – encourage comments from Rodger/Conan at the beginning of this. But also maybe ask Courtney, Maia or Maurice.

Show a few examples of student work from the Nearpod so they can visualize some of the stronger answers that the class provided.   Ask students to reflect on this.

4 – 7 minutes

Discussion of **Contextualization as applied to historical materials**

> **Passing out of the "contextualization cheat sheet" (along with a Meme) - add to the Google Classroom.**
>
> - **When and where was the document created?**
> - **What was different then?**
> - **What was the same?**
> - **How might the circumstances in which the document was created affect its content?**

Use the Lincoln historical example – was he a racist or was he speaking in his time? What happens when we look at people of the past with our "presentist" lens?

Judging vs. Analysis of history. "People only know as much as they can know."

7-14 minutes

Small Group Activity – asking the questions.

Dr. M with Group 1   Daley with Group 1

Maia   Conan
Rodger   Courtney
Newt   Maurice
Arminda   Casey
Odin   Gareth

Activity Task Review – *Time Magazine* – Hitler Person of the Year – http://content.time.com/time/magazine/article/0,9171,760539,00.html

Photo of Hitler with People at Munich (https://sheg.stanford.edu/history-assessments/appeasement-munich)

Charles Lindbergh against World War II - https://courses.lumenlearning.com/ushistory2os/chapter/primary-source-charles-a-lindbergh-america-first-1941/

Small group task:

1. Show the document on screen
2. Ask students to think through the questions for that document
3. Ask student to respond to the questions for 1 of the sources this way. (Jamboard)

Small Group Discussion – working through the questions on contextualization

Can you think of any more recent examples of when some article or story was taken out of context, and where asking these questions would have led to a more sophisticated understanding?

14-18 minutes

Large group discussion of contextualization/summary

Key facets
1. Remember that we should be asking these four questions (hold onto your cheat sheet)
2. We ask them so that we can analyze, not judge immediately.
3. Criticism may be warranted, but a historical mindset usually asks us to reserve our judgment prior to making quick criticism.
4. We live in a world where a lot of media make condemnations quickly and without examining the facts (Scoop vs. Substance)

Figure 84

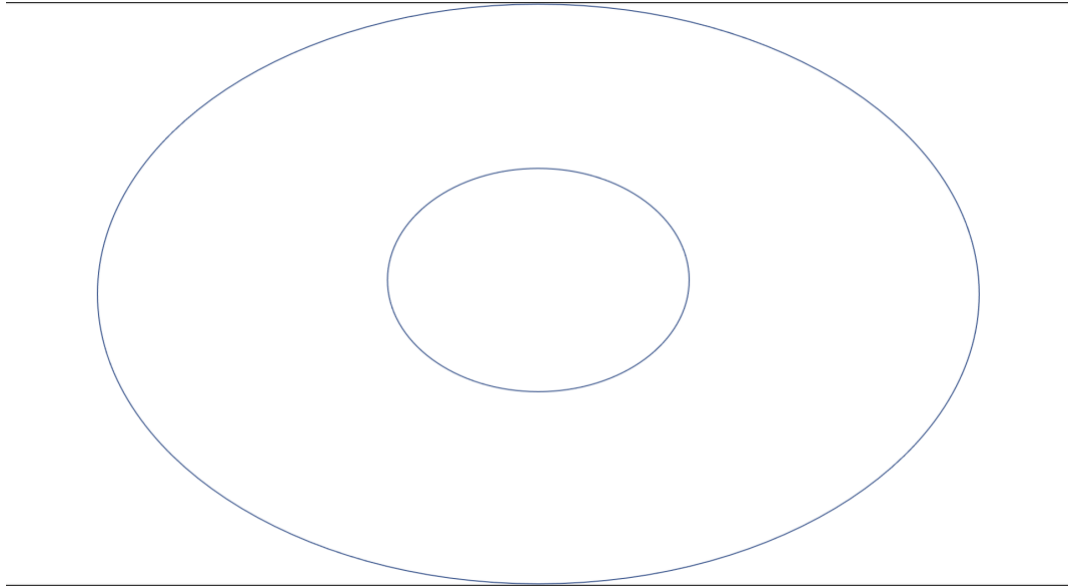*Opening Slide, Nazi Takeover Nearpod Presentation*

Figure 85

Blank Graphic Organizer

Lesson Plan 2: Lateral Reading

<u>Objective:</u>

1. Ensure students have familiarity with concept of lateral reading by giving them the opportunity to observe and then practice lateral reading by uses materials developed by Stanford History Education Group.

25 Minutes:

UDL components:

8.3 – Foster collaboration and community
9.3 – Develop self-assessment and reflection

2.3 -- Support decoding of text
3.2 – Highlight patterns
3.3 – Guide information processing

6.3 – facilitate managing resources and information

Activities

0-10 minutes

1. Review the homework – get insights from students (Can I have them write notes in the chat?)

    (Anyone have a poem or piece of art to share?)
    Share a quick poem

    Foster Collaboration and Community - 8.3
    Use multiple tools for construction and composition – 5.2

2. Move attention to focusing on the denial that was listed in the Goring segment

    (Read with German accent)

    Support decoding of text – 2.3

Transition – Why am I here – what am I doing, and what will I ask you to do at the very end. Explain survey and the HAT.

So, when we read the German piece, we have a lot of skepticism, right? Why do we have that? You put a number of clues together because you are good readers – you did an excellent job in

picking out how this guy, the #2 in Germany, could not really NOT have known about what was going on. This is good, your skepticism meter is up. I want to take that skepticism meter you all have there, and I want to apply it.

I want to shift it from this immediate focus on the Holocaust to this broader skill you might use in your real life. And that's called "lateral reading."

Now remember last time I taught I taught you about contextualization which was where we were asking questions about who made the source, what was different or the same at the time, and how might how that source that was created effect what it means.

This time I'm trying to extend those skepticism skills, and have you thought about what it means to look at items on the web and how you evaluate online information. Which is more and more important these days. Right now, as you're going to read this weekend, there is A LOT going on in Israel. And how do we know what is true? Well, Dr. M and I want to help you navigate all this information (and I think your English classes do as well).

So, we are going to do 3 things:

1. I'm going to show you a video
2. I'm going to demonstrate for you how I think about a website and how it may or may not be trustworthy
3. I'm going to show you a website as a class and ask you to mimic what I did.

Now the goal is that, later, I can test you on this and you remember these steps.

For my work, I've made a Jamboard for you to write things down. This is a little different than Google Docs, but I'm experimenting so I'm going to ask you to give it another try – can we try that. I just want you all to be able to use some new tools because I'm a tech geek.

10-15 minutes

3. Show one of the John Green Videos

Use Multiple media for communication – 5.1

15-22 minutes - Lateral Reading in Action (Non-Holocaust Website)

4. I want you all to watch me as I analyze a website. My goal is to determine whether this website is trustworthy. I'm going to walk through an evaluation of the website and see how I'm doing on this front. I want you to write comments on the side and engage with Dr. M as I am doing so.

3.2 – Highlight patterns
3.3 – Guide information processing

22-30 minutes

5. Class based lateral reading. (Holocaust Website --
   https://www.veteranstoday.com/2019/12/09/the-six-million-figure-another-holocaust-lie-
   and-the-lying-liars-who-enable-it-2/)

You are all going to look at a website

Dr. M and I are going to listen carefully. We need all of you to be able to speak through what you are doing as you look at the website, so everyone's microphone should be on (as can be with background noise).

Together, you are going to review this website and show us that how you would determine that it was trustworthy or not.

Octavia is going to be provide the final answer for the group – she has to listen to everyone to hear 'why' and give Dr. M and I one coherent answer for the group.

