USING HYPERDOCS TO PROMOTE TECHNOLOGY INTEGRATION IN SOCIAL STUDIES CLASSROOMS

A Record of Study

by

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ABSTRACT

Despite more funds being spent on technology tools by Lovett ISD for both students and teachers, social studies teachers are not creating lessons that integrate or use technology to transform the task. Instead, students use technology devices such as tablets and Chromebooks as a substitute for paper and pencils. A 2016 curriculum audit of the district found that technology integration was at the lowest level of SAMR, substitution.

A review of the literature found several key issues that were addressed in this study. The high-stakes testing movement has dramatically impacted social studies instruction. The pressure from high-stakes testing has led to social studies being marginalized in instructional time and curriculum development. Educators often abandon effective technology integration due to the pressure to cover everything required on the test. However, technology integration cannot be ignored by social studies teachers. Students need to be provided educational experiences that allow them to learn how to navigate online information and different types of sources. Social studies teachers need training and support in effective methods that embed technology with content.

The product created for this study was a professional development session for social studies educators over HyperDocs. HyperDocs allow teachers to create lessons that embed the elements of student choice, different types of sources, and a student-created product using technology tools. The steps of the training session were evaluated using the Madeline Hunter Model. Also, HyperDocs were further examined through the use of ISTE standards for students and the SAMR model. A rubric was also created to help teachers see areas of improvement when creating lessons involving technology tools. The professional development session also offers the participants support by sharing HyperDoc resources with peers and online databases.

DEDICATION

To teachers - thank you for all your work and how hard you work to improve the lives of your students. I've been lucky to have worked with and been in the classroom with some of the best.

To my students, past, present, and future, I am thankful for you. My desire to become better for you was the inspiration of this journey.

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NOMENCLATURE

DOK	Depth of Knowledge
ISTE	The International Society for Technology in Education
SAMR	Substitution, Augmentation, Modification, and Redefinition
SBEC	State Board of Education
TEA	Texas Education Agency
TEKS	Texas Essential Knowledge and Skills
TATEKS	Technology Application Texas Essential Knowledge and Skills
T-TESS	Texas Teacher Evaluation and Support System

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CHAPTER I

INTRODUCTION: LEADERSHIP CONTENT AND PURPOSE OF ACTION

The Context

From the beginning of my teaching career nearly two decades ago, I was always drawn to using technology as a tool in my social studies classroom. As a student teacher, I was encouraged to use the school's new computer lab. My first attempt at integrating technology with content was a simple web quest where students reacted to images from the Holocaust. My interest in technology and social studies followed me as I entered the classroom in Lovett ISD nearly twenty years ago. The district had created multiple computer labs on each campus and an educational technology department. I met with that department quite regularly as I became my department's technology representative.

However, often what seems like a good idea can have serious repercussions. The new educational technology department found that out firsthand. In the early 2000s, the district spent a lot of money and time devoted to educational technology. First, they created an educational technology department. Next, this newly created department held professional development on campuses as well as at the district level. Then, each core teacher was given a bank of five desktop computers for student use and an LCD projector. Finally, the educational technology department pushed for integration by requiring each content area to teach a lesson using the TA-TEKS during each grading period. These pre-made lessons involved the students going through an online tutoring program to learn a skill. Then they were supposed to apply the skill to create a tech product over the content. These activities were not well received by the teachers or students.

Eventually, these lessons went away, as did the educational technology department. Every secondary campus became a one-to-one campus by 2016. I knew that how I integrated technology needed to change. So, I began to look and see how other campuses utilized their devices. I searched for general examples as well as to explore what other social studies teachers were doing. Unfortunately, I did not find many ideas. However, I did find a professional development session on HyperDocs. I went to the three-hour session, and it left a mark on me. Although the examples and resources provided were mainly for elementary classrooms, I saw possibilities for my grade level and content area. What I liked best about HyperDocs is that students used technology to learn content. Another positive element I found in HyperDocs was the student-created product that would demonstrate mastery. My research on HyperDocs revealed that they were based on an inquiry model lesson, designed to build digital literacy skills, and had the goal of providing students with the opportunity to learn twenty-first-century skills.

When I reflected on the earlier issues I observed with technology integration, I felt that Hyperdocs were an instructional tool that corrected many of these issues. HyperDocs have a lesson plan format that provides opportunities for teachers to embed digital content. Social studies teachers can use videos, images, and other primary and secondary sources. In addition, students have choices with the medium that they learn from and demonstrate knowledge. Unlike the former prescribed curriculum, HyperDocs allow both teachers and students to take ownership of learning.

National Context

A prime expectation is that schools will provide students with the most current tools to enrich their learning experiences and prepare them for the future. A direct result of this expectation is an increased amount of money spent on technology. According to Rob Waldron,

the CEO of Curriculum Associates, the budget for educational technology for K-12 schools will jump from $1.5 billion in 2016 to $1.83 billion in 2020. Districts and other entities spend their educational technology funds on devices, software, and other tools. Technology not only provides students with new ways of learning but also makes education more personalized. Technology allows students, teachers, administrators, parents, and district personnel to track and monitor student progress. A recent *EdWeek* market brief found that, since 2013, "over $41 million has been spent on adaptive learning technology," which should enable "schools to present a finely tuned instructional methodology that more readily matches the student's ability to process and retain instructional material" (Bogardus Cortez, 2017, para. 1). With billions of dollars involved, technology in schools has come under heavy scrutiny. The debate over educational technology includes arguments over what tools and devices schools should purchase, the effective use of instruments and tools, and the impact of technology on student learning and achievement. National Public Radio (2013) found that test scores have remained the same or even fallen in districts that have invested heavily in technology.

Matthew Lynch of *The Tech Edvocate* believes that school and district administrators rarely do their homework on products needed to teach digital literacy. The temptation to "purchase by the brand name" can cause a technology that "might be clunky for educators, too expensive for the district, and ineffective for students" (Lynch, 2018, para. 6). If the teaching staff is not comfortable with the program, application, or device, they will not use it. If used or ignored, the tool will not benefit teachers or students. If technology products are not used as intended, the "schools will not be getting much out of their investment" (Campisi, 2018, para. 2). Technology investments must match student needs as precisely as possible. Lynch (2018) contends that "there are very few studies on the overall effectiveness of educational technology

interventions," so administrators "cannot see what" products have "produced better learning outcomes for students" (para. 7).

Teachers also play an indispensable role in technology integration. Every new purchase or trial of an application requires staff hours in faculty training and practice. Kristen Purcell, Chief Research Director of the Pew Research Center, states that providing teachers with professional development is the key to the successful implementation of educational technology. It is essential "to train teachers on how to use it, so it becomes a learning experience and not just an expensive distraction" (NPR, 2013, para. 23).

Situational Context

Lovett Independent School District, in north Harris County, Texas, serves over 50,000 students. The district gives secondary students computers or Chromebooks; the only cost is an insurance fee. If a student cannot pay, the building principal can waive the insurance fee. Teachers keep two desktop computers in their classrooms for students who opt not to have a laptop. All but one of the ten intermediate schools in Lovett ISD use Chromebooks. One intermediate and all five high schools use tablets/laptops. All teachers have access to a projector or interactive screen. Teachers and students have access to various digital and Internet-based resources, online databases, and educational platforms such as Google Classroom and Schoology. The district provides all teachers with training on various curricular issues and technology integration. All high school campuses have core content specialists and digital learning specialists. Intermediate campuses have digital learning specialists, but not all core content areas have designated learning specialists. Each content area has an instructional officer at the district level for curricular and instructional support.

After a private audit in 2017, Lovett ISD moved to a new plan called "Promise to Purpose." The underlying theme for the district is that every student enters Lovett ISD with a promise and exits with a purpose. Each teacher, administrator, or instructional officer helps students reach their goals. The district focuses on equity, challenges, pathways, leadership, and continuous improvement to realize the promise for every child. Lovett ISD has also produced three documents that guide the district in achieving its mission. These documents are the basis of instructional meetings and professional learning. The objectives of professional development courses link to the guiding documents to improve teacher performance.

At the district level, teachers and instructional specialists meet to refresh the district curriculum. The purpose of this curriculum refresh is to ensure a quality education for every student. Campuses also are using the vision guides to write new mission statements and draft campus improvement plans to empower all students to exit with a purpose. Students are the heart of the district's new mission. The district has targeted three population groups. It has established "guiding coalitions" to enable teachers to reach these students better and provide more opportunities to help them reach their full potential. The groups are gifted and talented, special education, and English language learners.

Technology integration has been a crucial issue for Lovett ISD since the early 2000s when Lovett was one of the few districts in the area with a separate department for instructional technology. In 2008 and 2016, voters passed bond measures that allowed students to have more access to technology. The commitment to educational technology is apparent in published district budget documents. In the 2013-2014 budget, Lovett ISD spent slightly less than $200,000 on educational technology and digital learning media. In 2017-2018, the district proposed spending $1.1 million in this same area just four years later. The district funds a campus-based

digital learning specialist who facilitates teachers' use of technology. Most campuses have on-site computer repair facilities so that both staff and students can receive immediate help. Specialists and repair centers remove the traditional barriers to technology integration and provide support in both the curriculum and the maintenance of devices

The Problem

Relevant History of the Problem

In 2007, Bill Tally found that educational technology has little impact on making social studies instruction "livelier, more rigorous, and more grounded in authentic sources … and hardly a dent in what teachers and students do" (p.309). Ten years later, Aydin, Ozfidan, and Carothers (2017) found that experienced teachers do not use technology as they do not want to incorporate something new into their time-tested lesson plans.

This practice by experienced teachers is unfortunate. Teachers should not be abandoning technology as an instruction tool. Students need to be given the "opportunity to research and obtain information to develop different skills" (Alismail &McGuire, 2015, p. 153). Technology should be integrated using methods that promote inquiry and critical thinking skills. The International Center for Leadership Education founder Bill Daggett believes that technology should change teaching, not "merely to make more traditional practices more digital" (2014, p. 12). Teachers need to learn ways to integrate technology with the curriculum through professional development training and other support systems.

In 2017, the audit report of Lovett ISD revealed similar issues with educational technology. One of the first areas that the auditors observed was technology planning and implementation. Lovett ISD received a low score of 28.6% by being graded adequate on four out of the fourteen criteria used to evaluate an instructional technology program. Another area of

concern revealed in the report is the role of technology in the classroom. 74% of district administrators and 93% of building administrators believed teachers appropriately integrated technology into their instruction. However, after 835 classroom observations, the auditors found that only 374 classrooms were using technology.

During their visits, auditors divided technology use into two categories – passive and active. Passive use has students doing work that is similar to print mediums. Active use has students engaging with technology for a purpose. The results showed that when students used technology, it was in the active category. Conversely, teachers tended to use technology in the passive category (Texas Curriculum Management Audit Center, 2017, p. 397).

More issues were revealed about technology usage in Lovett ISD when the auditors applied their findings to the SAMR model for teacher use. Of the 374 classrooms in which auditors observed technology usage, 96% used technology at the lowest two levels, Substitution and Augmentation. What is more concerning is that 72% of the usage in those classrooms was at the lowest level. The numbers are alarming, as they show that the assignments completed by students are merely digitized pencil and paper activities. The auditors were also quite concerned with their findings, as they reasoned that "students were not given a chance to use technology or the instruction does not require the use of technology" (Texas Curriculum Management Audit Center, 2017, p. 398). Observations revealed that students were not using technology or using it for practice only. As a whole, little evidence was found to show that students used technology for communication, planning and managing activities, collaborating with peers, or collecting and analyzing data.

While Lovett Independent School District offers training specific to all disciplines, many sessions do not include strategies or tools that embed technology with content. For the past two

summers, Lovett social studies teachers have been invited to attend a content-specific conference, Passport 2 Purpose. District talent, such as librarians, campus specialists, and teachers, deliver most of the sessions. In 2019, 11 of the 38 courses involved educational technology. However, over half the sessions focused on a product, such as Nearpod, Active Classroom, or Schoology, rather than showing teachers how to create technology-rich lessons. Only three sessions afforded teachers the experience of creating lessons that use both technology and content.

Teachers on each Lovett ISD campus have access to a digital learning specialist. Their duties include one-on-one support and professional development. Schools can have regularly scheduled classes that feature a new technology tool or idea. However, these sessions are not content-specific and tend to be sparsely attended. The attendance issue may be related to several factors. First, technology training is not a current requirement of the district. Teachers must obtain a specified number of hours of instruction in ELL, GT, AP, etc., but there is no hour requirement for educational technology. Second, the training sessions are scheduled during teacher conference periods. Teachers often use the conference period to grade, plan for instruction, or to meet other obligations. Third, the subject or content of the session is not appealing to the teacher. Fourth, because course descriptions do not detail the information or skills covered in the session, teachers do not feel compelled to attend.

During the last decade, Lovett ISD has tried to provide students with a quality education. This effort is evident in the fact that more funds are spent on technology for students. The district has phased out computer labs and now puts a device in a child's hand. Elementary students typically have class carts of tablets or iPads. Secondary students are issued a personal device for use at school and home.

The importance of building 21st-century skills has gained credence in the district. However, technology integration has not brought 21st-century learning to the social studies classroom. It requires little collaboration and problem-solving from students to upload a presentation to Google Classroom or Schoology. Replacing a paper quiz with a digital Google form is not using technology to transform learning. What is missing is the marriage of technology with 21st-century skills.

Most social studies training in Lovett ISD is not designed to be both student-centered and technology-productive. Instead, the objective of these professional development sessions should be how to use technology to transform student learning. Thus, the district should offer courses to aid teachers in creating instructional opportunities that include using primary sources, vocabulary development, research skills, and collaboration about social studies topics using technology.

Social studies have the reputation of being based on lectures and other teacher-centered models of delivery. The level of technology usage in most social studies classrooms is shallow and simplistic, consisting of lectures from PowerPoints sets and other items displayed on a screen. (Texas Curriculum Management Audit Center, 2017, pp. 386-387). Teachers can use recently developed technology tools to make presentations and lectures more engaging for students. They can use Nearpod or Pear Deck to embed questions, drawings, and other activities into the slides. These applications can help make learning more student-centered. However, they may not provide students with the opportunity to solve problems, work together, and build social studies skills. Because of the requirement to purchase these tools, campus and district administrators will need to budget funds to make the tools work for teachers and students.

Significance of the Problem

Social studies are already a casualty of the nation's standardized testing movement and its emphasis on STEM disciplines. Because tests exist for math, language arts, and science in the elementary grades, the social studies curriculum seldom is taught at the elementary level. However, there is a state curriculum for elementary school (TEA, n. d.). In addition, the National Council for the Social Studies warns “against the continued marginalization of social studies disciplines in elementary school classrooms" (Fitchett & Heafner, 2010, p. 114).

In 2017, NCSS found that, since the passage of “No Child Left Behind,” 44% of school districts have reduced the time allotted for elementary social studies. The situation is direr in failing schools, with 51% reduced the time set aside for social studies instruction. The concern is that students are being denied the opportunity “to build social studies vocabulary and background knowledge through engaging in social studies activities,” which can lead to lower literacy levels and, ironically, increase the achievement gap (NCSS, 2017, p. 186).

The amount of time devoted during the week to social studies varies from state to state. Still, social studies receive less instructional time across the country than other elementary school subjects “due to the external pressures to focus on literacy and mathematics" (Fitchett & Heafner, 2010, p.115). Social studies courses are on a downward trend that has picked up speed since the passage of No Child Left Behind in 2001. The problem with not teaching social studies at the elementary level is that elementary teachers must promote student growth and learn by “developing the big ideas that underscore powerful social studies instruction” (Fitchett & Heafner, 2010, p.116). The focus of the No Child Left Behind Act was mathematics, science, and language arts. The result of this is the “further erosion of time for social studies instruction, particularly at the elementary level" (Vogler, 2012, p.165).