6.3 – facilitate managing resources and information
9.3 – Develop self-assessment and reflection

Sample Modeling Script from SHEG
(https://docs.google.com/document/d/1FmoEGwz8AW-u9qc9OaHK_VvGsoJ73_AVl8Dq-
bcrlOQ/edit)
Note: This material requires an account from SHEG to access and what is below is an exact
replica:

Introduction: Who is behind the information?
- *I'm trying to figure out if this article is a reliable source of information on the minimum wage. I'm going to share how I approached this problem. In the process, I will model asking the question, "Who is behind the information?" (Reference the COR classroom poster if you have one). That's the first question I ask when I land on a website I don't know.*
- *It's tempting to just dive into reading the information. But to quickly evaluate information, we need to make the conscious decision to step back and ask who wrote the words and made the website before we read it. That's the only way to figure out the authors' perspective, how much expertise they have on the minimum wage, and why they're presenting the information—all aspects that go into deciding whether the article is reliable.*
- *The link in the task brought me to this article. Now, I'm tempted to just start reading it, but I'm going to stop and first try to answer the most pressing question: Who's behind it? Who's saying this? What website am I on?*
- *It looks like this website is called minimumwage.com. So, I need to find out about the minimumwage.com website. I'd like to know more about the organization behind this, and since that's not really clear from this article page, I'm going to click on the "About" page to see if it will tell me the name of the person or organization who sponsors the*

website. Then I can investigate them. [Navigate to the "About" page and quickly read it aloud.]

Employment Policies Institute
- *The first sentence answers my question about the organization that sponsors this site: "Minimumwage.com is a project of the Employment Policies Institute."*
- *The "About" page makes the organization sound pretty trustworthy: it says it is a non-profit, non-partisan research organization that sponsors research done at universities.*
- *But one thing I consider when I read an "About" page is that it's written by the people behind the website itself. There are many reasons to make themselves sound trustworthy—to gain status, followers, donations, etc. Would you say something bad about yourself or your company if you were writing an "About" page? Probably not.*
- *I know I need to go outside this website to see what other people say about minimumwage.com's sponsoring organization, the Employment Policies Institute. That's called <u>lateral reading</u> because I'm going to open a new tab in my browser and search for the name of the organization to see what other sources say about it.*

Lateral Reading
- *To start my lateral reading, I'm going to open a new tab and search for "Employment Policies Institute."*
- *Notice that I put the name of the organization in quotes. I'm doing that so that Google searches for the three words as a unit, rather than finding any of the three words randomly on a web page.*
- *I'm going to look carefully at the search results before I decide what to click on.*
- *I'm scrolling past the Employment Policies Institute (EPI) pages because I'm interested in information from other people.*
- *As I scroll down the page a little further, I see this Salon article: "Corporate America's new scam: PR firm poses as think tank." I'm going to check out this article because it is from Salon, a news organization I've heard of (and if I want, can check it out on Wikipedia), and the headline makes it sound like the article may give me important information about who's behind this organization.*
- *Quickly read or skim the first two paragraphs of the article. Focus on the following sentences, starting in the third paragraph: "In an Op-Ed he wrote for the Washington Post, his title was listed as EPI's 'research director' but with a notation that EPI 'receives funding from restaurants, among other sources.' But even this partial disclosure provides a disservice to readers in the nation's capital. In fact, the Employment Policies Institute operates from the same office suite as Berman and Co., a public relations firm owned by Richard Berman."*
- *This makes me question whether I can trust EPI or minimumwage.com as a neutral or completely reliable source on the minimum wage.*

Berman
- *Minimumwage.com is a site created by Richard Berman and Company, a public relations firm that receives funds from the restaurant and hotel lobbies. In general, businesses like restaurants and hotels are against raising the minimum wage because they would make less money if they had to pay their workers more.*

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- *This source probably has a strong perspective against raising the minimum wage and not a lot of motivation to present information that would make a minimum wage increase look like a good thing. I'm starting to question how reliable this source is for balanced information about minimum wage policy.*
- *Before I completely trust this information about the Employment Policies Institute and minimumwage.com, I need to remember that this is just one source. I need to seek out multiple, trustworthy accounts on a topic to gain a better understanding than relying on a single source.*
- *I have a couple of options here: I could keep reading the article and dig into evaluating the evidence they provide about Berman and his PR firm. Or I could see if I find corroborating information on minimumwage.com and Employment Policies Institute in other sources that I'm familiar with.*
- *Note: If you want to spend more time on this, you could continue your modeling by going back to the search results and investigating what another source, like the New York Times, has to say on the topic.*

Recap
- *In trying to figure out who is behind the website minimumwage.com, not only did I have to check its "About" page, but I had to read laterally—to see what other sites said about the website I was investigating.*
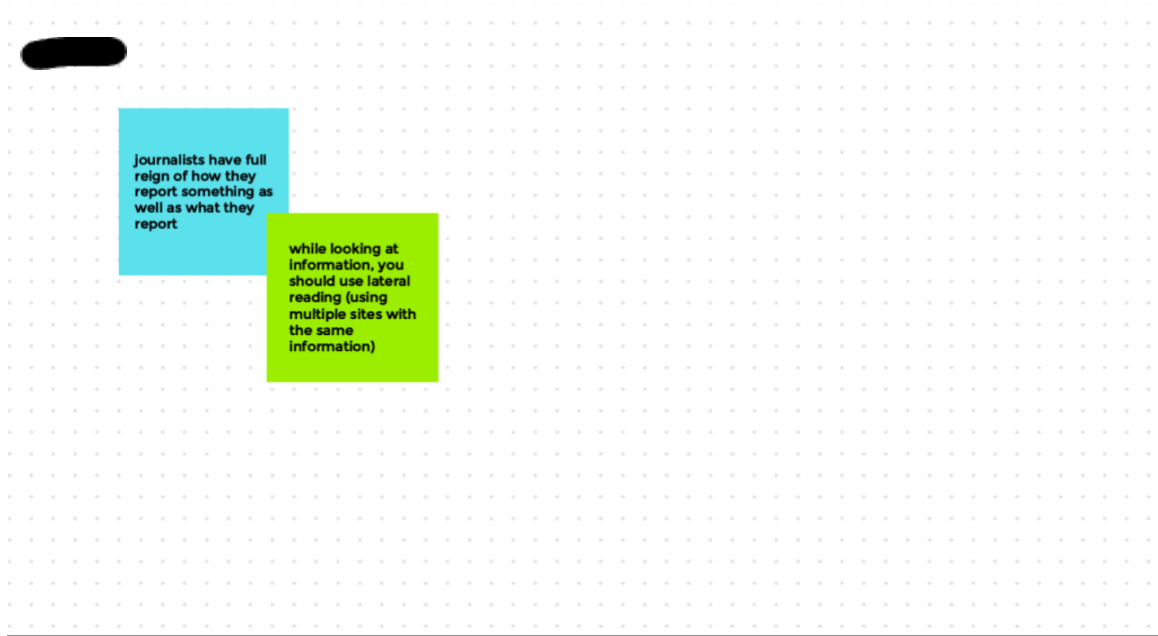
Figure 86

Screenshot, Materials in Google Classroom

Figure 87

Jamboard Notepad Sample

Lesson Plan 3: Sourcing

Objectives:

1. Ensure students have familiarity with concept of sourcing by giving them opportunity to observe and then practice sourcing process.
2. Give students lead into the process of corroboration (Applied Learning)

UDL Components

Representation

Checkpoint 2.5 – Illustrate through use of Multiple Media
Checkpoint 3.2 – Highlight patterns, critical features, big ideas and relationships

Action & Expression

Checkpoint 5.3 – Build Fluencies with graduated levels of support for practice or performance

Engagement:

Checkpoint 8.1 – Heighten salience of goals and objectives

Introduction (0-5 minutes):

Okay so over Memorial Day weekend you had the opportunity to find photos. Excellent. And the hope was that you were able to record the source of these photos. From a quick scan of the sources, it's clear to me that we all see a URL as a source. But the URL/Website, in most cases, didn't take these Vietnam Era photos because, frankly, the web only existed in the minds of some rogue department of defense officials at the time. So, we are going to take a few minutes to talk about how we would dive one level deeper to the "source" of the photos.

But why do we care about this?

Checkpoint 8.1:
On the screen: our opinions and ideas are formed by the materials that we see. And we must know who made them and why they made them if we are going to trust them.

So far in the times that I have been teaching you, I've talked about two things:

1. Contextualization – what was happening at the time when a source was created/made
2. Lateral Reading – Looking "sideways" for more information about a source

Visual: 4 windows tools (self-made) for these two + sourcing (and corroboration to be added)

So now the third skill I want to talk to you about is "sourcing"

Sourcing is the act of determining who made a particular source, why they did it, and do I find them reliable.

Really clear point early on – a source isn't necessarily good or bad, but sometimes a source is better or worse at offering me information for a particular topic or issue. Like, a letter from my grandfather about World War I might be okay, as he talks about what his father talked about to him. But a letter from a soldier on the front is going to be a better and more reliable source because they were there. But a letter from a British solider may be better than an American solider because the British were in the war for 4 years, whereas the US were only in the war for a little less than a year.

Activity (5- 15 minutes)

Checkpoint 5.3 – Build Fluencies with graduated levels of support for practice or performance
Checkpoint 3.2 – Highlight patterns, critical features, big ideas and relationships

Okay, so now we want to do an activity where we practice the art of sourcing

Once again we are going to be divided into two groups. In these groups, we are going to do the following:

1. You are going to have two images on your Jamboard. Can everyone access the Jamboard?

Group 1 (Daley)   Group 2 (Dr. M)

Rodger   Maurice
Maia   Odin
Conan   Arminda (Leader)
Courtney   Newark
Casey (Leader)   Gareth
                                               Octavia

2. Okay, on the Jamboard, you are going to see that I've put the questions we answer about "sourcing" to start us off. Does everyone see those?
3. You all should be able to write on your Jamboards – you can take notes.
4. What Dr. M. and I are going to do is walk you through the first one of these, and then as a group, we have to work to do the second.

5. So that means you should pay attention to how I work – maybe take some post-its in the jamboards about what I do in this process. As I'm going to ask you to walk through this without me after I do the first one.

Get into groups

Step 1 – Teacher Review - walking through the thinking

Use Catherine Leroy Image:

Who took this? - this is a picture that is taken by someone named Catherine Leroy? Who is she? Well, if I do a basic Wikipedia search she is a French photographer who took pictures in Vietnam throughout the war. Okay, so she was there, firsthand, looking at this war.

What do you think the photographer's perspective is: Okay, well, the caption of this photo is interesting – a US trooper (I assume, it doesn't say, it just says 1st cavalry) evacuates wounded North Vietnamese solider. Now from what I know about the war this is really interesting, because the North Vietnamese solider is the enemy and here a US trooper is evacuating him or taking him out of the area. Maybe he's capturing him? Hmmm…

Why was it made? I don't really know why she snapped this photo. It may have been to present the US troops as not being so bad. I mean, this guy could have left the enemy for dead. Why not? Or it could be that the US troops were taking prisoners. Or maybe she wanted to get a record in case after the war the North Vietnamese family would see a picture of their son/husband.

When was it made? - February 1967, in the middle of the war. It says so on the caption.

Where was it made? I assume it is in Vietnam, although that isn't necessarily clear.

Is it reliable, or isn't it? Why/why not? I think it is reliable for showing a depiction of American troops in action during the war. Catherine Lecroy was a noted war photographer, and she was French, so while she might be somewhat sympathetic to Americans, but she wasn't an American or working for the government, so it is less likely that this is propaganda.

Student Experience (Group efforts)

Okay, so now that you've seen me walk through this thinking wise, I'd like to be a fly on the wall for you being able to do this as a group.

So we are going to want you to lead this charge with me listening. Can you go through the same steps that I went through with the questions that we have listed on your Jamboard?

Use photo from Getty Images

Who took this?

What do you think the photographer's perspective was?

Why was it made?

When was it made?

Where was it made?

Is it reliable or not? Why or why not?

Full Group discussion (15 – 20 minutes)

So why do we care about sourcing? We mentioned this at the onset, but why do we do that?

It may seem as if being a historian means you doubt everything. And to be honest, that's true. When people write in their diaries, they are often presenting their perspective. So even if they are a murderer, they are going to paint their picture for you. That means you have to always be skeptical with what is being presented.

You should be consistently thinking 'can you tell me more?' Can I find more?

History is partly about YOU interrogating the storyteller/creator of the history until you can't find more information.

And what a useful skill, right? Especially in this world where everyone can publish their opinion.

Checkpoint 2.5 – Illustrate through use of Multiple Media

John Green Video on how to trust a source (authority & perspective) – shorten to 3 minutes
https://edpuzzle.com/media/60976d66cefe5b4186d3d1d5

Conclusion

Okay, so you have done this work of finding sources (images) about Vietnam. Is that enough?

Lesson Plan 4: Corroboration

<u>Objectives:</u>

1. Ensure that students have familiarity with historical thinking skills of corroboration by reviewing how they can step from doing sourcing work to verifying a source.
2. Prepare students to complete their Applied Learning, "Are you sure?"

Materials:

1. Nearpod slide deck on corroboration
2. Corroboration tool form from SHEG
3. Mr. Daley's Historical Thinking Cheat Sheet

<u>UDL Components</u>

Representation

Checkpoint 2.5 – Illustrate through multiple media

Action & Expression

Checkpoint 4.1 – Vary the methods for response and navigation
Checkpoint 5.1 – Use multiple media for communication

Engagement

Checkpoint 7.1 – Optimize individual choice and autonomy.

Introduction (0 – 5 minutes)

**Will be transitioning from main lesson by Dr. Marzipan

Share out – what did you find when you looked for photos about Vietnam. Can we look at some of the items that people found for their homework?

Allow the students to talk about what they found and use Google Meet share function to show some of these photos/images to the full class as students talk about them. Allow 1-2 students to share.

Shift to Nearpod (5-10 minutes)
Explain to the students that we are going to be reviewing the concept of corroboration in preparation for their applied learning assignment. To do that, however, they are going to need to login to a special Nearpod that will allow them to answer in class.

Show the students the login password and URL so that they can go to the site and log in. This will allow them to engage this class more interactively as they will have the opportunity to review the nearpod on their own devices and answer questions through the Nearpod.

Checkpoint 4.1 – Vary the methods for response and navigation
Checkpoint 5.1 – Use multiple media for communication

Ensure that all students can get in through signing into the Nearpod program. This should allow the instructor to see that each of the students is in the classroom and able to respond. Give students extra help if necessary or have Dr. Marzipan support them via Google Meet chat if they struggle.

Review of Corroboration (10-25 minutes)

Once all students are in the Nearpod with you, show them the picture of you in Vietnam and explain that this is a photo of you in a tunnel in the Da Nang area in Vietnam from 1998. Explain that you were visiting a tunnel that the Vietnamese carved out in the 1960s to resist bombing from the United States.

Checkpoint 2.5 – Illustrate through multiple media

Wait a second after the initial story and ask, "is this true?" Can you believe Mr. Daley?

Allow them to answer and say – well, whether you believe me, how could we prove that this photo is taken in Vietnam and is of a tunnel that was made for the 1960s bombings?

See what answers they initially provide, seeing whether they come up with answers akin to checking out more about tunnels in the Da Nang region, looking for stories of tunnels, checking whether Mr. Daley really went to Vietnam, etc.

Ask them what are we doing with checking Mr. Daley's story?

Explain that this is corroboration or verifying the story behind a primary source or artifact.

Ask the students why corroboration is an important skill for a historian/history student?

Listen for their answers and see whether the students talk about trying not to rely on only one piece of evidence, or how that piece of evidence might be quite biased and might not tell the full story. Explain how, in your own circumstance, you could have brought that photo of your younger self walking in a tunnel to simply be cool, and it could just be a tunnel somewhere near Mt St. Helens.

Share with them the Corroboration SHEG poster to review the four questions that go into practicing corroboration as a skill.

Read them aloud for the students as they look at them on the Google Meet screen

"What do other documents say?"

"Do the documents agree? If not why?"
"What are other possible documents?