Social studies must stay relevant by showing itself as a subject that can prepare students for their future. Not only is there a need to teach documents, battles, and influential figures, but students need to learn problem-solving, critical thinking, and collaboration with peers. NCSS (2016) stresses the importance of social studies education as it "engages students in a comprehensive process of confronting multiple dilemmas, and encourages students to speculate, think critically, and make personal and civic decisions on information from multiple perspectives" (p. 180). A sound way to help students "thrive in a world of continuous and accelerating change … is the prudent use of twenty-first-century skills and media" (NCSS, 2016, pp. 180-181). Technology helps at building 21st-century skills through strategies that include collaboration, creativity, personal responsibility, and adaptability" (Kaufmann, 2013, p.79). Therefore, instructional methods in social studies must change by incorporating technology in a meaningful way. If not, social studies will move further down the instructional priority list.

Research Questions

1) Can the HyperDocs professional development address the issues that social studies teachers have with educational technology?
2) Does the HyperDocs professional development model a viable example of using technology to transform the educational experiences provided in social studies classrooms?
3) To what extent does the professional development over HyperDocs provide a sound instructional model for teachers?

Personal Context

Researcher's Roles and Personal Histories

When I started at the University of Mary Hardin-Baylor, my goal was to study music or something that would help me become a lawyer. Becoming an educator was not on my radar. Others noticed that teaching was natural to me. My second-grade teacher, Mrs. Hinton, wrote to my mother that it would be nice if I would let her occasionally teach the class. After my presentation on Queen Victoria and her descendants, my sophomore English teacher told me I was a natural-born teacher. After my first semester of college, I changed my major and focused on a history degree. It was just practical for me to take the courses to become certified as a teacher.

UMHB provides plenty of pre-service opportunities in schools before student teaching. I observed a high school history teacher in Temple, Texas, one semester for about ten hours. Then the following semester, my classmates and I spent at least four hours a week at Belton Junior High School observing and working with students. During this internship period, we created and delivered lessons. I found it very beneficial to receive feedback about my instructional style before my student teaching semester. Educational technology was still in its emerging phase when I was completing my internships. Few teachers had a computer in their classroom. Classrooms looked like those I sat in a secondary school; computers were relegated to libraries, labs, or just to courses in computer literacy.

My preparatory coursework at UMHB did not involve technology integration. Instead, the focus was on student-centered instruction and how to develop reading skills. No method courses were available for secondary social studies teachers. However, as a music minor, I was required to take a secondary music methods course. One of our primary assignments was

teaching someone music. My student learned a piano piece that earned significant praise at the final student recital.

Before my last year at UHMB, the State Bar of Texas offered professional development sessions that I was eligible to attend. Their Hatton Sumner Institute on the Founding Documents and Institute for Student Teachers were the only pre-service method training I received before student teaching. Their lessons included government and early U.S. History topics. What was appealing to me about their lesson format was how their ideas taught content through student-centered activities.

I completed my student teaching at Belton High School, teaching U.S. History to juniors and government to seniors. My mentor teacher had a computer that she used for a grade book or word processing. In addition, there was a large computer lab near her room. My mentor teacher, who had to approve my lessons a week in advance, happily created WebQuests for the students for various topics. These specific activities required students to go to a website to read, interpret an image, and answer basic questions. We began going to the lab frequently because no one else was using it. My mentor teacher had no issue with it, and her evaluating principal included the WebQuests on her appraisal as a positive instructional method.

After graduation, I started my master's in history at the University of Texas at San Antonio. I graduated from UTSA in December 2001 and turned my attention to finding a secondary teaching job in the San Antonio area. My advisor and I decided that it would be best to take a variety of courses to be prepared to teach secondary history rather than focusing on just American or European studies. This decision allowed me to explore different topics, including Stalinism and the Chinese Diaspora. On the advice of the district recruiter, I pursued my secondary social studies certification and my secondary music certification.

In the fall of 2002, I attended a job fair at UTSA. I decided that I would not limit my job search to the San Antonio area. I had two successful pre-interviews with recruiters from the Houston area that resulted in interviews with principals. My meeting in Lovett ISD was at an Intermediate School. The associate principal took me around the school. I was encouraged to observe two social studies classes. Several challenges came with this position. First, the job would not start until the second semester. My schedule would consist of two classes each of sixth, seventh, and eighth grades. Students would move from their current class to my newly created class. Two weeks later, I agreed to take the position and moved to Spring, Texas. The principal wanted to use me as a substitute during the remaining weeks of the first semester so that I was not an entirely new face for the students.

During my break from the classroom, there was a significant change in the technology tools available to teachers. Every teacher had a computer. Most of the teachers' computers sat on a television cart that displayed the computer screen on a TV. They offered me a projector, but I used my overhead and the TV because I was unfamiliar with the newer device.

Lovett ISD also had an instructional technology department that focused on technology integration. The instructional technology department offered a grant for five classroom computers to increase student experiences with technology. I wrote a proposal without knowing much about technology integration. I received my five computers in the following school year. Because of the age of the campus and the cost of connection, we had to use a splitter and a long ethernet cord. We were encouraged to use the five computers in rotations or station-type activities. I had difficulty with pacing the stations in my classroom. Activities progressed too slowly using the computers this way. Instead, I signed up for the lab so that the entire class could work on the lesson simultaneously.

Lovett ISD was committed to making strides in technology integration. From 2003 to 2013, I was one technology leader for my campus. A positive element was focusing on the Technology Applications Texas Essential Knowledge and Skills (TATEKs), teacher training, and the mindset that technology should become an integral part of core content instruction. As a young teacher, this greatly influenced how I used technology and my willingness to learn more about it in continuing education courses.

A few years into my career, four to five desktops, a projector, an E-instruction learning set, and an interactive whiteboard, called a Starboard, became standard equipment for every classroom. Teacher support came through campus-based training. Not everyone bought into these tools or attended the training. Despite thousands of dollars and many hours devoted to the technology, many items remained unused, collecting dust in classrooms across the district.

Tracking the Technology Applications Texas Essential Knowledge and Skills (TATEKS) was essential for the educational technology department. It assigned each core subject a group of TATEKs and provided prescribed lessons. The district added a letter grade on student report cards for technology in each core subject. The grade did not count towards grade promotion. Instead, it was a way to track how students were doing with their tech skills.

Instead of accurately documenting student progress, the TATEKS grade morphed into an item that teachers obligatorily filled in. The prescribed lessons were part of the problem. District personnel insisted that technology should not be taught separately from content. However, the district gave teachers an impersonal online program to teach general skills but did not allow for the embedded content. This program and department eventually faded out as the district moved to the one-on-one environment.

Journey to the Problem

In the Spring of 2016, the district decreed that every secondary school in Lovett ISD would become a one-to-one school. Intermediate schools would provide Chromebooks for the students. The high schools and one intermediate would continue to provide tablets for their students. Our campus had nearly a whole school year to prepare for the arrival of the Chromebooks. I had to plan how I would use this new technology effectively in my instruction. What I learned in the EdD program at Texas A&M University had a significant impact on my preparation for the move to Chromebooks. The program strengthened my skills as an educator and better prepared me to be a one-to-one teacher.

In the first semester of the program, I did not know what topics in education I wanted to study. My first two courses allowed me to research problems in education and my content area. My years as an educator had made clear to me that there were many problems in social studies. As a teacher, I always had struggled with "covering" everything required by the state. Research assignments in my graduate courses validated my beliefs. A 2007 article by Kenneth Volger and David Virtue about the effects of high stakes testing on social studies piqued my interest. Volger and Virtue (2007) found that "many teachers were narrowing their curricula to include only content listed in the curriculum framework and tested on the examination" (p.55). Knowing that breadth versus depth is a problem across the state and country led to my desire to research more instructional issues in social studies.

During the first summer as a doctoral student in Dr. Laub's class, we could investigate issues and problems facing education, such as ELLs, technology, and the effects of high-stakes testing. I began to examine the relationship between social studies, instruction, and technology. For Dr. Joshi's class, I created a presentation about a problem or issue of interest. I focused on

using technology for personalized learning in social studies. Reading studies by Anderson and Cook (2014), Beeson, Journell, and Ayers (2014), and Gomez (2105) pushed me closer to defining a research problem for my Record of Study. I took away two main ideas from these studies. First, teacher beliefs play a massive role in using technology in the classroom. Second, technology should be a "separate thing integrated into the curriculum" (Gomez, 2015, p. 297).

In EDCI 690: Theory of Curriculum and Instruction Research, I began to identify the subject I would study. My personal experiences with technology, the current situation in my district, and my coursework at Texas A&M all aided in the formation of my topic. My plan for the semester was to look into how technology could be used in social studies to promote higher-level thinking. This work was made possible through a major assignment of creating a literature review that explores previous research on our topic. This strengthened my belief that I need to develop a plan to help teachers use technology effectively to teach social studies.

At a professional development session, I began to see what might be a solution to the disconnect between technology and student learning. HyperDocs allows for both personalized learning and student choice. HyperDocs will enable the teacher to have the students "do history." Students could read a primary source, look at maps and photos, or gather information from other places to create a product to show their learning. Teachers create well-organized lessons with HyperDocs that integrate content with both technology and thinking skills. Efforts to use technology in the classroom must go beyond digitized paper assignments. Instead, teachers must use instructional methods, such as HyperDocs, to facilitate learning content while using technology.

Significant stakeholders

The Significant Stakeholders are Lovett ISD, secondary social studies teachers of Lovett ISD, and secondary students of Lovett ISD. Due to the nature of the problem, district administrators, including building principals and district support personnel, are also significant stakeholders. The parents of Lovett ISD, as well as community members, are also stakeholders.

Important terms

DOK–Depth of Knowledge refers to the level of understanding required to explain or answer an assessment or education activity. Norman L. Webb developed this concept in the 1990s.

HyperDocs–digital lessons for students that are engaging and use inquiry-based learning

ISTE–The International Society for Technology in Education is a global community of educators who believe in the power of technology to transform teaching and learning, accelerate innovation, and solve severe problems in education. (https://www.iste.org/about/about-iste)

SAMR–Model for using technology in the education setting. S stands for substituting computers to digitize pencil and paper assignments. A describes an augmentation level that entails the kind of pre-computer activities that technology now enhances. . M is the modification level; the work has been modified or changed from everyday classroom tasks. R stands for redefinition and involves utilizing new teaching methods that were unavailable before technology.

SBEC–State Board of Education

TEA–Texas Education Agency

Technology – for this study, the term technology will be used to refer to the devices available to teachers and students, including laptops, Chromebooks, and projectors.

TEKS–Texas Essential Knowledge and Skills

TATEKS–Technology Application Texas Essential Knowledges and Skills

T-TESS-The Texas Teacher Evaluation and Support System is designed by educators to support teachers in their professional growth.

One-to-one–a situation in schools that allows each student to have access to a device while at school and often to take home as well

21st Century Skills–refers to the four areas of collaboration, digital literacy, critical thinking, and problem-solving that current students need to succeed in the 21st-century world.

Closing Thoughts on Chapter I

Current teachers and students have access to a greater variety of technology resources than had previous generations. However, instructional methods have stayed relatively the same. Technology use has grown, but the medium used often produces the same result as a paper assignment. Students are not engaging with content and technology to provide critical thinking skills, collaboration, or other 21st century skills. The use of HyperDocs will allow teachers to create lessons that combine curriculum, 21st-century skills, and technology. HyperDocs make it possible to differentiate and personalize learning. Student voice or choice is a crucial ingredient as well. While not the only solution, HyperDocs provides a structure that can guide the teacher to create activities that integrate technology with content and improve student excitement and learning.

CHAPTER II

REVIEW OF SUPPORTING SCHOLARSHIP

Introduction

The primary purpose of this literature review is to examine previous research related to the historical and current relationship between the social studies curriculum and educational technology. The main topics that came forth in the literature involve teacher training, teacher beliefs about technology, and frameworks that may help bridge the gap between instructional technology and the social studies curriculum. The material reviewed supports this idea by showing the history of the problem of social studies integrating technology, the current state of the problem, the role of teachers, and how teachers can improve their use of technology with proper support systems and training.

Relevant historical background

In the 1990s, Charles White, Peter Martorella, and Phillip VanFossen documented the use of technology as an instructional tool in social studies education. White (1991) examined how social studies can use technology to create better informed and engaged citizens. Martorella (1997) found little evidence in his review of journal articles that social studies was preparing for advances in technology. VanFossen (1999 & 2001) reviewed conference proposals and offerings and studied the Internet usage of teachers. All three complained about the failure to incorporate technology in social studies. More recent studies have used the work of these researchers to strengthen their arguments that social studies instructors are a step behind in using technology as an instructional tool.

In 1991, White wrote a piece that espoused the idea that one of the primary duties of social studies education is to teach citizenship. Technology is a tool that White viewed as an aid

to social studies in the creation of “informed and engaged citizens” (p. 34). White said that social studies content, combined with instructional technology, would aid students in the “understanding of social processes, using information, and [knowing] how to interact in social settings” (p.34). White (1991) said that developments in technology would cause an “infoglut,” with students having access to more information than they could process or analyze intelligently. To prevent “infoglut” from becoming a problem, social studies educators should use technology to teach students how to retrieve information, think critically about information, and engage in inquiry using primary source material.

In his report, White explained that technology integration depended on technology infrastructure, teacher training, resolution of conflicts within the field, and the support of administrators. Overall, technology tools would aid students in doing citizenship in the same way that “science teachers have students do science” (White, 1991, p. 39). There are many ways to teach citizenship skills, but White believed that they should include digital tools.

Six years later, Martorella (1997) called social studies "a sleeping giant in the curriculum" that can never catch up to other subjects in terms of technology use (p. 511). After reviewing three professional journals for social studies education, Martorella found that only three articles dealt with technology-related topics during the last 25 years.

This alarmed Martorella, as his viewpoint was that professional journals should be “sensitive indicators of serious concerns” in the social studies world (1997, p. 512). He said that the lack of printed information showed that technology issues appear to have a low priority for social studies educators. If technology was to become a dynamic agent for change, this trend must be reversed with "an infusion of concern, as well as new instructional materials” (p. 512). Martorella felt that adopting a system of national standards would allow for identifying standards

and strategies that reflect technology issues. Martorella's assumptions about the relationship between social studies curriculum and technology are reflected in VanFossen's research.

VanFossen published several studies on the integration of social studies and technology integration. In 1999 and 2001, VanFossen released studies that explored how teachers were using the Internet. He also used the opportunity to identify the barriers that stood between teachers and technology. His study of teachers in Indiana concluded that teachers mainly used the Internet for lesson preparation and personal research (VanFossen, 1999 & 2001).

"Teachnology," as he called it, was not used by the teachers for two reasons. First, there was a lack of knowledge about the best practices for computer use. Second, teachers viewed digital devices as a distraction from "real learning." VanFossen found that comprehensive training would increase the probability of Internet use, as well as the development of meaningful social studies pedagogy and curriculum."

VanFossen, along with Shively (2002), reviewed seven years of presentations at the annual National Council for Social Studies Conference. The two researchers found no increase in sessions that provided training on using the Internet as a teaching tool. If minimal opportunities exist for teachers to learn how to integrate technology, they will not be able to use these new tools to transform instruction and learning (VanFossen, 2001). Despite studying different aspects, White, Martorella, and VanFossen contend that the change in the relationship between social studies and technology must come from within the field itself through training, development of curriculum, and accountability.