"What documents on the most reliable?"

Explain that these are important questions to be asking when given any source. They should be thoughtful with all primary sources that they are given as they go through their education. Not that teachers cannot be trusted for handing them to the students, but that they should have questions in their head that they should be asking.

Explain to students that you are now going to practice this with them, although you'll be focusing the upcoming questions on Central America, specifically, what was happening with Cuba in the 1950s.

Slide 3-7: You Make the Call #1

Checkpoint 7.1 – Optimize individual choice and autonomy.

Scenario: Family losing land to the government for a vacation resort

Read the scenario to the students and then explain that while this is a semi-fictious scenario, you want them to weigh in on the strength of corroborating evidence.

Read the two other samples of evidence to the group, one about a worker who is explaining practices in support of the family and another of a cousin who is able to share about his own family's situation. Ask the students to consider this evidence and how both pieces are able to corroborate the story that they would have to share.

Ask them to answer via Nearpod what they thought would be stronger, and what might be a weaker source of evidence.

Ask the students to talk to you about their answers. What did they find as more potent a source – the national government worker who explains the practices of the city or their cousin, Camelo, who explains how his family situation was the same. Which of these might be a weaker source of evidence, and why (is Camelo trustworthy since he is a cousin? But do we know if he is a real cousin? Does the government worker have more trust since the government is trying to take the deed away? Should the family trust the worker to submit and get a form?)

Explain how this isn't necessarily an example of corroboration of sources just yet, but more a **process of how we weigh evidence.**

Slides 8 – 16 – You make the Call #2: (**This part of the lesson was not reached in the intervention in 2021; class time did not permit us to complete this task).

Review the second example with the students, in this case where they are now a worker for the United Nations in Cuba. Read the scenario and then review each of the three perspectives with the students.

Using the three vignettes, allow students to contemplate what they learn about the situation.

Take a moment after they have read to review a little bit of Cuba history with them. Explain the impact of the Batista regime on the people at large and explain that the average person did not generally appreciate how the government treated them over the course of the regime. Explain who the rebels were, naming Fidel Castro for the first time. Explain that he had been someone exiled by the government but that he returned with a small band of rebels and they were moving about the country gaining support because of how people felt about the government.

Return to the vignettes and the questions. Ask the students to think about what they learned from each of the different pieces of evidence and to answer the questions in the Nearpod.

After they have filled in all the details on the Nearpod:

What did they learn from the solider (solider is sworn to protect people from rebels who might be killing people; the man was encouraging rebellion an attacking the national troops)

What did we learn from the man (that he was not a rebel but he was in support of the rebels (so does this make him a rebel in some way…), that he was 65 years old and does not consider himself a revolutionary).

What did they learn from the third party (that the man did speak often about revolution, that the troops were under enormous pressure and could be killed at any moment).

Now, from a *corroboration perspective*, does any particular evidence prove that the man is or isn't a rebel? No, not really. What else would you need to see as a UN worker to be able to know that? Or could you know that? (Maybe, if a rebel came up to him and handed him a gun or if there was some document connecting him with Castro, etc).

Explain a few pieces there to the group that often in history we will not have definitive proof of something. In fact, more often, we will get varied perspectives from different historical figures and we will need to make informed guesses based on what we know from the sources we have access to.

But an important lesson there is that you think carefully about what sources might corroborate a story, and keep your eyes out for when you find something that would confirm or reject what another source may say.

Explain this is a key part of the work of historians. If historians weren't working on these, we would simply accept what people may have left in certain documents. Take a moment to reference the "thinking like a historian" process that is detailed in Wineburg, where a historian

reads a given texts and questions everything, in every line. And that the historian doesn't trust it unless he is able to prove what is said by some other means.

Link this story also back to LATERAL READING. Ask the students, "why do we leave the primary website to determine if the website is trustworthy?" Wait for their answers. Hopefully they say that they only way they can trust it is if they can find another source that can back up the claim.

Try to remind them that in their next HAT, they may be asked about corroboration – how does one source explain or reject another. AND they might also have to actively corroborate what they find on their website (explain how many of them just trusted the Fact Check Armenia site even though it wasn't trustworthy).

Transition to the Applied Learning (25-30 minutes)

Okay, for applied learning, you are going to have to take part of your photo from the previous lesson and corroborate that it tells us about what you thought it was about. Now, we realize you probably pulled your photos more randomly, so you only must pick ONE of them (not all of them). That is up to you. When you pull that photo, you need to do the following activities:

1. Look at **one** of the Vietnam photos that was found

2. Identify what you think the photographer was trying to convey in that photo

3. And find another source that corroborates that

This second question is the more important question. We want to see a short but thought-out answer – what documents are out there which might or might not agree with what was in the original photo.

Because it's hard to just scan the web, we've compiled some sources for you that contain other documents about Vietnam so that you can get a good chance at being able to corroborate something in your source.

A reminder – we are not looking for perfect corroboration – just something that indicates that what the first source told us is accurate (OR NOT).

Vietnam Images + Vietnam Documents

Give them other resources to work with (WebQuest List). Find an article to confirm the story that your photos/pictures tell.

https://www.vietnam.ttu.edu/virtualarchive/
https://www.vietnamwar50th.com/
https://avalon.law.yale.edu/subject_menus/indoch.asp
https://digitalarchive.wilsoncenter.org/collection/87/vietnam-war
https://www.archives.gov/research/vietnam-war

(These sources have all been verified as being able to provide some historical support for the students).

Closure (30-32 minutes) – if time, or bring up in the next class.

Point out *Mr. Daley's Historical Thinking Cheat Sheet*, which is in the Google Classroom files for this class. Explain that they have finished the skills they will be learning in this term, although they should continue to practice these (and will practice these) as they keep going through class.

Explain that you will review before they finish, they are assigned their final HAT.

Figure 88

Corroboration Nearpod, Sample Slide 1

Figure 89

Corroboration Nearpod, Sample Slide 2

Figure 90

Corroboration Nearpod, Sample Slide 3

Figure 91

Corroboration Nearpod, Sample Slide 4

Which of the two pieces of evidence make the case stronger? Why is that?

Please enter your answer here.

Figure 92

Corroboration Nearpod, Sample Slide 5

How do accounts A & B corroborate what the scenario was?

Please enter your answer here.

Figure 93

Applied Learning Assignment Sample

Applied Learning - Are you sure?

In your last applied learning, you were asked to find three **photos of the Vietnam War and to provide the source of those photos.**

Each of your photos tells a story that the photographer wanted to tell.

For instance:

We might believe that Catherine Leroy, the photographer, took this photo in 1967 so that people might depict United States troops as being merciful, since this soldier is moving a wounded enemy.

That could be true. U.S. troops might have been merciful, but Leroy's picture is only one piece of evidence of this. To confirm the story, we would need to find other sources to corroborate this, or to confirm this story might be true.

So your assignment for next class

1. Choose **one** of the three photos that you selected
2. Identify what you think the photographer was trying to convey in that photo
3. And find another source that corroborates that

We recognize that within two days you might find it challenging to track down one of those sources, so we are providing you with 5 places to look. These do not have to be the only places you look, but there are good items here to look at. All of these are reputable sources (government or university) that have rich deposits of primary materials for you to see.

Resource #1:
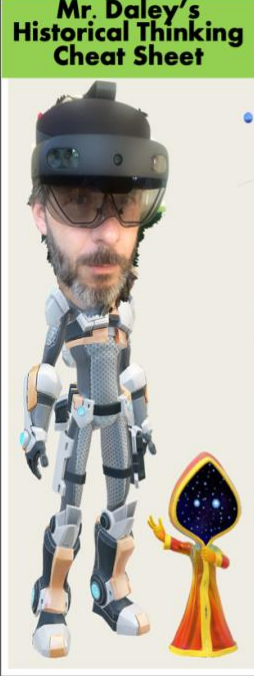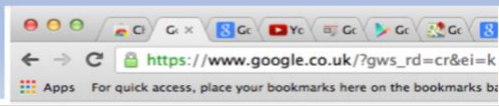The Vietnam Center and Sam Johnson Vietnam Archive: Virtual Vietnam Archive

Resource #2:
50th Anniversary of the Vietnam War Commemoration | Vietnam War Commemoration

Resource #3:
Indochina - Vietnam, Cambodia and Laos

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Figure 94

Historical Thinking Cheat Sheet

Transcript that was evaluated (Third Discussion)

Transcript produced by Transcribeme.com

<u>Transcription details:</u>

Date:	25-May-2021
Input sound file:	GMT20210524-214053_Recording.m4a

<u>Transcription results:</u>

S1: 00:03   Okay. So, uh, first thing is the check-in. So, um, how about Conan. What did you over-- do over the weekend?

S2: 00:16   Uh, I went to the coast with my cousin. I got some, uh, watermelon fudge. I didn't know it even existed, but it's actually pretty good.

S1: 00:26   Yeah. Uh, how about Newark. What'd you do over the weekend?

S3: 00:36   Um, Saturday and Sunday I hung out with a friend all day, and, uh, just kind of chilled, I guess.

S1: 00:47   Okay. Uh, how about Odin. What did you do over the weekend?

S4: 00:54   Um, basically the same thing I do every weekend. Just stay home and sleep, eat, watch TV, and play video games.

S1: 01:04   Uh, Arminda, what, what did you do over the weekend?

S5: 01:08   Uh, [sew?] like every day, and just did chores.

S1: 01:13   Yeah. Um, right now my, um, aunt and cousins are here because my parents are in Hawaii, so I just kind of hung out with them over the weekend. Um, so next thing in the li-- on the, uh, thing to do is insight. So on the sheet that we filled out for, um, the class, you-- we were supposed to write down some insights. Do you guys have any, um, that you'd written down and wanna share?

S4: 01:50   Yeah. I do. Uh, one of my insights was, uh, from the Vox video, and it said that Israel moved into Pals-- Palestine's land. And that reminded me of the way US moved into Native Americans' land. Uh, Israel pushed Palestine, Palestine out of their homeland and forced them to, like, elsewhere and created hundreds of thousands of ref-refugees. And the US took Native Americans' homeland and forced them to leave and killed, uh, millions of them.

S1: 02:26	Okay. Does anybody else have anything?
S2: 02:32	Um, I'll go, I guess. Uh, I wanna learn more about Palestine, about their-- more-- I wanna know more about-- detail about it like who they are, where they came from, and what their motives are. Because I think it's important for us to learn about this because if we can know their past, then we can predict the future.
S3: 03:00	Um, something that I noticed in the article thing is that it doesn't really mention-- it mentions why Zion, uh, Zionism is, like, made, right? And like, it's part of the creation of the Jewish homeland. But like, who-- how did it spark the idea, and wh-- how did it take so much shape? I feel like that's a good place to start because, um, it doesn't really go over that in the article. It does a little, but not really.
S1: 03:35	Okay. I thought it was interesting at how the, uh, president or, um, like, the leader said that he was gonna send more rockets back at Palestine, um, to get back. But, uh, I found that kinda funny. I feel like they would-- I don't know how their, um, like, situation-- how bad situation is, but feel like just launching more rockets will just get them into bigger trouble, uh, later on down the road, in my mind. So I found that interesting.
S5: 04:12	What I find interesting was that the map and how, like, over a little time, like, how Israel, feel like, took all, like, all the places, like, Pa-Pa-Palestine that had. Like all the places-- like it went from black to-- it went from, uh, very much blue to black very quickly. Is [inaudible] right?
S1: 04:39	Yeah, on the page here.
S5: 04:42	Yeah.
S1: 04:44	Okay. Does anybody else have anything else to, uh-- any, any more insights they wanna share?
S4: 04:58	Uh, I have another one. It-- I compared the, uh, all the Palestine's condi-- uh, Palestinians' conditions, like, in Israel, or I guess, like, outside of Israel, uh, are, like, similar to how minorities in the US, uh, are. Like, worse housing and just living conditions are a little bit worse. And they're also, like, not treated as equals.
S1: 05:29	Mm-hmm.
S5: 05:35	Uh, so one of the-- one of the main thing that I had was, like, how they, uh, Israel, like, take homes of the Palestine-- is it Palestine?
S1: 05:46	Yeah.

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S5: 05:47	Oh, because I keep getting confused between Pakistan and Palestine, I don't know why.
S1: 05:50	Yeah.
S5: 05:51	Is like, how they took-- how people were already there, they took their homes. At first, they came in as refugee, they took them as, like, even though they were not part of the war, Palestine, they took-- they took them in and offered them refuge. But they just came in and started, like, taking places, things for them, like, they start making up their own wars and everything, which is, like, kind of--
S1: 06:23	I, um, compared-- or I kind of made a comparison in my mind of Israel and Palestine, um, they were kind of like-- or Israel was almost like the Nazis coming into France, or Israel was like the Nazis coming into France, into Palestine. So, like, Nazis were Israel [inaudible] Palestine because it said that, uh, Israel came into Palestine, and Palestine was not happy about it. So they were trying to, um, kind of like get back and say, like, "We don't want you to take us over because we were--" So that's where France was kind of, and the Nazis trying to fight back then. So I found that kind of interesting to make that connection. Okay, does anybody have anything else on the insights? All right. Um, let's see. Okay. So now, um, does anybody have any, uh, questions for the information? Like any questions on the video or anything like that that they wanna, um, ask or they thought was kind of weird?
S5: 07:58	My question is that, are they fighting about the land? Like, you know what I mean? Like, they might be-- there, there must be something about that land that they're fighting over it. The fact that even the US has involved itself, is it more than the land? Because I heard there's, like, oil or something out there. So, yeah, that [inaudible] question.
S1: 08:36	Newark, did you have any questions on the, uh, one the, uh, information, the video or reading or anything like that? No? Okay. Um, okay. I was kind of-- um, one of my questions was why were the, uh, the people, uh, throwing, like, stones and protesting against Israel police trying to hurt them? I would think they would, like, need the police, um, and, uh, to help them in like, their fight against Palestine. I thought that was kind of funny that they were hurting the police and, um, kind of making them look weak almost. Okay, so if there's no more questions then we'll go on to the, uh, questions for the [discussion?] and not the information. So, um, anybody have any, uh, questions for the discussions? Or what are your questions that you wanna talk about?

S2: 09:55	I will go first. Right. Um, my discussion or topic I think we should talk about is, uh, how-- what do you think the future is for Pakistan and the, uh, Jews and all that? How long do you think this conflict will continue to the future, or do you think the people will settle for peace?
S3: 10:18	Personally, I think that it's gonna stay kind of like confusing mess until, um, they sort it out because things are so-- like, there's so much tension building in that area that I think that, um-- I think that for another, like, at least 100 years it's gonna be still pretty confusing and hard to navigate, until, like-- because everyone always has a bad habit. It seems like, like a historical pattern almost that if the resolution is not up to your standard, then you go to war. That seems really common. So I think that if they don't come up with a resolution then there's probably gonna be even more war.
S1: 11:13	[crosstalk]--
S4: 11:14	I, I think-- oh.
S1: 11:16	You go ahead.
S4: 11:18	All right. Thank you. Um, I think that the conflict might start to end soonish just because there's starting to be more protests, like, within Israel and outside of Israel. So, uh-- like in out of the countries, so maybe that'll help pressure them into, uh, peace.
S5: 11:42	Just to-- just to add on what Odin said, yes, I think-- I think it will be pretty soon that, like-- they might end it pretty soon because, like, a lot of damage has been done. Like, innocent lives are being lost and all that, so might as well end it or more people is gonna end up dying.
S1: 12:02	I was kind of thinking that it might keep going, uh, because, at the end of the video, they were talking about how, um, the, uh, president or the, uh, main leader of Israel was planning on, um, bringing even more bombs to, uh, Palestine, um, to try and put that to a stop. But I feel like once they do-- once Israel does that, then Palestine will go back again and kill more people and destroy more stuff it seems like to me. Okay, does anybody else have another, um, question for the discussion?
S4: 13:00	Uh, I do. Uh, mine was kind of also relating to, like, the end of violence in Palestine and Israel, or the conflict, I guess. Uh, I was wondering if it would end once the US, like-- okay, I'm gonna just rephrase the whole question. Will the Israeli and Palestinian conflict end in violence if the US continues to just-- to support and fund Israel's military?