These studies spanned years of technological improvements and increased access. However, a collective voice of frustration emerges over the failure to use instructional technology in the social studies curriculum. Berson and Balyta (2004) found that technology has

not appreciably changed social studies instruction in the last twenty years. In her case study of middle school social studies teachers, Sheffield (2011) concluded that not much has changed in the ten years since VanFossen examined teachers' use of the Internet. Tally (2007) found that, at most schools, instructional practices did not integrate technology. Computer usage during class is "for information retrieval or the simplest form of authoring" (Tally, 2007, p. 309). A 2013 Pew study, based on a teacher survey, found that 95% of the teachers said their students searched for information online, but only 36% stated that their students edited their work using a web-based tool, such as Google Docs (Cuban, 2018). In other words, technological advances have had minimal impact on technology integration with the social studies curriculum.

Alignment with Action Research Traditions

In their book, *Studying Your Own School,* Anderson, Herr, and Nihen (2007) define action research as "'insider' research by practitioners using their own site" (p. 2). The spiral they created influenced my record of study, as I am increasing my "knowledge of the original question, puzzle, or problem" to advance the use of technology in social studies classrooms in my district (2007, p. 20). After two decades in Lovett ISD, I have noticed a lack of consistency by social studies teachers when using educational technology. Overall, technology is used in classrooms, but not in a manner that engages students and promotes rigor. My solution is introducing teachers to a practice that combines content, technology, and 21st-century skills.

An essential part of this study is the collaboration with others who have a stake in the problem (Anderson et al., 2007). Social studies teachers are being challenged to use technology in a manner that promotes pedagogical rigor. Inviting this specific group to participate in my research serves two purposes. First, they are the ones who will determine how technology is used in the social studies classroom. Second, the teachers in the district need an opportunity to

collaborate on a plan to increase the use of educational technology. Within Lovett ISD, partnerships are campus-based. Working together, sharing lessons, and reflecting on instructional practices will allow the teachers in my study to work together at the district level.

My primary purpose for the study is to help teachers create more rigorous, student-centered lessons that use both the Social Studies TEKs and ISTE's Standards for Students. To that end, I conducted a professional development session for secondary teachers based on the district's guiding documents. Before the session, teachers submitted a lesson they believed integrated content with technology. Teachers then answered questions about their professional experience, beliefs about technology, and the use of technology in their classrooms. Teachers went through a Hyperdoc activity that ended with creating a lesson. They uploaded those lessons to a shared folder and created a resource for teachers districtwide.

Theoretical Framework

The self-efficacy theory developed by Albert Bandura will serve as the theoretical framework for this study. The American Physiological Association defines self-efficacy as "an individual's belief in his or her capacity to execute behaviors necessary to produce specific performance attainments" (N.D.). When applied to educators, self-efficacy is "the key driver of teacher effectiveness" (Clark & Bates, 2003, p. 13). According to Bandura (1994), educators who possess a high sense of efficacy about their teaching produce better results than teachers with low self-efficacy who invoke negative consequences to get students to study (1994, para 48). Self-efficacy applies to this study because teacher beliefs, or perceived ability, affect the use of instructional technology in the classroom.

One method to build teacher self-efficacy is professional development or training. Training has a positive effect on teachers' attitudes and anxiety and can produce better results

with students (Watson, 2006). Training should provide participants with practices that revolve around the four sources of self-efficacy: enactive mastery, vicarious experiences, support and reinforcement of learning, and physiological arousal.

Educators relate to both positive and negative experiences at the enactive mastery level. They have opportunities to actively practice new teaching techniques and content, so they return to the classroom using what they have learned. The vicarious experiences level provides opportunities for teachers to observe a model or to observe other educators using the instructional tool. Support and reinforcement of learning (genuine feedback) are part of the social and verbal persuasion level (Bray-Clark & Bates, 2003).

The sessions had time for teachers to interact and collaborate with other participants. This physiological arousal level should have built-in systems of feedback and support provided to teachers, with clear and compelling information about skill improvements (Bray-Clark & Bates, 2003). These types of experiences during professional development will help teachers increase their self-efficacy and "build a better bridge between what they learned in the session and classroom application" (Watson, 2006, p. 164).

The structure of the professional development used in this study ensures that participants encounter all four sources of self-efficacy. Opportunities for teachers included practice, collaboration, observation, and feedback to increase the extent to which they are willing to transfer skills learned during in-service training to the classroom" (Clark & Bray, 2003). By going through a HyperDoc themselves, teachers practice the activity before using it with their students. Finally, teachers share their final creations with their peers. This combination of modeling and collaboration allows the teachers "to see others who can do it, so they feel that they can do it as well" (Bandura, 1994, para 52). The rubric used to score teachers' lessons gave

teachers clear and compelling information about skill improvements (Clark & Bray, 2003). The teachers left the session with more confidence in their ability to use technology as an instructional tool because the four sources of self-efficacy were included in the training.

Most Significant Research and Practice Studies

The Effects of High-Stakes Testing on Social Studies

The high-stakes testing movement has dramatically impacted social studies education nationally. Social studies was not a tested subject of the No Child Left Behind Act (Volger & Virtue, 2007). Some states opted to test social studies, even though it was not a mandated subject mandated. In 2007, twelve states required social studies at the elementary level, fifteen states at the middle school/junior high level, and only nine as a high school graduation requirement (Volger & Virtue, 2007). As of 2017, fifteen states required a social studies test in high school, but now only six states require students to pass a social studies test to graduate (NCES, 2017). Research studies conducted by Grant (2007), Au (2009), Volger and Virtue (2007), Fitchett and Heafner (2010) show that high-stakes testing affected social studies instruction in three ways. First, the non-testing of social studies has led to its marginalization. Second, it has impacted the construction of the social studies curriculum. Third, testing affects the instructional methods used by social studies teachers.

Since the passage of No Child Left Behind, 44% of districts have cut instructional time for social studies because of the greater emphasis on the tested subjects of language arts and math (Anderson & Cook, 2014). Volger and Virtue (2007) examined the effects of high-stakes testing at elementary and secondary levels and found that social studies classes were eliminated or reduced because of its status as a non-tested subject (Volger & Virtue, 2007). In his study in

South Carolina, Volger (2011) found that testing still affected instruction even after the governor reduced the number of state assessments given to students.

The impact on the upper grades was not the same as that at the elementary level. Elementary teachers found social studies material harder to teach because of "fuzzy standards" that are more conceptual than fact-based, like secondary standards (Volger, 2011, p. 183). For Au (2007), the marginalization of social studies is an expected consequence of the high-stakes testing movement. Due to pressure, administrators and teachers have reduced social studies teaching as schools scramble to improve their reading and math scores. Fitchett and Heafner (2010) found that social studies are not a primary source of concern in elementary. This practice goes against the advice of the National Council of the Social Studies (Fitchett & Heafner, 2010).

The marginalization of social studies is not a recent development. Since the 1980s, social studies has "failed to stand alone as an important time-worthy subject within the elementary curriculum" (Fitchett & Heafner, 2010, p.115). Not only has high stakes testing led to the marginalization of social studies, but it has negatively impacted the construction of the social studies curriculum.

High-stakes testing has changed social studies learning standards because the tests are used to create the curriculum. This practice can be found in the recent trend towards curricular mapping and the popular backward design used to create units and other curriculum plans (Volger & Virtue, 2007). Again, this is an issue that has affected elementary classes differently than secondary courses. Elementary has seen their standards narrow, while the secondary grades deal with "an overwhelming amount of material" (Volger & Virtue, 2007, p. 56). The in-depth and large number of standards means that teachers tend to narrow their curriculum to include only content listed in the curriculum framework and tested on the examination (Volger & Virtue,

2007, p. 55). The result is that students do not explore anything in-depth; they just learn the facts (Volger & Virtue, 2007). Au (2009) agrees with Volger and Virtue's view that high-stakes testing does control the curriculum. Teachers are pressured to structure their content around the test (Grant, 2007). Thus, curriculum and instructional methods have both been affected by high-stakes testing.

Teachers cut their instruction to spend time on test preparation (Volger & Virtue, 2007) to get the best scores. A negative consequence of testing is that teachers use activities they know are bad practices to cover tested content (Grant, 2007). Au (2009) contends that teachers tend to "prepare students for tests with pedagogies that focus on rote memorization and lower-ordered thinking…that contradict what teachers feel is good pedagogy" (p. 46). There is more reliance on teacher-centered practices, such as lectures and memorization (Volger & Virtue, 200). Students spend less and less class time on inquiry learning and critical analysis because of the content demands of the tests (Au, 2009).

Moreover, the tests themselves do not assess students' critical thinking. Instead, these assessments are "structured to assess the breadth of often shallow, fragmented bits of knowledge" (Au, 2009, p. 46). Teachers must decide on and create lessons "without destroying their integrity or damaging their sense of purpose" (Volger & Virtue, 2007, p. 57).

The Impact of Technology on Social Studies Instruction during the 2000s

The work of White, Martorella, and VanFossen in the 1990s showed that social studies was not preparing for upcoming developments in technology. Berson and Balyta (2004), Tally (2007), Fogo (2014), Cuban (2018), and Anderson and Cook (2014) reveal that this prediction has become the reality of the 2000s. Berson and Balyta (2004) found that technology has not appreciably changed the instruction of social studies. Tally (2007) concluded that "in the vast

bulk of schools …. teachers and students hardly use computers in instruction at all" (p.309). Students mainly use computers for information retrieval or the simplest form of authoring (Tally, 2007). Sheffield (2011) found that there have been very few significant instructional changes in social studies despite improvements in access to technology and information. Teachers use technology, but they do it to support their existing teaching style (Sheffield, 2011).

Fogo (2014) conducted a Delphi panel survey of social studies educators. While teachers feel it is important to teach using historical evidence and thinking skills, he found that technology use was at the bottom of core instructional practices. The educators feel that their students should encounter instructional methods that use questions, developing evidence-based arguments and research, but they did not make the connection to technology, which, surprisingly, was only mentioned once by Fogo's respondents.

Advances in technology and the increased availability of devices have not changed the instructional methods in social studies. Tally (2007) found that the addition of computers to classrooms did not jump-start change. Instead, teachers viewed technology as an interruption to the traditional teacher-centered dynamic (Tally, 2007). Cuban (2018) argues that unless teachers make "changes in the classroom towards the desired direction, student learning remains untouched" (p. 6). Anderson and Cook (2014) found that students most often associate the words "boring" and "useless" with social studies and have negative attitudes about "dull instructional materials" (p. 1). Overall, students' assignments involve following a set of arbitrary rules or conventions, not serious historical investigations (Tally, 2007). Students' activities should contain technology scaffolds to ensure high-quality assignments and full substance (Tally, 2007).

DeWitt explored the digital divide in social studies classrooms for students of different socioeconomic groups. This study found that teachers "put computers to use to support teachers'

conceptions of students' needs, rather than transforming classrooms into sites promoting educational and social equity" (Tally, 2007, p.29). Instead, DeWitt said, teachers should use technology to help students develop the analytical, teamwork, and research skills that colleges and universities, and employers say that students need to succeed (Tally, 2007).

Students want social studies lessons that are useful, challenging, and fun to learn (Anderson & Cook, 2014). Teachers can rely on more than just the Internet and software applications. Applications or Apps can make traditionally boring content more interesting for students (Waters, Kenna, & Bruce, 2016). Technology integration is not just about computers. It is about educational improvement (Tally, 2007). If social studies want to improve student experiences and learning, “social studies educators should be at the forefront of integrating technology into pedagogical practices” (Wright & Wilson, 2009, p. 135).

Digital Archives as an Instructional Tool

Advances in technology have led to the increasing availability of primary sources and other archival resources for educational purposes. According to Berson and Balyta (2004), digital primary sources allow students to explore specialized areas that typically receive sparse treatment in textbooks, as in-depth information in these areas is available through online sites.

With technology, all students, even those facing economic and location barriers, have access to libraries, archives, and museums. The use of the Internet and educational software has democratized historical knowledge and research by helping students access authentic, primary resources previously available only to professional scholars. Digital resources can take students beyond their textbook or library resources (Bolick, 2006; Doppen, 2004). Lee, Doolittle, and Hicks (2006) argue that teachers should move away from using textbooks as their sole resource

for primary source activities. The primary sources often appear not in their original form and are not designed to encourage critical thinking about multiple viewpoints.

Improvements in devices and the digitization of archival resources create opportunities for teaching social studies skills and content in ways that would be impossible in the traditional social studies classroom (Mason et al., 2000). Students have the opportunity to "access, manipulate, and interpret raw materials of our past" (p. 108). Pace (2019) puts great importance on students working with primary sources in their original form. This turns students into historians by reading and deciphering cursive, interpreting and following citations, and using critical thinking and interpretation. In this way, the learner can disseminate social studies content while expanding their digital literacy (Wilson, Wright, Inman, & Matherson, 2011). Students no longer have to face "dusty textbooks, rote memorization, and teachers who drone" in their social studies courses (Reisman, 2012, p. 234). The activities should have students reconstruct the past (Greene, Bolick, & Robertson, 2009). Students should encounter a variety of sources to improve their understanding of multiple perspectives of history (Stuckart & Rogers, 2017).

Students should engage with sources while completing their lessons and other instructional activities. Whether they are writing term papers or joining online discussions, primary resources allow them to be "active in the process of historical resource or doing history" (Bolick, 2006, p.124). Teachers should create experiences that help illustrate statistical data related to the topic at hand (Mason et al., 2000). Moreover, primary source activities should include discussions, writing activities, and questions to promote critical thinking (Karabulut, 2012). Assignments should consist of opportunities for student ownership of work. Teachers will get better quality work when students enjoy the process. Lessons with embedded technology will provide students with sound academic content (Wilson et al., 2011).

There are a variety of ways teachers can merge digital resources with critical thinking and discussion-based learning. Green, Bolick, and Robertson (2009) studied the effects of using a hypermedia project in secondary social studies classes. Students enjoyed the activity and showed gains in knowledge when given a pre and post-test (Green, Bolick, & Robertson, 2009). Shand, Winstead, and Kotters (2011) studied using digital resources to teach about Medieval China. Students were able to share their findings and viewpoints through blog posts. Students used proper research techniques and peer review while learning social studies content through blogs, wikis, podcasts, and other digital platforms (Wilson et al., 2011).

Roberts (2013) studied students using Google Docs to complete an activity known as a "chalk talk." Students answered a question about a topic on Google Docs, which allowed them to interact with their peers simultaneously during the activity. Roberts found that students used their classmates' responses to improve their understanding of the topic (2013, p.133). The teacher said it was a positive experience and noted that Google Docs engaged students who never spoke during regular class discussions (Roberts, 2013). Wikis, blogs, podcasts, and even Google Docs involve active learning. The strength of active learning lies in its ability to engage students and encourage the completion of assignments (Wright & Wilson, 2009).

Civic Online Reasoning

Social studies is a subject that can help students get involved in their world and help them "deal rationally and effectively with political, economic, and ethical issues that arise" (Anderson, 1991, p. 68). According to Droppen (2004), social studies teachers must provide opportunities for their students to use computer technology to "find apply, and exchange information and resources with others, and improve their academic skills to solve real-world problems" (p. 250). Technology now allows teachers more instructional opportunities to have

their students apply critical thinking skills to current or historical events, a recent television commercial, or a political campaign speech (Shively &VanFossen, 1999). By incorporating elements of literacy and technology, social studies teachers help students become citizens of the modern world (Curry & Cherner, 2016, p.133). Students can to "navigate the maelstrom of information online" to make informed civic decisions (McGrew et al., 2018, p. 185).