S2: 13:37	I think that is a very difficult, uh, thing to talk about. Just, um, I'd say in my opinion, if the US stopped getting involved and sta-- if the US, uh, stopped supplying, uh, Islam-- I forgot the name, geez. Uh, if the, uh, if the US stops supplying the war and just leaves entirely, I think there could be a possibility of peace in the future because U-- one side or the other will eventually run out of supplies or have too many losses and then just stop fighting because, well, it wouldn't be worth it to continue. But I guess the US continues to supply the war, I think this, uh, revolution-- not revolution, this war will continue for a long, long time.
S3: 14:35	Think I'd have to agree. Oh, sorry. You go.
	[silence]
S3: 14:49	Okay. Um, I think I'd have to agree because, um, if one side starts to run out of supplies, they start thinking, "Oh, I can't take this," and, uh, then they can start maybe a surrender treaty or maybe a peace treaty, and maybe come to the realization that, like, you just-- you can't keep fighting forever. You've gotta come up with a humane solution because fighting just isn't worth it at the end of the day.
	[silence]
S1: 15:51	Arminda, do you have a, uh, question for the discussion?
S5: 16:06	I'm not-- no. No, I haven't, um, [inaudible].
S3: 16:11	Uh, I think I have one. Do you think that in the future this, um, rapid, like, you know, this fight and this war, do you think it will extend to further Europe, and maybe, um, creating or recognizing more problems in, uh, the middle-eastern society?
S4: 16:40	Uh, I'm gonna have to say, probably not because a lo-- uh, not really a lot of it, but a big portion of it is about, uh, like, their religion. And Europe really is more just Christian, not really, uh, Muslim or Jewish.
S2: 17:04	I agree with Odin. I don't think that Europe or any other country in the world would get involved with this war unless maybe they have the same beliefs as them. Because if they don't have the same beliefs, there's not re-- there's not really a point to going to war for a religion that you don't even believe in. It'll be a waste of time and resources.
S4: 17:30	Yeah. Well, what I meant was, so there's these two sides fighting, right? I w-- I was wondering if around them maybe, maybe not, not connected to religion but just because they've been fighting for so long, do you think that other problems in that area would start to realize each other's, um, their tension and would they start

a fight too? So like, kind of like piggybacking off of the fight. And I would have to say I don't think so, but it was just a-- it was just a wonder.

S5: 18:10   I f-- I feel like-- I feel like they're not really fighting about-- I th-- isn't it about religion? Because like, it's like, like, you know, like, kind of like what's the point? But I feel like it's more the land because I heard, like, there's a lot of oil, and that's why, like, I'm pretty sure USA is, like, helping Isra-Israel to, like, fight with it so they can-- so they s-- they see the benefit they can get from it. If any other country around there that w-will come and pitch in, it's only for that oil. It's like money.

S1: 18:48   Okay, so, um, it's, it's the-- we're all supposed to ask one question for the, uh, discussion. So, um, Arminda, if you have one, maybe good to ask that. Um, uh, but for now I think I have one. Um, it said in the end of the video that some, uh, Palestinians are actually supporting Jelus-- Jerusalem. I was kondering what-- kind of w-- kind of wondering why that was and why they were with, um, some Jew-Jews in, in that. I thought that was kind of interesting why they were supporting them, wondering why.

S5: 19:39   I feel like-- I feel like they-- I feel like it's this-- I don't know, but it just came to my mind. I feel like it's more, like, who's-- who they think might win. Not sure, not really, but I feel like who's gonna win or who has, like, more, like, benefits of, like, the winning, so they're like, "Might as well support the Jews," or something like that. Because they don't have trust in their own people, like, they're just like, "I'm just gonna support the Jews." Oh, I guess I have one more. Or maybe [inaudible] the religion thing you said is one. Or maybe because, like, you know how the Israelites and how the Bible portrays that that land was given them-- to them by God. And if they really have so much trust in the bible, they might think, "Oh, this lands belong to them," because God said they can-- this land is them-- is, like, the promised land or something like that. That's one of my insight, like, if they really are, are, like, strong on their beliefs about the bible and everything, God, so yeah.

S1: 20:52   Okay.

S4: 20:59   Um, I actually had, like, pretty much the same question. And I, I was kind of thinking about it and maybe they might support them because it's safer than other parts of the middle east.

S1: 21:15   Okay.

S2: 21:19   I agree with Odin too that it, it, it could-- it might be a better decision to support them because if, um-- because, uh-- train of thought lost, sorry. Uh, I think it'd be better to support them, but

	just, just because, I don't know, they lose or they win, whatever happens, uh, if they support their enemy and the enemy wins, then, I don't know how to describe it that well. Uh, then they would get the benefits. I don't think that's the correct word, but, um, they would get their benefits if that makes sense. I don't know how to really put it in words exactly.
S3: 22:11	So what you're saying is support the winning side?
S2: 22:14	Yes, basically.
S3: 22:16	Okay. To reap the benefits no matter what.
S2: 22:19	Correct.
S1: 22:32	Okay. Uh, does anybody else have any more questions that they wanna ask?
S5: 22:38	Oh, I have a question.
S1: 22:39	Okay.
S5: 22:41	I just had it. Um, my question is, um-- God, I [inaudible]. Um, my question is-- okay, so my question is, I was wondering because like, I haven't really did a dig in-- dig on this, but where-- like, earlier in our conversation, Conan, I believe it was Conan asked this question, like, we need to know the background of the Palestine, where they came from, like who they are, like, any insight on them, like, what's their history, like, this and that so we have to be able to, like, either predict or to know, like, where this war is goi-- is gonna, like, le-lead us. So that's one of my questions. Like, who exactly are they, and when or how did they end up there? Yeah, that's my question.
S4: 23:45	So, uh, I think it was, they were part of the Ottoman Empire. And then after that fell, they became their own, uh, section. I don't know if I'm right, that's just what I thought.
S2: 24:00	I'm pretty sure after the Ottoman Empire, I think, uh, Britain got influence around that area, and they declared independence, something like that. I don't know if that is true ei-either, but I think that's my guess.
	[silence]
S1: 24:39	Okay. So, um, if anybody has any more questions, they can ask them. Um, we have a couple more minutes t-- before we need to, uh, do our summary. So we can do, like, one, one or [so more?] questions, um, and then we can do our summary. So if anybody has anything they wanna say, go ahead.
	[silence]

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S5: 25:20	Well, one of my question is, uh, why did, um-- is it Palestine? Right?
S1: 25:29	Mm-hmm.
S5: 25:29	Yeah. I don't know, I just-- I don't wanna me-mess it up. Why did Palestine agree to let the Israel-- the Israelites, the refugee Israelites there while they not do any damage to them like other countries that, like, give an example like Germany, why did they let them in while they weren't really part of the war? And how other countries like [pull drama?] to the Jew-- to the Jewish people?
S4: 26:08	Could you restate your question?
S5: 26:11	Yeah, I can. So my question was why did the Palestine let the Jewish in, like, gave them refuge while the other countries that did most harm to them didn't, like, really take them in while the Palestine took a-- like, most of the Jews in?
S1: 26:45	I think it was mostly because, um, after World War, uh, two, they were wondering, "Well, what do we do with them?" since German took-- Germans took, um, all of their, uh, like, everything they own, like their houses and farms, everything. So would-- they would never be the same because Germans were living in that area. So I guess it was just an open space that, um, people thought, "Well, we could just put them here and have them, um, be here," but then as they grew bigger, then they needed more and more space to go. So they were starting to go into Palestine land. So I think that's when things started, um, kind of being a problem because there's two different religions getting closer and closer is what I think.
S4: 27:38	I also want to add that there had been moving into Palestine, like, Jews were, like, since, like, 1918, which was, like, the, the Zionism movement.
S1: 27:59	Okay. So, um, I think it's probably about time to do the summary. So, uh, I think, Cam, did you do it last? The summary? Yeah? Conan, do you wanna do the summary for what we did today?
S2: 28:17	Uh, I would have to kindly pass if you-- if you [inaudible].
S1: 28:22	Okay. Uh, Odin? You got a summary?
S4: 28:29	Sure. Um, kind of talked about a lot so I might forget a little bit of it.
S1: 28:34	No problem.
S4: 28:35	But we mainly talked about, like, uh, why Israel decided to, uh, like, take more land from Palestine and, like, why the conflict

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started and if it would end, and how soon it would. We also talked about, uh, like, what, like, the conditions they were living in and how they were treated. Anyone has anything else to add to that?

S1: 29:23   Yeah. Arminda, do you have anything to add to, like, what we did towards the end of the class?

S5: 29:33   Not really, no.

S1: 29:35   Okay. All right, well, I think we're good.

Codebook for Discourse Analysis (Revision 3)

This codebook is divided into four sections that align with the Discourse Analysis Tracking form

Area 1: Talk Quantity. Looking at a count of student speaking turns, their longest turn, and the length of their average turn.

Area 2: Talk Quality – This segment looks at whether the student contributed by prompting from the leader or a classmate or was willing to engage without prompting. This segment also looks at their contribution to the conversation by completing their required preparation – which included an insight and at least one written question. It also examines whether they asked questions that they thought of within the conversation, and whether they responded to their peers during the conversation.

Area 3: Content Analysis – this segment looks more precisely at the content of the talk from the students. Did the student remain on topic, or did they make comments that took the group off topic, or even distract the rest of the group? It also seeks to understand if the student demonstrated one of the four historical thinking skills or civic reasoning. Finally, this segment examines if they asked an original historical question or shared a unique historical reflection.

Area 4: Notes – this section look at two other observations – whether there was evidence of a sociocultural influence or if they had demonstrated some facilitation task.

Section 1: Talk Quantity

Number of Turns – a hand count of the number of turns of a given speaker. A "turn" is when a student speaks and is able to complete their thought in the discussion. This is recorded by the transcription service, but confirmation is helpful. In some cases, a judgment could be made that a series of short comments is one comment or complete thought, as the service occasionally divides up a comment if a speaker is interrupted. For instance:

Speaker 1: I was talking the other day to my friend who was telling me…

Speaker 2: I know that colleague!!!

Speaker 1: that we should find a way to reflect on our voting rights

In this instance, we would characterize the comment for speaker 1 as one comment, not two.

Longest Turn – the transcription service provides timing for each response. For the purposes of this study, we will use the time for each comment provided by the transcription service. We total up that time and record that on the accompanying excel chart (e.g. – 15 secs, 75 secs).

as it treats all student responses equally. This means that if a student were to have paused in the middle of their comment, the service would note that, and we would go into the audio file and break up the time. We record the longest overall turn on the tracker form.

Length of Median turn – after reviewing all responses by a given student, we total up all the turns taken by the student and look at what the median response length is. So if a student spoke 3 times, and spoke for 3 seconds, 4 seconds, and then 98 seconds, the 4 seconds is the median.

Length of Average Turn – after reviewing all the responses by a given student, we total up all the turns taken by the student, divide it by the number of responses, and generate the average turn length. If there is a concern that the average is heavily influenced by a single contribution (e.g. – most responses are 10 seconds, but 1 response was 3 minutes) then record that in the notes.

Section 2: Talk Quality:

A note that categories here can overlap. A student can speak without prompting AND respond to a peer.

Spoke without prompting: The student contributed to the discussion without either the leader or another classmate **directly** prompting their participation. This is often a slight judgment call. For instance, the leader asks students to share their insights, and the student simply goes.

For example:

Leader: Okay, so who here has some insights to share?

Student 1: I have one that I'm happy to share: I think that the Cubans were wise to hide their weaponry in the Sierra Hills.

Student 2: I thought that Castro and Guevera did an excellent job formulating a battle plan against the government forces.

Student 5: My insight was that it was amazing how they did that with so little equipment or weaponry.

Student 4: I felt that this was something I could not imagine happening anywhere else in the world.

In this case, even though the Leader opened the discussion, no student was prompted by name by the leader directly to talk.

By comparison

Spoke with Prompting: The student is directly asked to contribute to the discussion, most likely by name.

For example:

Leader: Okay, so who has some insights to share? (WAITS). Okay, how about you, Jeremy?

Student 1: Oh, well, I was thinking about how Cuba's sugar supply had to be dwindling during this time.

Prepared Materials

Students are asked in this discussion protocol to come prepared with two written items: insights (their reflections on any aspect of the reading) and questions (which come in two forms, but are counted as the same here). The leader is supposed to prompt the students being able to share these in the discussion.

Provided Insight: During the "insights" portion of the discussion (usually toward the beginning), the student shares an insight with the group. Insights are a part of the discussion protocol structure in which students have thought about some aspect of the reading or assignment leading to the discussion and wrote this down in their preparation notes.

Asked Question: Students have been assigned to ask two different types of questions – Questions for Information and Questions for Discussion. Questions for information are optional, while Questions for Discussion are required. Not all students though will be able to ask their questions in the course of the conversation. So this category only captures whether a student asked either question. The leader of the discussion prompts the question period, and the students provide their questions during this time.

For example:

Leader: Okay, thank you all for your insights – does anyone have a question for information?

Student 1: Yes, I do. The author continually refers to the Jewish people in Germany and something called Shoah. I didn't know that "Shoah" meant. Can anyone clarify for me?

OR

Leader: Hearing that we had no information questions, does anyone have a discussion question?

Student 4: So, I wrote this question down: What are your thoughts on whether Nixon should have gone to China considering how the Communists had treated their people up to this point?

Responded to peer: This category is to help identify when a student talks in response to another member of the discussion who is NOT the leader operating as the leader.

For example:

Student 1: So I'm curious if anyone has thoughts regarding the Allies making a fake army out of cardboard in England before the D-Day invasion.

Student 2: Yes, that surprised me that they spent so much time doing that. I was thinking about whether my great-grandfather, who I know was in England during the war, had to inflate a fake tank.

Leader: I found it clever on the part of the generals, but I wasn't sure how the troops felt about being asked to do that.

Student 5: Yes, can you imagine that? You're there for army service and you're painting cardboard cutouts of tanks and jeeps?

In this instance, **Students 2 and 5, and the Leader, are all responding to a peer**. The Leader here is operating as a member of the discussion and not working in a facilitator's role.

Section 3: Content Analysis

Comments that were on topic: the student continues to contribute talk that is moving along with other students in the natural flow of the discussion. A discussion is going to be focused on a larger overarching topic (in the case of this study, there were four primary topics – the Russian Revolution, Jewish people hiding in Germany, Israel and Palestine, and the Bay of Pigs Invasion. On topic materials will follow along with the primary topic of the discussion. Students might still be on topic if they are slightly

Example:

Student 3: This reminded me a bit of what Ms. Marizpan shared in class, that the Russian peasants were really in direct conditions due to the harvests of 1911 and 1912.

Student 2: I struggled to think of how they were able to stay tolerate of the leadership for so long given that they were doing so poorly with their food supply.

Student 1: Well, it makes some sense, since the Czars were brutal in how they would repress anyone who would fight against them.

In this case, all three students would have their comments marked as "on topic." Even as the first student is the originator of this thread, their comment is on the historical topic being discussed by the full group. Therefore, all three would be marked as "on topic."

Comments that were off topic: the student moved the discussion away from the general topic that other students were discussing and/or the overall discussion topic.

For example:

Student 3: I am confused as to how Czar Nicholas and the royal family were so oblivious to what was going on in the provinces of Russia at that time. You would think his advisors would say something to him.