The development of social media and other online resources has impacted the delivery of and interaction with information. Kahne, Hodgin, and Eidman-Aadahl (2016) studied the involvement of young people in politics using social media. They found that social media outlets, such as Twitter, Facebook, and Instagram, give young people a way to "be heard, join together, and to work for change" and to engage in participatory politics, such as Black Lives Matter and the DREAMer movement (p.2). Individuals are empowered by removing traditional gatekeepers of information and influence and can operate with greater independence in the political realm (Kahne et al., 2016).

The disappearance of gatekeepers means a flood of information is available for public consumption, but this puts an "enormous responsibility" on people to evaluate what they find online and in social media (McGrew, Breakstone, Smith, Ortega, & Weinberg, 2018, p. 165). McGrew et al. (2018) place great importance on "civil online reasoning," defined as "the ability to effectively search for, evaluate, and verify social and political information online" (p. 165). Civic online reasoning is a digital literacy skill necessary for an informed and engaged citizenship (McGrew et al., 2018). Social studies classes should educate students on evaluating online content as they get 75% of their news online (Breakstone et al., 2018).

The ability to appraise information is a crucial element of digital literacy and "civic online reasoning." McGrew, Breakstone, Smith, Ortega, and Wineburg released two studies in

2018 that investigated the digital literacy skills of secondary and college students. The findings of both showed that there is room for improvement. Breakstone et al. (2018) gathered almost 8000 responses from students to determine how they evaluated Facebook posts and other online content. Middle school students could not distinguish between an advertisement and a real news story. High school students were unable to determine the authenticity of Facebook accounts. College students used websites without verifying if their descriptions were accurate.

In a different study, McGrew et al. (2018) developed an assessment based on 15 tasks related to digital literacy. The findings from the over 2500 responses show similar results. Students do not question who created websites, seldom went beyond the first websites pulled up in a search engine, and were easily swayed by the website's appearance (McGrew et al., 2018). Students found it difficult to evaluate authors, sources, and evidence. Not being able to analyze the validity of the information can weaken the quality of decisions, especially when it comes to civic matters (McGrew et al., 2018). The authors concluded that the methods that students use to analyze websites critically need to improve.

Breakstone, McGrew, Smith, Ortega, and Wineburg (2018) compared the methods students and professional fact-checkers use when evaluating online information. Teachers encourage students to use a checklist when assessing sources (Breakstone et al., 2018). The issue with the checklists is that they are not research-based and focus on "features that are easier to manipulate" (Breakstone et al., 2018, p. 31). Checklists have students go into the website and examine the information, but not the source.

On the other hand, professional fact-checkers investigate the source of the information before they even read the text (McGrew et al., 2018). Their investigation leads to more reading, but fact-checkers learn more and spend less time researching than students (Breakstone et al.,

2018). The authors conclude that "educators are relying on an analog approach to fix a digital problem" (p. 28). Schools must abandon the current trend of a yearly visit with the librarian to learn how to use a checklist (Breakstone et al., 2018). Instead, they need to learn that it is critical to determine the author or sponsoring organization of a story (McGrew et al.).

To improve civic education, social studies teachers should "shift from merely focusing on the features of tech tools to prioritize the process of student thinking, learning, and the social practice of communicating, connecting, and collaborating with digital tools" (Kahne, Hodgin, & Eidman-Aadahl, 2016, p. 25). This change is essential to prepare students for their civic life. (McGrew et al., 2016). To do this, students need to use the methods of professional fact-checkers (Breakstone et al., 2016). McGrew (2020) used this technique to advance civic reasoning online by creating three modules for students (McGrew, 2020). After teachers modeled the activities, students spent the rest of the lesson working in small groups. To evaluate the effectiveness of the lesson, students were given a fake news skills test before and after the lesson. Growth was found on three out of the four elements, as students were found to be "able to employ more sophisticated strategies to evaluate sources and evidence online" (p. 8).

McGrew (2020) concluded that students still need more practice with open searches. Guided practice, she said, will help them learn to balance the priorities of relevance and reliability to evaluate online content successfully. Social studies should build the civic reasoning skills of students so that they can better process the information that they find on websites and social media platforms.

Barriers to Integration: The Beliefs of Teachers

Several barriers exist for technology integration in social studies (Saye & Brush, (2006; Sheffield, 2011). Teachers often do not have students work on technology-rich lessons because

of the pressure to cover content (Dewitt, 2007; Anderson & Cook, 2014). Digging deeper, teachers' personal beliefs concerning educational technology and their teaching philosophy affect educational technology usage. Teachers must perceive that the learning is legitimate, as it relates to their personal beliefs "about knowledge and how one comes to know" (Sheffield, 2011; Saye & Brush, 2006, p. 200).

The studies conducted by Swan and Hick (2007), Sheffield (2011), and Curry and Cherner (2016) show the effects of technology usage based on teachers' personal, educational philosophy. Swan and Hicks (2007) studied three social studies teachers using primary sources to teach historical inquiry. Only one teacher used technology to transform learning, while the other two did not incorporate technology beyond content acquisition. Swan and Hicks explained that teachers were not interested in or comfortable in using technology to foster historical thinking opportunities. In a study of three middle school teachers, Sheffield (2011) found a similar situation. The teachers said they saw advantages for using technology and viewed it as a tool for gathering information and critical thinking. However, classroom observation told a different story. Only one of the three teachers used technology in a student-centered approach (Sheffield, 2011).

Curry and Cherner (2016) observed that students' technology usage was under teacher control. Teachers designed lessons with technology when they found it useful in particular circumstances and with particular tasks assigned. The teachers never allowed the students to research without specific guidance about what and where they were to research. The technology was a tool in these activities but controlled for students to accomplish specific tasks (Curry & Cherner, 2016). In all three studies, technology was used to support the teachers' personal style

of teaching. The introduction of student-centered technology lessons depends on the teacher's pedagogical practices (Sheffield, 2011).

Obstacles often arise that can put pressure on teachers to change their instructional methods. In their study of three teachers using a problem-based inquiry multi-media unit, Brush and Saye (2006) found that teachers' individual beliefs and dispositions may cause them to respond differently to curricular obstacles. Anderson and Cook (2014) studied two teachers developing a unit plan that involved differentiation. The student-centered strategies took longer to create, so the teachers abandoned the unit plans in favor of more teacher-centered instructional methods because of the challenges and stresses of covering an overwhelming amount of content in a limited amount of time.

The teachers in DeWitt's 2007 study also cited the curriculum as a barrier to using technology. DeWitt's study concerned the digital divide between students tracked for college and those who were not. Classes that contained college-bound students did not receive as many computer-based assignments. The teachers assumed that the college-bound students needed lecture-based or teacher-centered instruction because they "had more stuff to cover, …and could not sacrifice time on the computer" (DeWitt, 2007, p. 300). The teachers observed by Anderson and Cook (2014), Brush and Saye (2006), and DeWitt (2007) all allowed the curriculum calendar to be a barrier to technology integration.

The Role of Training Teachers to use Technology

Hooper and Rieber (1995) defined five phases of teachers' use of technology: familiarization, utilization, integration, reorientation, and evolution. They found that most teachers never moved past the utilization phase. In this stage, technology is irrelevant. In fact, nothing would be different in the classroom if technology disappeared.

There is a crucial difference between integration and utilization. Integration requires that the teacher include activities that could not be attempted without technology (Hokanson & Hooper, 2004). Evolution involves integration. Here, there is less focus on the medium that students used and more focus on the learning taking place (Hokanson & Hooper, 2004). Shaver (1999) believes teachers do not use technology effectively because they feel inadequately prepared to be instructional technology users. Training, or "effective professional development, may be the key to providing teachers with the knowledge and support needed to integrate technology more fully into their instruction" (Kopcha, 2012, p.1119).

Practice and reflection are essential elements of professional development. Bolick created a professional development session that turned teachers into students of history. The teachers went through a multi-media lesson, just like their students. As a result, they experienced the same excitement, frustration, and elation that their students might feel. They found that the construction of this assignment "provided a more open, constructivist, and democratic learning environment than one that is a teacher- and- knowledge centered" (Bolick, 2006, p. 132).

Debele and Plevyak (2012) studied 33 cases of technology-assisted projects to understand the alignment of technology and content. Many of the teachers they studied worked with a researcher who guided their goals for content and technology. The study found that teachers need to be "introduced to the what and how, but also to the kinds of learning outcomes that can be achieved through the blending of content with technology. The successful teachers were the ones with clear expectations of what they hoped to achieve with their projects.

There is also a concern that teacher educators do not prepare preservice teachers to integrate technology with content. Lipscomb and Doppen (2002) developed a framework for technology integration for preservice teachers. They then studied how the teachers used that

framework. Yet, the preservice teachers did not feel like they had enough background to merge technology with content even with this scaffold. According to Lipscomb and Doppen (2002), colleges need to offer an entire course based on integrating technology to provide students with models on which to base their teaching. Educational technology courses will give these new teachers more confidence in their content and technology knowledge, which will help them be stronger novice teachers.

Not all technology training for teachers is equally valuable, however. Van Fossen (2001) argued that teachers do not want "one shot one half-day workshops" that do not have any meaningful follow-up (p.70). Teachers want an expert or mentor for feedback and to help monitor their growth. Kopcha's (2012) study of a technology integration mentor program aligns with VanFossen's viewpoint. In this two-year program, teachers attended professional development and worked with a campus-based mentor. This interaction allowed them to bounce off ideas and receive feedback from an expert. Kopcha noted that this program changed the mindset of many of the teachers about technology. People who were closed off and did not promote technology in their classrooms now had positive feelings about using digital devices. Overall, the mentor helped create a community of practice that had a long-term impact on teaching and learning (Kopcha, 2012). Multi-year observations found that students of the mentored teachers were more engaged in problem-solving and critical thinking than the students of teachers who were not part of the program (Kopcha, 2012).

Not only do teachers need to practice technology integration, but students need opportunities to be responsible for their own learning. However, they, like their teachers, students find themselves unprepared for technology. Green, Bolick, and Robertson (2010) studied high school students in hypermedia learning environments using self-regulated learning.

Growth was hard to measure because the students had issues with the process and needed more experience (Green, Bolick, & Robertson, 2010). there should be opportunities for students to enhance the skills needed in technology-based learning environments to judge the impact on learning thoroughly,

The Use of TPACK and SAMR by Social Studies Teachers

Case studies by Beeson, Journell, and Ayres (2014); Hilton (2015); Sheffield (2017); Van Varenewyck, Shinas, and Steckel (2017); and Harris and Hofer (2011) involved teachers who used a theory or model to guide their integration of technology. The researchers explored the teacher's use of the TPACK and SAMR. TPACK, or Technological Pedagogical Content Knowledge, is the creation of Punya Mishra and Matthew J. Koehler. The goal of TPACK is to explain the critical interaction between teaching methods, lesson content, and technology that maximizes the opportunity for student learning (Mishra & Koehler, 2006). Dr. Ruben Pentedura developed SAMR or Substitution, Augmentation, Modification, and Redefinition. This model "supports and enables teachers to design, develop, and infuse digital learning experiences that utilize technology" (Shrock, N.D.).

Beeson, Journell, and Ayers (2014) studied the use of TPACK by two teachers in a one-to-one laptop environment. The framework provided the opportunity for the differences between the teachers to come to light. TPACK develops over time. It is not intuitive, and teachers need to be versed in technology's how and why (Beeson, Journell, & Ayers, 2014). Hilton (2015) completed a study comparing teachers using both the TPACK framework and the SAMR model. The two teachers preferred the TPACK model as more teacher-friendly than SAMR. "It is more useful when considering how to incorporate technology into learning that is already strong pedagogical and content-wise" (Hilton, 2015, p.72).

Van Varenewyck, Shinas, and Steckel's (2017) observations of a high school history teacher align with Hilton's findings. While demonstrating TPACK, the teacher "situated learning experiences that provided her students with authentic opportunities to develop content-specific language and literacies" (p.171). Sheffield (2017) also finds TPACK to be a reliable tool for teachers, as TPACK trains teachers to know how to use technology and teach in their specific field (p. 303).

Harris and Hofer (2011) looked at TPACK differently. Their study examined the effect of TPACK training on seven social studies teachers' instructional planning. The results were positive in many areas. Teachers made a conscious, strategic decision when addressing how to deliver content. The teachers "used technology to intellectually, rather than effectively, engage their students" (p. 222). Harris and Hofer found that teachers used digital resources to extend students' learning and, as a result, the depth of learning increased. The use of TPACK and SAMR are essential, as their use may provide more critical civil learning opportunities for students (Beeson, Journell, & Ayers, 2014, p. 126).

The Madeline Hunter Model: Development, Criticism, and Legacy

The Madeline Hunter Model came to fruition in the 1970s when the teacher preparation program at UCLA asked Hunter to create a new system to prepare future educators. Hunter's education in psychology and her years of experience as an elementary principal were created in her interview with Brandt. In the model. The result is a series of six steps designed to maximize instructional time and student learning. Hunter made the seven-step model to guide teacher decision-making as Hunter felt that teaching is a "constant stream of decisions " (Brandt, 1985, p. 61). Hunter felt that the instructional decisions made by teachers affect the transfer of

knowledge for students. Her model focuses on what students will be learning and how they will be doing so.

The main idea of the Madeline Hunter Model is effective instructional planning. Hunter believed "that it took four times as long to plan a good lesson that it did to teach it" (Burris, 2014, p. 5). Instructional plans must include goals for the learner. The focus of the goals is "of what students know now and what they are next ready to learn" (Hunter, 1984, p. 170). Goals or objectives are "the what" of student learning. The steps that the teacher includes in the lesson should help the learner meet the instructional goal. Hunter (1987) contends that instructional activities should consider the students' learning expectations and how the students will demonstrate mastery of learning. (p. 52).

Hunter (1976) placed great importance on lesson planning because "time is the coin of teaching" (p.163). The activities of the lesson are "how" students will learn and demonstrate mastery of the goal. To best spend the coin, instructional activities should help students reach the learning goal or objective. Hunter (1976) felt that "the how" or the instructional exercises are to "influence a student's motivation to learn, increase the rate and degree of learning, promote retention of learning, and encourage the transfer of learning to new situations" (p. 165). Teachers must be willing to make adjustments while instructing to make the best use of instructional time. Master teachers "monitor and adjust based on the observation of student learning" (Burris, 2014, p. 5). Activities cannot be too easy or too hard for students. Activities that do not match students' abilities result in "little motivation to continue" learning (Brandt, 1985 p. 61).

As the Madeline Hunter Model grew in popularity, so did criticism of the model. The complaint stemmed from the model's origins, the perception that the model favored direct or

teacher-centered instruction, and the lack of research to back up Hunter's claims. In addition, critics did not feel that Hunter acknowledged the model's relationship with the work of Johann Friedrich Hebert and behaviorism theory. When reviewing the steps of the model, Hunter's critics found the steps created a model of instruction that was more teacher-centered than student-centered. Finally, educational researchers took significant issue with Hunter when they failed to find studies or actual instances that supported her claims that her models would improve student learning.

Educational researchers had an essential issue with the Madeline Hunter Model because it was not Hunter's unique or original idea. Critics of Madeline Hunter traced her steps back to German philosopher Johann Freidrich Hebert. Ramsay (1990) found that the roots of Hunter's creation are Herbartian methodology or step-by-step instructional practices (p. 476). Hebert's steps include preparation, presentation, association, generalization, and application (Britannica, 2021). Hunter's steps of Objective, Anticipatory Set, Input, Modeling, Checking for Understanding, Guided Practice, and Independent practice contain the exact "fail-safe mechanisms in Herbatian methodology" (Ramsay, 1990, p. 477). Both Herbert and Hunter included lectures in their models due to the "premise that students are less likely to forget and misunderstand lectures" (Ramsay, 1990, p. 477).