Student 2: Being oblivious is something that I thought about when watching Monday night football last night.

Student 6: I must agree that the Czar's advisors should have warned him about how perilous things were becoming, especially given that St. Petersburg seemed to be spared the riots and he might not have seen them in his day-to-day endeavors.

In this case, Student 2 has offered a response that is off topic.

Comments that created distractions: the student not only was off topic, but thought their comment took the students away from the discussion protocol and task on hand. A comment that created a distraction should also be categorized as an off-topic comment (so it should be marked with both).

Example:

Student 4: I happen to believe that the Americans were irresponsible with supporting Arbenz's overthrow in Guatemala just because of United Fruit's monopoly on bananas.

Student 1: I thew a banana at James Michaels in class yesterday and it hit him square on the forehead. Probably the greatest thing I've ever done in school.

Student 5: I saw that. That nailed him. I think you gave that clown what he deserved.

Student 6: What a waste of fruit. You should feel bad that you did that.

Notice that in the case of an off-topic comment, in the previous example, the students recovered and kept going. In this example, the distraction eliminated the discussion thread entirely to focus on this off-topic comment. **All three students** – Students 1, 5, and 6, all should be scored as having a distracting comment.

Demonstration of historical thinking skills: the student is using one of their four principle historical thinking skills – corroboration, close reading, contextualization, or sourcing. These can be cross checked with the Historical thinking chart provided by SHEG (attached).

Examples:

Corroboration:

Student 2: You know, I read the text and couldn't quite believe that the US would overthrow Iran's government. However, I went to the textbook like Ms. Marizpan told us and sure enough, even the US government said that we did that.

Sourcing:

Student 3: Probably should be a little skeptical about the document given that it was an official government report and usually when these are written they aren't going to provide every detail that a first-person account might be able to give. Wasn't sure if you all noted that Jim Miller, the author, worked for Department of Defense.

Contextualization:

Student 4: When I first read this I couldn't help think that the authors had to be afraid to completely honest given that the Nazis might review their paperwork. So I imagine they had to hold back a little bit otherwise they might get in trouble.

Close Reading:

Student 1: I thought that the way the author framed that discussion was pretty sneaky. He continued to shy away from talking about "liberation" when referencing Palestine because I think he was trying to ensure that people didn't use his argument to insinuate Israel had done something wrong.

Demonstration of lateral reading: In this case, the student demonstrates that they have used the civic reasoning skill taught in class where they look at other websites because the website, they were given to use by itself was not inherently trustworthy.

Example:

Student 6: When I was reviewing the website last night, I realized that I didn't know it's author. So, I left that one and found out from Wikipedia that the group that provided it was actually the Russian government. So, it might have been a little biased.

Section 4: Miscellaneous:

Sociocultural influences: Does the student demonstrate the impact of their personal or school culture during the discussion? Does the student's racial/ethnic, class or gender perspective influence the discussion? The attempt here is to determine whether the student brings any unique qualities as a product of their specific environment that might create new learning or opportunity for learning to their peers.

Example:

Student 3: I'm not sure if you noticed this, but as an immigrant from Peru, it struck me that the Germans were so adamantly opposed to Turkish people coming to their country, even as the Turkish people contributed so much to their economy.

OR

Student 4: Growing up in this small town has made me more aware of how sometimes big events in countries don't effect people all the same way. Like, if I were in the rural parts of Russia, I can understand why they wouldn't necessarily care what happened in the cities.

Facilitating: This is a category only for the leader, and occasionally for other group members that might 'help' with facilitating. The comments are primarily helping the students with moving the discussion along.

Example:

Leader: Okay, so we really need to wrap up the discussion and have time for one more question. Does anyone have another question?

OR

Student 3: Hey, I feel like I've spoken a lot in this discussion, and I'd love to hear from Jimmy or Max – you guys have any thoughts on the violence in Manila?

Scoring Sheet for Discourse Analysis

Figure 95

Discourse Analysis Student Tracking Form Draft

Name:	Group:							
Discussion #	1		2		3		4	
Facilitator?								
Talk Quantity								
Number of Turns								
Length of Median turn								
Length of Average Turn								
Longest Turn								
Talk Quality								
Spoke w/o Prompting								
Spoke with prompting								
Provided Insight								
Asked Written Question								
Responded to Peer								
Content Analysis								
Comments that were on topic								
Comments that were off topic								
Comments that created distractions								
Demonstration of historical thinking skills								
Demonstration of lateral reading skill								
Notes								
Sociocultural influences								
Facilitating								
Notes:								

Figure 96

Sample Coding Sheet, Conan, Third Discussion

Discourse Analysis Student Tracking Form Draft

Name: S2	Group:					
Discussion #	1		2	3		4
Facilitator?				no		
Talk Quantity						
Number of Turns				10		
Length of Median turn				24.5		
Length of Average Turn				24.3		
Longest Turn				58 sec		
Talk Quality						
Spoke w/o Prompting				6		
Spoke with prompting				4		
Provided Insight				1		
Asked Written Question				1		
Responded to Peer				6		
Content Analysis						
Comments that were on topic				9		
Comments that were off topic				n/A		
Comments that created distractions				1		
Demonstration of historical thinking skills				0		
Demonstration of lateral reading skill				0		
Notes						
Sociocultural influences				0		
Facilitating				✕		
Notes:						

Figure 97

Joint Coding Tracker, Arminda, Third Discussion

Turn	s5 - Shawn	WoP	WP	PI	AQ	RtP	OT	OfT	D	HTS	LRS	Scl	s5 - Matt	WoP	WP	PI	AQ	RtP	OT	OfT	D	HTS	LRS	Scl
1	5		1				1						5		1				1					
2	27	1		1			1						27	1					1					
3	2		1				1						2		1				1					
4	11	1		1			1						11	1					1					
5	3		1					1					3		1					1				
6	32	1					1						32	1					1					
7	38	1			1		1						38	1			1		1					
8	20	1				1	1						20	1					1					
9	5		1					1					5		1				1					
10	38	1				1	1						38	1					1					
11	73		1		1		1						73		1	1			1					
12	1	1					1						1	1					1					
13	64		1		1		1						64		1		1	1	1					
14	9	1					1						9	1					1					
15	39	1			1		1						39	1			1		1					
16	34		1		1	1	1						34		1		1	1	1					
17	2		1				1						2		1				1					
	sum	WoP	WP	PI	AQ	RtP	OT	OfT	D	HTS	LRS	Scl	sum	WoP	WP	PI	AQ	RtP	OT	OfT	D	HTS	LRS	Scl
	403	9	8	2	5	3	15	2	0	0	0	0	403	9	8	1	4	2	16	1	0	0	0	0
	median												median											
	20												20											
	Avg												Avg											
	23.70588235												23.70588235											
	highest												highest											
	73												73											
	100%	17/17	17/1	16/1	16/	16/1	16/	16/17					100%											

Figure 98

Social Validity Survey, Page 1

Figure 99

Social Validity Survey, Page 2

≡ Free Text
What did you think of Mr. Daley's contributions to this class in addition to...

≡ Page 3   + Add Page   ☐ Randomize questions

≡ Headline
These questions are ONLY for the six students who participated in the small group...

≡ Matrix
Please select one answer from the following responses.

≡ Multiple Choice
How did you find the template that you were asked to use for preparation for the ...

≡ Multiple Choice
How did you find the discussion process to participate in and understand?

≡ Multiple Choice
How did you feel about the conversation

≡ Multiple Choice
How did you use the feedback that you were given on the past discussion?

≡ Multiple Choice
Did completing this discussion online with Zoom have any impact on your experienc...

≡ Multiple Choice
I would take part in another discussion experience like this one if offered

≡ Multiple Choice
How helpful were the resources given to you (instructional booklet, videos, Mr. D...

≡ Multiple Choice
Specifically, how helpful were the four videos that you were asked to use for thi...

≡ Free Text
How else might you have been shown this process effectively?

≡ Free Text
Can you provide any suggestions for how to make the discussion process better for...