After studying Hunter's model, many critics began to express their concerns over the inclusions of behaviorism philosophy. The traces of behaviorism caused doubt that the use of the model would improve student outcomes based on learning. Instead, critics felt that the results stemmed from students conforming to the wants of the teachers. Larry Cuban (2019) wrote that one of the reasons for Hunter's abandonment by education was its "neglect of student choice and the behaviorist cast to teaching." Ramsay found Hunter's method to have the goal of "students

providing answers rather than thinking about the questions" (1990, p. 484). Gibboney (1987) found the model to be "unintellectual and mechanical" (p. 50). The concerns about behaviorism by Cuban, Ramsay, and Gibboney stem from Hunter's discussion on the reinforcement of particular behavior of students.

After analyzing the Madeline Hunter model, critics found that the model encouraged teacher-centered instructional practices over student-centered practices. Cuban calls Hunter's steps "a map for a teacher-directed class" (Cuban, 2019). Ramsay believed that Hunter wanted "her teachers front and center to lead students to their highest potential of learning and living" (1990, pp. 480-481). However, Gibboney found that the methods espoused by Hunter focused on the technique of teaching rather than learning. He went further and stated that the methods used to train people in the Hunter method were "didactical" and "required fast recall" over "intellectual thought" (Gibboney, 1987, p. 48).

During the 1980s and 1990s, Gibboney and Ramsay shed doubt on the effectiveness of the Madeline Hunter Model. A chief concern about using the model for Gibboney was Hunter's inability to provide any research that supports that the method improves student learning (1987, p. 47). He could not find a study that showed that the model actually "cultivates thought" from students (Gibboney, 1987, p. 48). When researching Hunter's writings, Gibboney found "no mention of thinking" about the transfer of knowledge (1987, p. 48). Ramsay faulted the Madeline Hunter Model for its failure to include student inquiry. Guided practice only exercises "the information-stacking skills of students" (Ramsay, 1990, p. 484. Hunter was way too focused on "correcting student mistakes" rather than "disabusing them of their misconceptions" about the topic. (Ramsay, 1990, p. 484). Ramsay's biggest complaint is that Hunter never explains how "learning chunks of information" leads to higher-order thinking for students (1990, p. 485)

Hunter personally responded to her critics. In her responses to Gibboney and other critics, Hunter included results of California schools where the staff had undergone training using her model. Project Linkage was a study at an inner-city school in Los Angeles. Not only did Hunter note that vandalism and discipline issues lessened, but "students doubled and in some cases quadrupled their previous learning gains" on testing (1987, p. 51). The Hunter model was also part of a Napa County Unified School District study in the 1980s. The result was a rise in student attentiveness and higher scores on tests (Stallings, 1985). The Madeline Hunter Model helped teachers "gain feedback as part of formative evaluation regarding individual students' off-task behavior" (Stallings, 1985, p. 337).

Hunter also defended her model against those who argued that it did aid in the develop higher-level thinking skills in students. Hunter felt that curriculum and instruction both helped "to develop creative problem solvers and responsible, productive decision-makers" (1987, p. 53). In 1985, Hunter argued that her method included building students' critical thinking skills in her interview with Brandt. However, Hunter emphasized that students have to have foundational knowledge before employing higher-order thinking skills (Brandt, 1985, p. 62). In the end, Hunter felt that if utilized correctly, her model could turn the classroom into "a launching pad from which creativity can soar " (Hunter 1985, p. 58).

Part of Hunter's legacy is manipulating her steps into an object outside her original intent. Instead of being a tool to help teachers improve their skills, the model was used to create punitive teacher evaluation tools during the later part of the Twentieth Century. In 1991, Hunter blamed her coaching model becoming an evaluation tool checklist squarely on school administration (p. 28). The design of the steps aided in the ability to "pinpoint problems and help get teachers towards excellence," not for a formal evaluation or rating of teachers (Hunter, 1991,

p. 58). After she died in 1994, the Madeline Hunter Model "fell out of favor and nearly disappeared" in school systems (Cuban, 2019).

New eyes are giving the Madeline Hunter Model a second glance as a means of "coaching teachers and accelerating their learning" (Gurksy, 1991). In 1998, Wolfe used brain research to validate the Madeline Hunter Model (p. 61). Hunter's inclusion of an anticipatory set "to set the stage for learning" aligns with "the research on the attentional mechanisms of the brain" (Wolfe, 1998, p. 61). In her descriptions of her steps, Hunter justified including opportunities for students to recall previous knowledge. Options such as anticipatory sets force students to access stored information in various locations throughout the brain. Thus, additional pathways are built in the brain each time the learners access specific data (Wolfe, 1998).

Wolfe (1998) and Burris (2014) agree that one strength of the Madeline Hunter Model is that she based the model on her observations of effective teaching practices. Hunter then turned her observations into "practices that teachers could use to inform instruction" (Burris, 2014, p. 5). Wolfe found that it should "be no surprise that science justifies Hunter" as she observed teachers "who obtained good results in learning" (1998, p. 64). Hunter felt that teachers should view the steps as an idea of what instructional opportunities to include to bolster student learning outcomes. A great teacher is one "who could monitor and adjust based on the observation of student learning" (Burris, 2014, p. 6). Hunter wanted to improve students' education experiences, but she also wanted to help teachers become more intelligent when it came to effective teaching practices (Hunter, 1985).

As lesson plans are the "meat and potatoes" of education, the Madeline Hunter Model has made a reemergence (Cuban, 2019). The non-profit education organization, Computer Using Educators or CUE, held workshops and professional development sessions on using the

Madeline Hunter Model to integrate technology into instruction in 2017, 2018, and 2020. Matt Miller is an educational blogger, author, and speaker who attended a CUE in 2017 on using the Madeline Hunter Model with technology. His experience inspired a blog post describing the conference attendees creating digital lessons that include Hunter and innovative ways to have students learn content. Miller contends that a "new twist on an old idea can give us the spark of inspiration that we need" (2017). Madeline Hunter would probably be delighted to know that her model is being used to help educators improve their teaching.

Closing Thoughts on Chapter II

The access and availability of digital tools for instruction have grown since the latter part of the twentieth century. Quality integration has not shown the same rate of growth. The failure to use technology can no longer be blamed on not having access to computers or a good Internet connection. Budgets should reflect efforts to train faculty and other school personnel and keep buildings current, as "no contemporary school district, can reject the cost of new technology without being labeled Neanderthals" (Cuban, 2018, p. 99).

Because of the expenditure in funds and human resources, technology must be used to its full potential. Teachers are responsible for developing lessons that integrate technology. The task of improving digital literacy is critical for social studies teachers. Students should be taught how to evaluate sources both in books and on their screens. Computers, software, and other tools should "expand into a teacher's familiar array of teaching tools… so "that they know when, where, and how to use tools to achieve their lesson's objectives" (Cuban, 2018, p. 32).

CHAPTER III

SOLUTION AND METHOD

Outline of the Proposed Solution

In March of 2020, many aspects of the field of education changed due to the Covid-19 Pandemic. Efforts to reduce the spread of the virus impacted the delivery of instruction for both teachers and students. The situation in Lovett ISD is no exception. Due to the new responsibilities placed upon educators to navigate the world of teaching both in-person and online simultaneously, the professional learning department streamlined training programs to focus on navigating the district's learning management system. The delivery of professional development has also changed. The majority of the training is self-directed modules on best practices with the district's learning management system. It is unclear how training will look in Lovett ISD in the future. During the summer of 2021, secondary social studies professional development sessions were self-paced modules housed in the Lovett ISD learning management system. This change and uncertainty have significantly altered how I originally planned to conduct my study.

My original plan was to conduct my study using a mixed-methods explanatory design. Due to changes related to Covid-19, Lovett ISD stopped having in-person professional development from Spring 2020 through the summer of 2021. The district utilized self-paced courses to meet the professional development needs of teachers. I did not feel that this format would be the best for the HyperDocs training. I had serious concerns about the validity of my results if the study contained a self-paced online module. In my eyes, the impact of in-person professional development would not be the same as a session held in an online, self-paced environment. When designing the training, one of my aims was to build a community of social

studies teachers using collaborative instructional tools such as Padelt and peer support. Training conducted in a self-paced manner would remove the opportunities for the teachers to work together.

Online training is necessary to facilitate both restrictions due to Covid-19 and professional development requirements. However, using a self-paced module professional development will not provide the same results as having the participants' experience the training in person. Instead, I will be evaluating my training program using information from my literature review and literature about professional development and lesson implementation. Considering my proposed training session using established research has merit. First, it will allow me to show how my plan effectively addresses issues found in my research. Second, it will let me see areas of improvement to improve the effectiveness of my training plan.

My solution to help social studies teachers build lessons that promote technology integration was to hold a professional development session over HyperDocs. The session aids secondary teachers in aligning their instructional practices with Lovett ISD's guiding documents, *Profile of a Leader, Profile of a Learner,* and *High-Quality Teaching.* HyperDocs is a robust instructional tool for both students and teachers. In one-to-one environments, HyperDocs allow the use of instructional technology at its fullest potential. An additional strength of HyperDocs is the opportunity to expose students to both primary and secondary sources. Finally, HyperDocs allow teachers to develop rigorous learning activities by mixing technology, content, and student choice.

A HyperDocs lesson contains seven sections: Engage, Explore, Explain, Apply, Share, Reflect, and Extend. The Engage section serves to hook students' interest to the topic of study. Teachers should include a video clip, political cartoon, or any type of thought-provoking visual

in the Engage section. For the Explore section, a teacher should provide different sources that allow students to explore topics. A variety of sources that include texts and graphics is included in the Explore section so that students can choose the source that best interests them. In the Explain section, students receive content directly as a whole class. Teachers can employ a web-based instructional tool or a traditional teaching method. The Apply section allows opportunities for students to use what they have learned to create a digital product. The final creation of the students should reflect the lesson's objective. Students will be able to view the work of their classmates in the Share section. This step allows students to share what they learned and receive feedback from both the teacher and their peers. An opportunity for students to reflect on their learning is in the Reflect section. This section helps students visualize their knowledge and makes new goals or plans for future learning. Finally, the Extend section serves as enrichment for students as it provides opportunities to explore more about the lesson's topics.

At the beginning of the session, I will tell the participants that the session is for research purposes and that any responses and materials collected will remain anonymous. My introduction will include background information about my study and goals for the professional development session at the training. The first part of the training will comprise collecting demographic data through a Google Form about the participants. At the end of the survey, attendees will share an activity they have used in their class that they feel best integrates technology with the social studies curriculum.

The HyperDocs training will begin after the survey. To best understand how a HyperDoc works, teachers need to go through one on their own. According to Dr. Rich Allen's *Train Smart* (2008*)*, five pillars are the basis of the training session. These are engage, frame, explore, debrief, and reflect. For the "engage" section, the participants will view an image of what a

Hyperdoc is and answer reflection questions. In the "explore" section, participants will have the option to read articles, watch a video, or listen to a podcast about HyperDocs. After this, the participants will reflect again on using HyperDocs in their classrooms. To meet the "explain" element, teachers will either record a video response defining Hyderdocs or create an image in Google Draw. The "apply" section will have teachers create a Hyperdoc lesson. Participants can use Padlet and Schoology to share their Hyperdoc lessons. In the final reflection piece, the teachers will complete a checklist to grade their Hyperdoc.

Justification of the Proposed Solution

HyperDocs are an instructional tool that can have a positive effect on social studies instruction and student learning. According to Highfall, Hilton, and Landis (2016), "HyperDocs shift the focus from teacher-led lectures to student-driven, inquiry-based learning, allowing students to learn through exploration" (p. 8). This strategy prevents the mere transfer of a low-quality worksheet to a digital medium by including personalized learning, flexible grouping, collaboration, project-based learning, inquiry learning, blended learning, and innovative learning spaces.

Highfall, Hilton, and Landis (2016) created HyperDocs to meet Webb's Depth of Knowledge (DOK) chart in level four (extended thinking), the SAMR method, and ISTE standards. Webb's DOK chart moves from Level 1 (Recall and Reproduction) to the more complex Level 4 (Extended Reasoning). In this level, Webb (2002) states that work completed by students should be very complicated and require applying significant conceptual understanding and higher-order thinking (para 27). Lessons contain carefully planned steps based on a template that includes the fundamentals of effective lesson design (Highfall et al., 2016). The lesson's sections are engage, explore, explain, apply, share, reflect, and extend. They

give students instructions and embedded links to locate information. HyperDocs pique a student's interest through inquiry and interaction with a variety of source material. HyperDocs create historical reasoning skills by providing students with opportunities for choice and research.

Training is an ideal way of introducing teachers to HyperDocs. Professional development, or continuing education, requires both Lovett ISD and the State Board of Educator Certification (SBEC). Lovett ISD's audit included a recommendation to improve the use of technology in the classroom and implement "professional development for teachers and all staff with a method for evaluating effectiveness and changes for student learning" (Texas Curriculum Management Audit Center, 2017, p. 411).

Both the rubric and professional development sessions that I have created respond to this recommendation. Workshops or mini-classes can introduce teachers to an instructional strategy and give them time to practice with it. According to Sparks and Loucks-Horsley (1989), training is staff development that allows "a trainer to select activities that will aid teachers in the achievement of the anticipated outcomes" (p.48). The training not only introduces teachers to the benefits of HyperDocs, but "has the potential for significantly changing teachers' beliefs, knowledge, behavior, and the performance of the students" (Sparks & Loucks-Horsley, 1989, p. 49).

Allowing teachers to create their own Hyperdoc is a critical part of the training. In his book, *Train Smart* (2008), Allen states the importance of learners applying new knowledge to demonstrate its validity or usefulness. Creating a personal lesson allows the attendees to have involvement in the learning instead of just hearing about it (Allen, 2008). The participants can share the lesson, which can lead to collaborations that benefit both teachers and students.

I planned to use a rubric rather than a survey to collect quantitative data because my goal was to create an artifact that supports teachers while not costing additional district funds. The rubric is a measurement instrument familiar to teachers. Teachers also are scored with rubrics on the T-TESS evaluation system every year. My use of ISTE standards to create the rubric is crucial, as the aim of those standards is to integrate content and technology with 21st-century skills. Due to Covid restrictions, the scope of the evaluation has changed. My study now uses the Madeline Hunter Model, ISTE Standards, and the SAMR framework to evaluate the HyperDocs professional development lesson plan. While the rubric was not part of the evaluation, it remains part of the materials for the session.

Study Context and Participants

The objective of this study was to provide social studies teachers with a professional development session that will demonstrate a sound instructional method that facilitates the integration of educational technology, 21st-century learning, and content. Due to Covid 19 restrictions, participants of the study have changed. Instead of using the rubric to evaluate teachers' lessons, the Madeline Hunter model assesses the professional development lesson plan itself. In addition, to meet the training's objective to improve technology integration in social studies classrooms, I evaluated how the HyperDoc training aligned with ISTE Standards and the SAMR framework (See Appendix D and E).

Proposed Research Paradigm

To prepare a research proposal, individuals "need to make explicit the larger philosophical ideas they espouse" (Creswell & Creswell, 2018, p.5). An individual's worldview or paradigm develops based on their experiences. These feelings or "beliefs often lead to embracing a strong qualitative, quantitative, or mixed-methods approach in their research"

(Creswell & Creswell, 2018, p. 6). Determining which research method to follow is based on what and how that individual wants to study. Because of what I experienced as a teacher and studied as a student, my study of social studies and technology integration will incorporate a pragmatic worldview. My original plan was to conduct my research using mixed methods because mixed-methods researchers bring a worldview to their inquiry that they base on their "beliefs and assumptions about knowledge that informs their study" (Creswell & Plano Clark, 2018, p. 35). Due to Covid restrictions and validity concerns about conducting the study online, I evaluated the HyperDoc professional development using the work of Madeline Hunter, ISTE Standards, and the SAMR Framework.

The goal of my research was to improve how social studies teachers use technology with their students. Pragmatism fits my purpose, as this view focuses on the primary importance of the question asked rather than the methods used (Creswell & Plano Clark, 2018). I find it a severe problem that technology is not integrated in a manner that promotes digital literacy. I hope that my professional development session will help participants create better teaching experiences for the attendees and learning experiences for their students; I believe that my worldview is pragmatic.

Data Collection Methods

My course work and this study required me to analyze the literature relevant to my topic critically. Looking at the field of social studies related to technology integration revealed several areas of concern. First, social studies courses were behind other subjects when it came to technology integration. Next, teachers play a huge role in why social studies has not embraced technology instructional tools. Often this was due to the effects of high-stakes testing, lack of training, and certain beliefs that teachers held concerning technology. Third, the Internet has

opened up a whole new world with digital archives. However, navigating this new world and how to use these digital resources was an issue for many educators. Finally, teaching students how to evaluate websites and sources about current events and other social studies topics is crucial for teachers. Analyzing the problems found in the literature helped to lead me to the beginning of researching a possible solution to these issues.

An instructional tool that I encountered during a professional development session was HyperDocs. As I looked more into the history of educational technology and social studies, I decided that HyperDocs could aid teachers in creating learning experiences that utilize technology to replace pen and paper tasks. In addition, HyperDocs allow for and even encourage the inclusion of primary and secondary sources. Another strength of HyperDocs for social studies is that the lesson plan model provides opportunities to embed different resources, including articles, videos, and images. Finally, HyperDocs facilitate learning through digital means and provide an opportunity for students to use technology to demonstrate mastery of content.

To proceed forward, I had to explore more about the background of HyperDocs and look at real-life examples of their use in the classroom. One of the first resources I studied was *The HyperDoc Handbook* by Highfill, Hilton, and Landis. The handbook provided the background information about why the authors created HyperDocs. In addition, Highfill, Hilton, and Landis detail how to construct each step of the lesson and how to best have students complete the task in a manner that marries content with technology skills. Finally, to see how teachers used HyperDocs, I looked at the lesson examples provided on Highfill, Hilton, and Landis' website and the models that teachers posted. These examples allowed me to see how different subjects and grade levels used the HyperDoc format.

My new knowledge about HyperDocs gave me confidence in an instructional tool that I wanted to use on my campus. I did not find many examples of HyperDocs to use with my students, so I created my lessons. I often would share these with teammates. In 2018, I led a professional development session for social studies teachers over HyperDocs. The session was less than an hour, but it provided excellent feedback for me. I knew that in the future, the session would need to be longer than an hour. Many of the teachers that attended spent most of the time looking at examples rather than creating a personal lesson. I needed to include more time for exploration and reflection to understand better how to develop and implement HyperDoc lessons. Also, many of the teachers were concerned about the quality of the lesson that they produced. Teachers need training on Hyperdocs, and they need the means to determine if their assignment met the needs of their students when it came to content and technology instruction.

I created a research plan in my mixed methods class that included an evaluation tool for my proposed solution. My original plan was to complete a survey and interviews to see if the teachers felt that my HyperDocs professional development helped them integrate technology with social studies content. My course instructor suggested that I create a rubric to determine if my solution offered an improvement. The reasoning was that the overall goal of showcasing HyperDocs was to help teachers create quality lessons that integrated technology. A survey would likely show opinions about HyperDocs rather than see if the professional development session improved technology-integrated lessons.

Rubrics measure the criteria or objectives of an assignment. For this study, the design of the rubric must include standards that measure the digital literacy skills included in a lesson. The learning targets or standards that I used are from ISTE Standards for Students. The background of these standards is to build both technology and twenty-first-century skills in students. The

creators of HyperDocs also studied ISTE Standards when developing their product to create an instructional tool that teaches content and digital literacy. Basing the rubric on ISTE Standards helps ensure that lessons integrate technology in a manner that allows for technology to be more than a substitution for a paper assignment.

The professional development session has the teachers using the rubric twice. First, the session requires that the attendees bring a personal lesson that they believe best integrates technology. At the beginning of the session, the teachers are to use the rubric to score their lesson. The result will show areas of improvement as well as current strengths in technology integration. Second, at the end of the session, the teachers use the rubric to score their newly created HyperDoc lesson. The rubric should show that their HyperDoc lesson is more aligned with ISTE standards than the lesson they first evaluated.

Due to Covid-19 restrictions, in-person professional development was suspended by the school district. Therefore, the evaluation of my professional development had to change. My chair suggested analyzing my professional development plan with a recognized and studied lesson plan format, such as Madeline Hunter. I researched the details of the Madeline Hunter Model to determine how Hunter's steps fit with the parts of HyperDocs. Luckily, Hunter was a prolific writer about the nuts and bolts of her steps. An aspect that better helped me understand Hunter's logic was the pieces she wrote that responded to criticism of her method. Hunter's defense and explanations better help me see the reasoning and logic behind her model.

The evaluation of the HyperDocs professional development session occurred using evaluation tools of The Madeline Hunter Model, ISTE Standards, and the SAMR Model. First, I created the charts found in the Appendix to aid me in analyzing how the parts of my session best fit with the evaluation tools. Not surprisingly, the sections of the HyperDoc lesson plan match

up with Hunter's steps (See Appendix C). Next, to meet my goal of improving technology integration, I described how the parts of HyperDoc professional development fit with both the ISTE Standards and the SAMR Model (See Appendix D and E). The use of Hunter's model, ISTE standards, and the SAMR model showed that the HyperDoc professional development is a sound lesson plan that encourages the development of lessons that properly integrate technology.

Justification of the Use of Instruments in Context

The rubric created for this study uses the ISTE Standards for Students to evaluate technology integration in lessons. ISTE standards guide educators to move their students towards 21st-century skills in their educational path. Rubrics are a standard evaluation tool that educators use. Using the rubric to score their lesson before the training reveals the teachers' strengths and weaknesses in technology integration. The teachers use the rubric again to evaluate the HyperDoc they created during the session. It also will uncover areas of weakness in lesson planning. Finally, the rubric offers teachers a way to test their technology integration lessons post-professional development.

To determine the effectiveness of the HyperDocs professional development session, I evaluated the lesson plan for the session using the Madeline Hunter Model. HyperDocs, like the Hunter model, focus on objectives and how students will demonstrate mastery of the lesson's aim (s). The design of each section of the professional development considered the best ways to educate teachers about the benefits of using HyperDocs. This part of HyperDocs is similar to Hunter's belief that the elements of a lesson should "influence the motivation to learn, increase the rate and degree of learning, promote retention of learning, and encourage the transfer of learning to new situations" (Hunter, 1976, p. 165). Hunter's goal for her model was to aid teachers in becoming more aware of effective teaching strategies (Hunter, 1976). Therefore, the

purpose behind the Madeline Hunter Model aligns with the purpose of the HyperDocs professional development session.

Data Analysis Strategy

I used the Madeline Hunter Model, ISTE Standards, and the SAMR framework to determine the effectiveness of the HyperDoc professional development lesson plan. I took several steps to accomplish this. First, I researched Hunter to develop an understanding of her model. Next, I analyzed Hunter's writings as well other pieces that were critical of her model. Then, I reviewed the ISTE Standards for students. Creating a solid knowledge base of these standards allowed me to better understand the best ways to integrate technology to build twenty-first-century skills in students. Finally, studying the SAMR framework allowed me to see how lessons can include technology to change how students complete tasks or parts of the lesson.

Closing Thoughts on Chapter III

This research study aimed to measure the effect of a professional development session on the integration of content with technology. The design of the Hyperdocs professional development considered the instructional needs of intermediate and secondary social studies teachers. HyperDocs allow instruction to blend technology with content to transform how students will demonstrate mastery of the lesson's objective. I used the Madeline Hunter Model to examine the effectiveness of the steps of the HyperDocs. Finally, I evaluated the HyperDoc professional development using ISTE Standards and the SAMR Framework to assess technology integration.

CHAPTER IV

ANALYSIS AND FINDINGS

Introduction

The format of the HyperDoc training for social studies teachers is a HyperDoc simulation for the attendees. Creating the workshop as a simulation allows the attendees (the teachers) to experience learning as their students would. The attendees will each have a digital training document (See Appendix B) to complete as the instructor moves the attendees through the training. HyperDocs include a series of steps similar to what one would find in many lesson plan cycles, including the Madeline Hunter Model. The purpose of this study is to analyze the HyperDocs training with the Madeline Hunter Model as an attempt to showcase the benefits of HyperDocs for social studies instruction.

The objective of this training is for the attendees to leave with a clear understanding of how to use HyperDocs to increase technology integration in social studies classes. ISTE has published standards for students in the area of technology skills. Each step of the HyperDoc training relates to various ISTE Standards. Part of the study includes an analysis of each step as it relates to the Substitution, Augmentation, Modification, Redefinition (SAMR) to showcase how HyperDocs aid in technology integration. At the end of the training, the attendees should leave with an understanding of HyperDocs and how to apply ISTE Standards and use SAMR to improve technology integration.

Anticipatory Set

In *Mastery Teaching,* Hunter defines two purposes of the anticipatory set. First, a warm-up or starting activity helps the learner focus their attention on the learning objectives. The

teacher is also allowed, with the anticipatory set, to diagnose or determine what the learner already knows (Hunter, 2004, p. 40). The Engage section of the HyperDoc allows for creating a starting activity that will fulfill both purposes. Designing an experience that embodies both goals is crucial to building learning from the beginning of the lesson. The main objective of the professional development session is to increase student engagement with technology in social studies classes. The activities created for the Engage section not only direct the session to its objective but also include an evaluation of what the participants know about technology integration.

The HyperDoc lesson created for the training session guides the teachers on improving technology integration in their social studies courses. A prerequisite of this training is for the teachers to bring a lesson that they feel best demonstrates ideal technology integration. Teachers are encouraged to bring a tried and tested lesson from their repertoire or one they hope to use with their students. During the first part of the Engage section, the teachers examine their lessons' effectiveness in integrating technology utilizing a rubric. The ISTE Standards for Students are the basis of the rubric. (See Appendix A) ISTE standards for students. The use of the ISTE standards allows for participants to engage with terminology related to educational technology expectations. The personal examination of the lesson by the teachers assists the traces in identifying individual strengths and weaknesses.

The design of this activity is not to tell teachers what they are doing incorrectly with technology integration. Instead, it serves as an experience that will help them focus on improving technology integration. The teachers will compose a statement that includes something their lesson did well and improvement areas to end this section. These statements will be available to all participants via a Padlet that is open to all participants. Experiencing this part of the lesson

like a student allows the teachers to see that an anticipatory set is an essential part of the learning cycle and HyperDoc lesson.

Once the workshop attendees (the teachers) finish sharing their statements on the Padlet, they begin the first activity on the HyperDoc training document (see Appendix B, Engage). Participants use one of the four sources provided on the training document to explore the specific details about HyperDocs. The goal of this activity is for the participants to start thinking about how HyperDocs would look in their classroom. Once they have finished reading their choice of source, the participants will ponder how HyperDocs would look like for students, the whole class, and themselves in their classroom on their training document.

The two activities included in the Anticipatory Set help start the session with the correct use of ISTE standards and the SAMR Model. The process of the participants rating their lessons using the rubric is an example of the ISTE standards of critical thinking and research and information (See Appendix D). Composing a statement about their areas for improvement allows for the inclusion of the Communication and Collaboration standard. The Anticipatory Set (found in the Engage section of the Hyperdoc) employs the SAMR level of Augmentation. The use of Padlet is replacing pencil and paper without altering the task (See Appendix B, Engage). Participants can easily add their statement to the Padlet wall and, within seconds, share it with the whole room. The second activity meets the ISTE Standard of Critical Thinking and Research and Information Fluency as the activity has the participants critically read digital sources and brainstorm answers to the provided questions. The SAMR level is Substitution as the technology tool replaces a pencil and paper activity with no modifications.

Both Madeline Hunter's Model and Hyperdocs stress the importance of starting the lesson with an activity that engages or "hooks" the learner. The writing of the statement about

strengths and weaknesses in the HyperDoc training in the Engage section helps to "move material into long-term memory" as well as "facilitate the acquisition of that day's learning" (Hunter, 2004, pp. 39-40). The professional development session's objective (increasing technology integration) was considered during the creation of the Anticipatory Activities. After completing both activities, the session attendees should have a clear picture of the objective.

Objective

Per Hunter (2004), the instructor has two things to consider when drafting an objective for a lesson. First, what does the instructor want the learner to know. Second, the instructor should consider how the learner will show mastery of the required content. After considering both of these items, the instructor can develop a clear, reachable objective for the lesson.

The "what" of expected learning uses various input modalities (Hunter, 2004, p. 6) or the sources of the information included in the lesson. The lesson's content or sources considers the objective and the desired skills that the learners should gain from the instruction plan. Hunter (2004) stresses that learner-centered lessons contain a variety of sources. The learning objective of this professional development lesson is to increase technology integration in social studies instruction through HyperDocs. The materials included in the HyperDoc training session include readings, recordings, and videos. The variety of sources allows the learner to choose sources that best fit their learner style while exposing them to other resources to use when planning their HyperDoc lesson.

The second part of the objective to consider is the "students' output" when completing the lesson. Hunter proposed that this part of the objective should "demonstrate acquisition of knowledge" (2004, p. 7). The instructor should plan a lesson that focuses on how students show mastery and what to do when students do not demonstrate mastery (Hunter, 2004, p.7). At the

end of the professional learning session, the participants are to submit a HyperDoc lesson. The instructor should be monitoring the participants during this process and offering feedback as needed. If they see someone who is struggling, there are resources available to help. Also, working with other participants and looking at more examples will help the learner better understand how to create a HyperDoc lesson.

The training session's objective was kept in mind when designing the activities of the HyperDoc training. In the first activity of the Anticipatory Set, the attendees began evaluating a lesson to determine how their students are using technology to learn content. The second activity of the session (See Appendix B, Engage) has the teachers defining HyperDocs and asking questions about them. The Input and Modeling section (See Appendix B, Explore) allows the teachers to explore more resources to determine why they should use HyperDocs. In the Checking for Understanding and Guided Practice section (See Appendix B, Explain), the participants complete an activity demonstrating their understanding of HyperDocs. In Independent Practice (See Appendix B, Apply and Share), the teachers create their own HyperDoc and share their creations with their other attendees. The Closure section (See Appendix B, Reflect and Extend) has the teachers evaluate their HyperDoc lesson. This activity allows the participants to see what part of the goal they met and what they need to improve. The Extend provides even more resources for the teachers to explore HyperDocs. These activities were created by helping the participants use HyperDocs to enhance technology integration in their social studies instruction.

The first place that the participants encounter the objective of the HyperDoc training is in the course description. The instructor and the participants should review the objective at the beginning and throughout the professional development session. At the end of the training, all

participants will understand what HyperDocs are and how to effectively use HyperDocs in their social studies classrooms. Most professional development sessions include some type of survey or critique. Having a clear, understandable objective or purpose for the participants to determine if the training helped meet the objective. Focusing on a measurable output (creation of a HyperDoc lesson) is a sound instructional practice.

The objective of the HyperDocs training session is to help teachers increase their technology integration in their social studies courses. The organization of each element of the training session (See Appendix C) supports the learning expectations. The last activity helps the instructor know whether or not the attendee can produce a HyperDoc for their related social studies content area. If the attendees demonstrate mastery, the inclusion of additional resources creates an opportunity to extend learning. If the attendee needs help, additional support is available through feedback and further examples of HyperDocs (See Appendix B, Extend).

Input and Modeling

In the Madeline Hunter Model, input and modeling involve how the learner obtains information required for the objective. Input includes the vocabulary, skills, and concepts the participants need to know to meet the learning objectives successfully. Modeling is "demonstrating a process or showing a product that elicits a response from the students that shows understanding" (Hunter, 2004, p. 53). The Explore section of the HyperDoc (See Appendix B) is the Input and Modeling of the Madeline Hunter Model. The workshop participants will be learning more about HyperDocs through various sources to think about why they should use HyperDocs.

In *Mastery Teaching* (2004), Hunter stresses that teachers are responsible for organizing the input or the content that the student is to learn to communicate information effectively (p.

48). The first thing that the instructor should consider is what the students need to know and how to manage that information (Hunter, 2004, p. 48). The step of organization helps with retaining information and building upon knowledge. Hunter believes that there are multiple ways to organize information. In the end, the method of organization should "promote acquisition, comprehension, and retention of the relationships within the material or process" (Hunter, 2004, p. 48). Organizing the information in a meaningful way is crucial to building a solid foundation in learning.

The second part of the Input section of the Madeline Hunter Model considers the presentation of the information to the learner. Hunter stressed the importance of "presenting the information in the simplest, clearest, and most understandable way" (2004, p. 49). Significant consideration should be given to learners when it comes to explaining concepts, vocabulary, and themes. Hunter emphasizes that the instructor's language should also be very concrete (2004, p. 49). Whether it is an instructor or a video, the delivery of instruction should keep the learner's needs in mind.

Instruction is provided through Modeling. In Mastery Teaching, Hunter states that she devoted a whole chapter to modeling because crucial modeling is in the lesson plan cycle (2004, p. 65). Good modeling includes highlighting the essential combinations of attributes, avoiding controversial issues, being accurate and unambiguous, and eventually introducing non-examples. The instructor needs to model processes, products, and examples. Hunter also believed that often the instructor needs to model their thinking as an example. When it comes to new material for the learner, seeing how the instructor accomplishes the task will help the learner achieve the objective (Hunter, 2004, p. 65). In the end, it is up to the instructor to determine the appropriate type of modeling that ensures success for the learner.

The Explore Section of the HyperDoc lesson reflects the Input element of the Madeline Hunter Model (See Appendix C). The workshop attendees are given a choice in what source they will use and what activity they will complete (See Appendix B, Explore). For the Input, the teachers have the opportunity to watch videos, read articles or blog posts, or listen to a podcast to find out more information about HyperDocs. These provided resources offer the teachers a clear example of the best usage of HyperDocs in the classroom. The choice of resources allows the participants to develop their questions and thoughts about the benefits of HyperDocs in social studies instruction.

The final part of the Explore section has the learner listing three reasons why they should use HyperDocs. Due to the linking of various resources, the attendees can explore the topic independently before constructing their responses. This activity allows the instructor to walk around and talk to the teachers about their tasks. Using questions, the instructor can determine which attendees need assistance with the activity. Per Highfill and et al. (2016), the Explore section adds to student engagement and excitement about the topic.

Modeling of the Madeline Hunter Model occurs throughout the Explore section. Setting up the activity with different types of resources about HyperDocs shows the workshop attendees the different types of resources they can incorporate into their lessons. The resources themselves provide concrete examples of why teachers should be using HyperDocs. For instance, if the participants struggle with coming up with three reasons for the activity, example reasons are provided on the training document (See Appendix B, Explore). The instructor and the other attendees can also help struggling learners by sharing how they came up with their reasons to use HyperDocs.

The Explore section again builds on meaningfully embedding technology into instruction. Allowing the participants to pick from various resources to learn more about HypeDocs promotes the ISTE standard of critical thinking and research and information (See Appendix D). Providing the teachers with an opportunity to explore learning by choosing what to listen to, watch, or read includes the ISTE Standard of Technology Operations (See Appendix D). The Engage section creates an opportunity for the application of the SAMR model. It is at the modification level (See Appendix E) because technology redesigns the task. Without technology, the provided resources for the activity more than likely would have been printed copies of an article. Using a variety of digital resources is technology modifying how the learner interacts with the information. The Engage section continues to model how to effectively embed technology into instruction by reflecting ISTE Standards and the SAMR model.

The HyperDocs training includes the Input and Model section of the Madeline Hunter Model with the Engage section. The inclusion of additional resources allows the teachers to explore more examples of the workshop's desired outcome. The attendees have a choice of which resources they will use to complete the Engage Section. Completing the Engage Section with an element of choice allows them to develop their questions and thoughts in a guided manner. Per Highfill, Hilton, and Landis (2016), the design of the Engage Section continues to add to the learners' engagement and excitement about the topic. A digital discussion opportunity such as a Padelt or discussion board will help to further engage the teachers with the content.

In the HyperDoc Professional development session, Hunter's Input and Modeling occur during the Explore section (See Appendix B). The participants choose to read, listen or watch two items to learn about how to use HyperDocs. This feature of the training serves two purposes. First, the participants can choose how they will obtain the information. Second, the

participants are gaining the experience of what it is like to decide how to learn the material. After viewing the two items, the attendees list three reasons they should use HyperDocs as an instructional tool. The listing of the three reasons helps the participants begin to envision how to use HyperDocs in their instructional practices.

The Engage section again builds upon embedding technology in a meaningful way. Allowing students to pick from various resources to learn about the topic embeds the ISTE Standards of Critical Thinking and Research and Information (See Appendix C). Providing the attendees with an opportunity to explore learning by choosing what to listen to, watch, or read, involves the ISTE Standard of technology operations (See Appendix C). Applying the SAMR model to the Engage step of the HyperDoc training shows that this activity is at the modification level (See Appendix D). Technology is modifying the task (writing down the three reasons why to use HyperDocs) from paper and pencil.

In the Madeline Hunter Model, Input and Modeling are where actual instruction begins in the lesson. For the professional development session attendees, they will be learning more about HyperDocs through the activity at the Engage section. The resources aid the attendees in learning more about HyperDocs while providing concrete examples of how to best use HyperDoc with their students. The Engage section keeps the session focused on using HyperDocs to increase technology integration in social studies classrooms.

Checking for Understanding and Guided Practice

After Input and Modeling, the instructor checks the learner's understanding and offers guided practice with the material. The Explain section of the HyperDoc template is the best match for Hunter's Checking for Understanding and Guided Practice. For the HyperDoc professional development, the Explain section contains both the Checking for Understanding and

Guided Practice. The Explain section allows the instructor to check the comprehension of the attendees before moving to independent practice.

In the Madeline Hunter Model, Checking for Understanding occurs after the modeling of learning. The instructor pauses instruction to ask questions or provide another type of activity that will quickly check how well the students comprehend the material. If the instructor notices a consistency in student errors, such as demonstrating a particular step correctly, they can stop and reteach right away. According to Hunter (2004), Checking for Understanding allows the instructor to concentrate on what the students(workshop attendees) are not grasping. This check is not a formal assessment but an "on the spot adjustment" before Guided Practice (Hunter, 2004, p. 82).

In *Mastery Teaching* (2004), Hunter states that the purpose of the Guided Practice section is for learners to practice with the material so that it becomes "automaticity in their use" (p. 86). Huntern (2004) believed that effective guided practice would be short and designed around the objective. A lesson can have several examples of Guided Practice. Hunter felt that it was better to "chunk" or limit the Guided Practice to a single item, concept, or vocabulary word (Hunter, 2004, p. 87). Limiting the material and allowing mastery on a small piece creates a strong foundation for additional learning. The teacher must keep the objective in mind when designing Guided Practice for the lesson. The activity should match the "what" the teacher wants the student to know. Effective Guided Practice should contain small activities that keep the students engaged with the objective.

Check for Understanding and Guided Practice are found in the HyperDoc Training (See Appendix B, Explain, and Appendix C). The activity of the Explain section concentrates on the participants' understanding of HyperDocs. Leaner Choice is an embedded element of the Explain

section. The participants may record a Flipgrid video or complete a Google Drawing to explain or define HyperDocs in their own words (See Appendix E). This activity allows the instructor to walk around and talk to the teachers while they are working. Using questions, the instructor can determine if the students are on the right track or need reteaching.

The design of the Explain task allows the instructor to observe the participants' understanding of HyperDocs (See Appendix B, Explain) and therefore fulfills Hunter's Check for Understanding as well as Guided Practice. If there is an issue, the instructor can redirect the learner or offer assistance in understanding what HyperDocs are. The activity itself focuses on small responses to the expected learning. The goal of the training is to know how to use HyperDocs. Hyeofdocs usually involve the learner making a final product that demonstrates knowledge. The Explain section consists of creating a small digital product that reflects an understanding of HyperDocs.

The Explain section continues to provide examples of how to embed technology effectively into instructional plans. The use of student-made Flipgrids or Google Drawings meets the ISTE Standards of Technology Operations and Research and Information (See Appendix C). The ISTE Standard of Critical Thinking is fulfilled because the participants use posted materials to respond to what HyperDocs are. While this activity does involve students using technology, it is the Augmentation level of SAMR (See Appendix E). The recording of the video or the Google Drawing is simply replacing a pencil and paper task. Technology is not transforming the activity; just how the participants are demonstrating knowledge.

Before the learners can work independently, the instructor needs to allow the learners to demonstrate their current state of understanding the material. The instructor accomplishes this check by observing the teachers' responses to the Explain section. While the teachers are

completing their videos or making their drawings, the instructor should be walking around the room asking questions. The answers to the questions will help the instructor realize who needs help and be ready to move on to the next step of the training.

Independent Practice

After learning about HyperDocs, the workshop attendees need an opportunity to demonstrate what they have learned. The Apply section has the teachers creating their HyperDoc lesson as part of independent practice (See Appendix B). The Share section allows for feedback from the instructor and attendees. The instructor will offer corrections as needed while the attendees are independently creating their HyperDoc lesson.

Independent Practice is where the learner takes on an activity to demonstrate their understanding of the topic. Hunter (2004) felt that these activities should not only address the objective but "be free of direct supervision" (p.145). The instructor should have the freedom to be walking around working with struggling learners while offering limited guidance to others. The final product of these learning activities should reflect the lesson's objective or, in this case, the training. Another crucial part of learning for Hunter is "transfer." In *Mastery Teaching*, Hunter defines transfer as what "occurs when past learning influences the acquisition of new learning and is the basis of all creativity, problem-solving, and decision making" (2004, p. 134). Independent practice activities allow for the students to demonstrate their learning and mastery of the objective.

The Apply section of the HyperDoc allows learners to create a final product using what they have learned. The attendees are to make a HyperDoc that they can use in their classroom. The training is a simulation as the teachers go through a HyperDoc themselves. This simulation experience should "increase the probability that what was taught will transfer appropriately"

(Hunter, 2004 p. 138). The included templates on the digital handout provide various HyperDoc styles for the learner to choose from (See Appendix B, Apply). The inclusion of additional HyperDoc examples is further support for the teachers. The attendees may take one of these examples and edit it to fit their content or grade level needs.

One of the final parts of the HyperDoc template is the Share section. In this part, the teachers share their work from the Apply section. The knowledge that peers will be viewing their work is often a motivation for teachers to complete their work at a higher level or with more effort (Highfall et al., 2016, p. 86). Current digital products such as Google Documents or shared drives allow people to share files or work quickly. For this training, the attendees share their final creations on a Padlet. Sharing lessons also help build a stockpile of resources for social studies teachers to use with their students while providing opportunities for feedback.

The goal of this training is to increase technology integration in social studies classrooms. Several ISTE Standards are embedded when learners design products using technology tools. The Apply section allows for the inclusion of the ISTE Standards of Technology Operations, Research and Information, and Communication and Collaboration (See Appendix D). The tasks of the Apply section reflect the Modification level of SAMR (See Appendix E). Creating a HyperDoc represents a modified activity because the student task (creating a lesson) changes from paper to digital. Creating a final product of a HyperDoc allows the participants to develop a product that showcases what they have learned about technology integration.

The Share activity also includes elements of ISTE Standards and SAMR. They provide a place for students to share a link and comment on work that meets the ISTE standards of Technology Operations and Communication and Collaboration (See Appendix D). In commenting on the work of others, students practice the ISTE Standard of Digital Citizenship.

The Share section represents the Augmentation level of SAMR. Digitally sharing work and commenting on peers' work allows technology to transform or even improve the task. Typically, sharing would involve students presenting projects one by one with no one listening. The sharing of projects enables authentic reflection and feedback from the instructor and teachers attending the workshop.

Independent Practice is where the learner demonstrates how they are observing the material. When comparing the elements of Madeline Hunter's Model to the HyperDoc format, the Apply and Share section best matches Hunter's Independent Practice. In Apply, the attendees take what they have learned and experienced about HyperDocs and create their own. For the Share section, feedback is given by both peers and the instructor after the attendees share their HyperDoc Creation.

Closure

Whether it is a professional development session or class period, time for learning ends. Before dismissal, an opportunity is provided to the learners to "make sense of what was taught" (*Madeline Hunter Model,* (n.d.), p. 4). The Closure step of the Madeline Hunter Model allows for an opportunity to close learning through a brief activity. HyperDocs follow suit with the inclusion of the Reflect and Extend sections. Both sections will enable the learner to complete activities that aid learners in processing the knowledge gained from the training.

In *Mastery Teaching,* Closure is not a specific step of the Madeline Hunter Model. Closure or the ending of a lesson is an instructional activity created to "maximize learning time after the instructional activity" (Hunter, 2004, p. 122). Iowa State University published a document titled *Madeline Hunter Model* that offers information about Closure. This handout labels Closure as "a series of actions or statements to bring a lesson presentation to an

appropriate conclusion" (n.d., p. 4). The Closure is Hunter's means of aiding students in processing and organizing that day's learning. Activities designed for Closure should "review and clarify key points of the lesson, tying them together as a whole, and ensuring their utility in the application by securing them in the student's conceptual network" (*Madeline Hunter Model,* (n.d.), p. 5).

The Reflect section of the HyperDoc lesson allows for the learning to come full circle. In the Anticipatory training set, the participants evaluated their HyperDoc using the ISTE Standards Rubric (See Appendix A). As the teachers (attendees) conclude the training, they use another checklist or rubric to evaluate the HyperDoc they created in the Apply section (See Appendix E). By reviewing their product with the final checklist, the participants use Depth of Knowledge and the SAMR framework to evaluate their project. Highfall et al. (2016) recommend that the learners complete the evaluation step pre and post-instruction. By completing the second evaluation, teachers will learn what worked well and see what needs improvement.

After completing their reflection on the training handout (See Appendix E), the teachers share their thoughts digitally in a Wordle, Padlet, discussion board, or other digital formats. The Reflect section of the HyperDoc training meets the ISTE Standard of Communication and Collaboration (See Appendix D). Allowing the teachers to share their reflections digitally would meet the ISTE Standard of Technology Operations (See Appendix D). For SAMR, this section uses technology tools to enhance the outcome rather than transform the task. Improving a task using technology would make the Reflect section Augmentation (See Appendix E).

HyperDocs also create an opportunity for the inclusion of enrichment or extension in the Extend section. Including enrichment opportunities "requires students to extend previous learning or pursue new learning independently" (Hunter, 2004, p. 149). The training document

(See Appendix B, Extend) provides the workshop attendees with more HyperDoc examples and resources. If time runs out during the professional development session, the attendees still have access to the information to use at a time that is convenient for them. Including additional resources is a necessary element of HyperDocs as it builds upon the interest and engagement of the participants (Highfall et al., 2016, p. 103).

The Extend section also shows the participants an additional way to integrate technology to extend learning and build engagement. There is a limitless amount of resources available to teachers in the Engage section, including games, digital simulations, research opportunities, and more product development. The ISTE Standards and level of SAMR will depend on what the requirements are in the Extend session. The participants are provided with more resources to explore; it would be the Research and Information standard (See Appendix D). The SAMR framework would be Augmentation as technology is not used to transform student activity (See Appendix E).

Before the teachers leave the workshop for the day, they will develop a coherent picture of HyperDocs and their many uses (*Madeline Hunter Model,* (n.d.), p. 5). The inclusion of a reflection activity allows the attendees to evaluate their product and determine if they met the learning objective. The Extend section provides more examples for the attendees to explore to find more opportunities to use HyperDoc as an instructional tool. The end of the workshop does not mean that learning stops. Instead, the attendees should leave with a deeper understanding of HyperDocs and a desire to use them as an instructional tool.

Summary

HyperDocs are a powerful instructional tool that would greatly enrich social studies instruction. A benefit of HyperDocs is their lesson plan style format. In particular, the

Madeline Hunter Model is comparable to the design of HyperDocs. Like the Madeline Hunter Model, HyperDocs also allow teachers to receive guidance, feedback, and reteaching.

The objective of the training is to improve the usage of technology in social studies classrooms. The discussion includes ISTE Standards and the SAMR method to help analyze technology skills in each step of the lesson. Tying the steps to the ISTE standards allows an increase in teaching technology skills and a sound way to embed those skills. Applying each step to the SAMR framework demonstrates how HyperDocs improve student use of technology as a learning tool. The inclusion of the Madeline Hunter Model, ISTE Standards, and the SAMR framework show that HyperDocs are valuable for increasing content knowledge and technology integration in social studies classrooms.

CHAPTER V

DISCUSSION

Summary of Findings from Chapter IV

An essential component of this study is altering how social studies teachers implement technology in the classroom. The literature review revealed two main problems related to teachers using technology: training issues and teachers' beliefs. In the area of training, there was often no training or additional support offered post-training. Another common thread about teachers was that many were unwilling to embrace technology as they did not value it as a robust instructional tool. Therefore, the design of the HyperDoc professional development session was to instruct teachers on how to use HyperDocs and offer additional support to teachers and encourage a structured use of educational technology.

The basis of the study was the creation of a professional development activity to address the historical challenges social studies education has faced in the area of technology integration. The subject of the professional development session was HyperDocs. During the designed session, the teachers would undergo the activity as if they were students, thus experiencing the activity as students would in their classroom. This type of simulation allows educators to encounter what it is like to learn while completing a HyperDoc. In addition, a rubric provides feedback to the participants about their final creation.

Due to the lack of opportunity for in-person training for the last two years (effect of the Covid pandemic), the research focus for this study changed. Instead of testing a professional development sequence designed to increase the use of technology with a group of social studies teachers, I analyzed the steps of the HyperDoc lesson using the Madeline Hunter model. The actions of the HyperDoc lesson contain different names, but they do match and follow the

Madeline Hunter model (see Appendix C). Like Hunter, Highfill, Hilton, and Landis, the creators of HyperDocs, want to help teachers create lessons that focus on students "demonstrating what they've learned" (2016, p. 81).

Using HyperDocs, teachers employ technology in a manner that transforms how students learn. The steps and activities included in HyperDocs are considerate of the International Society of Technology in Education (ISTE) Standards and the Substitution, Augmentation, Modification, and Substitution (SAMR) framework. The design of the ISTE standards provides for students to gain and grow using technology and develop twenty-first-century skills. SAMR helps ensure that technology replaces traditional methods of task completion. Students use technology tools such as digital resources and tools to create products that demonstrate learning. Using both ISTE standards and SAMR generates tasks that will enable technology to transform the learning process.

My research questions included the following:

1) Can the HyperDocs professional development address the issues that social studies teachers have with educational technology?
2) Does the HyperDocs professional development model provide a viable example of using technology to transform the educational experiences provided in social studies classrooms?
3) To what extent does the professional development for HyperDocs provide a sound instructional model for teachers?

Discussion of Results in Relation to the Extant Literature

Can HyperDocs Address the Issues that Social Sudies Teachers have with Educational Technology?

The literature review revealed that historically social studies teachers have not openly embraced educational technology. Social studies teachers are reluctant to integrate technology due to several factors. There has been a lack of training as well as questions about how technology integration should look. This study does address the issues that social studies have had with educational technology.

In the 1990s, Charles White, Peter Martorella, and Phillip VanFossen found deficiencies in how social studies courses used technology. The problems encountered were different, but all agreed that social studies teachers were not on a path to embrace technology as a historical tool. White (1991) thought social studies teachers needed to adapt to technology as it could help better prepare students to become informed and engaged citizens. Martorella (1997) concluded that social studies teachers were not considering the possibilities of technology as an instructional tool based on his review of journal articles. VanFossen (1999 & 2001) reviewed conference proposals and offerings and found minimal professional development opportunities for social studies instructors, including technology integration. Even though these problems are different, training and encouraging teachers to use HyperDocs can help social studies overcome these historical issues.

White felt that social studies courses should embrace technology as a social studies tool to help students "understand social processes, how to use information, and how to interact in the social settings" (p.34). The training program can help social studies achieve White's goals for social studies instruction. The inclusion of the ISTE standards of communication and

collaboration aligns with White's belief that instructional technology should provide opportunities to develop social processes, use the information, and interact in social settings (1991, p.34). White predicted that a possible problem with technology integration would be that there would be too much information available for research or "infoglut" (1991, p.34). After the training, teachers will use HyperDocs to help with streamlining information since the instructor chooses the resources used by the students. The participants will leave the professional development understanding of how HyperDocs can strengthen social studies instruction through communication and streamlining resources for student information.

Like White, Martorella was deeply concerned about the future intersection of social studies coursework and instructional technology. Martorella's review of professional journals found that technology was anywhere but at the forefront of social studies curriculum development. The HyperDocs training and the subsequent use of HyperDocs as an instructional tool aided in solving several of Martorella's problems. Using national standards from ISTE and the SAMR framework aid in HyperDocs provides teachers with an instructional model to develop social studies curriculums that appropriately embed technology.

Providing training that is beneficial to social studies teachers corrects the problems found in professional development offerings by VanFossen. A significant issue for VanFossen was that little to no training was offered on how to use instructional technology for social studies teachers. This professional development not only corrects VanFossen's findings but also creates a professional development session that focuses on developing lessons that build students' digital literacy. HyperDocs include VanFossen's indicated best practices for teachers to use technology effectively (1999 & 2001). In addition, the HyperDoc training creates an experience for teachers to the lesson as a student. By going through the steps of the HyperDocs, teachers gain exposure

to how to use different digital tools for instructional input and output. This opportunity to integrate technology through HyperDocs will transform instruction and learning in social studies courses.

Volger and Virtue (2007) and Au (2009) found that high-stakes testing led to more teaching-centered lecture and fact memorization practices. Students spend less class time on "inquiry learning and critical analysis because of the content demands of the tests" (Au, 2009, p. 48). The professional development over HyperDocs provides teachers with a tool that aids in creating a lesson that is teacher-centered instruction. The inquiry method is the basis of Hyperdocs. When creating a HyperDoc, the teachers use instructional strategies that are a "student-centered, hands-on, and minds-on approach to learning" (Highfall et al., 2016, p. 15). The learning activities are to build student interest and curiosity. There is a move away from direct instruction as "students rely upon their observations and investigative questioning to learn content" (Highfall et al., 2016, p. 15). Teachers learning how to use HyperDocs furthers their ability to create learning experiences that stop "fragmented bits of knowledge" (Au, 2009, p. 46).

Does the HyperDocs Professional Development Model provide a Viable Example of using Technology to transform the Educational Experiences provided in Social Studies Classrooms?

A vital issue raised by the literature review was that social studies teachers did not use instructional technology to alter students' classroom experiences. I evaluated if the HyperDocs professional development could change how social studies teachers use technology in their lessons to investigate this issue. I found that teachers need training on the best ways to share digital resources with students. The study showed that the HyperDocs training provides teachers with a concrete example of using technology to transform the educational experiences provided in social studies classrooms.

The HyperDocs training for teachers will transform how social studies courses use educational technology. More opportunities to incorporate personalized instruction, flexible grouping/collaboration, and project-based learning derive from the use of HyperDocs. Personalized instruction is offered to all levels of students as HyperDocs allow for “self-paced learning using flexible methods and materials" (Highfall et al., 2016, p. 14). Teachers have the freedom to adapt sources to fit different reading levels and even help students use online tools to ensure that their lessons meet the needs of students with IEPs or 504 plans. The lesson may include a lecture, but it is not the primary source of information for the students.

Hyperdocs create opportunities for students to work in a variety of settings. Students work with the whole class, with a partner, or in small groups. Students then have more opportunities to check and explain their understanding of the material before completing their independent work. HyperDocs are project-based learning as the lesson’s focus is completing a task or creating a product (Highfall et al., 2016, p. 14). The inclusion of project-based learning also gives “students the responsibility for completing the unit” (Highfall et al., 2016, p. 14). Through personalized learning, flexible grouping/collaboration, and project-based learning, HyperDocs offer an opportunity for educational technology to be an “improvement to student experiences and learning” in the social studies classroom (Tally, 2007, p. 307).

HyperDocs encourage teachers to move beyond the limits of their adopted textbooks. Too often, the primary sources included in print resources do nothing to promote critical thinking (Lee, Doolittle, and Hicks, p. 2006, p. 299). Through the inclusion of digital resources, HyperDocs enable students to “travel anywhere” and “take in stimuli that reach parts of the brain that a page in a textbook simply cannot” (Highfall et al., 2016, p.39). For example, dusty archives are no longer the lone home for information, pictures, and old texts. Instead, teachers

can create opportunities for their students to explore these resources in secondary social studies classrooms. Including sources with an activity allows students to "read and decipher cursive, practice citations, and practice critical thinking and interpretation" (Pace, 2019, p. 71). HyperDocs support teachers in their efforts to move students beyond just reading provided sources of information.

Another benefit of teachers using HyperDocs is that students become more active in "doing history." HyperDocs "require students to go beyond the recall process" through the inclusion of "high-level questioning and open-ended tasks" (Highfall et al., 2016, p. 50). Students have endless opportunities to practice critical thinking through discussion, writing activities, and digital projects. HyperDocs create opportunities for students "to rely on their observations and investigative questions to learn content" (Highfall et al., 2016, p. 15). HyperDocs are a tool that allows the learner to "disseminate social studies content [while expanding] their digital literacy" (Wilson, Wright, Inman, & Matherson, 2011, p. 71).

The fact that there is more information available to people is both a blessing and a curse. Researchers and students can both access texts and other materials that were only available in dusty archives. However, some concerns exist about having an "infoglut" of information available at one's fingertips. A worry is that there is an "enormous responsibility on people to evaluate info due to the sheer amount that is now available" (McGrew et al., 2018, p. 165). Teachers should be providing opportunities for their students that allow them to engage critically with information and sources. Since "75% of young people get their news online," social studies classes need to include opportunities for students to examine online content (Breakstone et al., 2018, p. 31). HyperDocs allow students to explore online information more effectively.

Training teachers on how to use HyperDocs provides an opportunity to improve students' use of civic online reasoning in two ways. First, the sources included in a HyperDoc lesson give an example of good, fact-checked resources. Students will not be disappearing down a rabbit hole and finding random information that is not valid about the topic. Instead, students will recognize a reliable source of information based on the models provided in their HyperDocs lesson. Second, HyperDocs have students process content while using technology tools. Students "create and share authentic products that help them develop their critical thinking and problem-solving skills" (Highfall et al., 2016, p. 8). HyperDocs create a "cultivation of a classroom of creators, not just consumers of information" (Highfall et al., 2016, p. 22). The final project constructed by the students represents the union of content and instructional tools. HyperDocs allow students to interact with content and technology in a manner that focuses "on the features of tech tools to prioritize the process included of student thinking, learning and the social practice of communicating, connecting, and collaborating with digital tools" (Kahne et al., 2016, p. 25).

To What Extent Does the Professional Development for HyperDocs Provide a Sound Instructional Model for Teachers?

The HyperDocs training serves as a simulation experience for the attendees. The design of this session is very similar to the one in the literature review by Bolick (2006). Simulation-type professional developments allow teachers to experience similar emotions and opportunities that their students encounter when going through the lesson. In addition, post-training must be given to teachers for professional development to affect their instructional practices. Thus, training or professional development must also grant teachers "the knowledge and support needed to integrate technology more fully into their instruction" (Kopcha, 2012, p. 1119).

Teachers can be a barrier to the use of technology in the classroom. Often, teachers' personal beliefs about the role of technology and their teaching philosophy affect technology usage in the classroom (Saye & Brush, 2006, Sheffield, 2011). However, after experiencing HyperDocs in a professional development setting, teachers will gain confidence in creating standard-based lessons encompassing digital tools. In the end, this study found that the HyperDocs professional development session does provide a sound instructional model for teachers.

Discussion of Personal Lessons Learned

My record of study allowed me to examine technology integration and social studies in a deep context. This examination forever changed my knowledge and personal viewpoint of technology integration and the social studies curriculum. Overall, my work in this study aided in developing my understanding of issues that exist in social studies courses. First, the literature review and personal observations within my district allowed me to see many opportunities for improvement in the relationship between educational technology and social studies. Second, the era of high-stakes testing has damaged social studies instruction. Third, education cannot abandon sound educational practices from the past in the name of progress.

One key takeaway from my study of technology integration and social studies is that there is much room for improvement. Reading more about technology integration showed that many educators are not using technology in a transformative way. The primary use of technology is to replace pencil and paper tasks. For example, when I observed digital learning on my campus during the pandemic, I saw assignments with students reading a posted handout, watching a video, or going through an assigned slide show. Mastery of the material was through a quiz or short answer questions posted in our learning management system. Students were not using

technology to create a product that demonstrated mastery of an objective. I do not fault teachers for this. There was little to no time for preparing to teach in a hybrid or virtual model. However, in the future, teachers have no choice but to plan instructional activities that embed ISTE Standards or use SAMR rather than recording lectures and posting quizzes in a learning management system. If asked, my recommendation would be that teachers, and administrators, look at HyperDocs and similar lesson plan formats that use technology to change the assignment in the future.

During my career, I have taught courses that are state tested and those that are not. Preparing for my record of study also allowed me to research the enormous pressure put on the teachers of tested subjects to cover every standard in detail. The result is that lecture is the primary medium of instruction in tested courses. Teachers do not feel that they have time to have meaningful hands-on or active learning experiences. The number of standards that tested teachers have to cover causes a focus on details and facts rather than a complete picture of historical eras. Standards-based or high-stakes testing depends on students knowing details rather than big ideas.

Another causality is that we see the marginalization of social studies education. The main focus of testing at the elementary level in Texas is math, science, and language arts. Teachers often abandon social studies to prepare students for other assessments. Recent events in our country have led to increased scrutinization of social studies curriculums. It will be interesting to see how this will affect standardized testing.

The biggest takeaway from my record of study is that we should not abandon all educational practices of the past. It was a great benefit for me that my chair, Dr. Burlbaw directed me to include Madeline Hunter as a reference source for my HyperDoc training. Hunter

was not unknown to me as I had to submit Hunter-style lesson plans in my education courses. However, the purpose of Hunter was unknown to me. After studying and comparing HyperDocs with Hunter's model, I find great value in Hunter emphasizing the importance of having a well-developed lesson that focuses on transferring knowledge. While Hunter's model was not entirely original, it does show educators the steps and decisions they must make to ensure student learning. After studying Hunter, I think she would be pleased that HyperDocs include a concrete lesson cycle that focuses on transferring knowledge for students.

Implications for Practice

My record of the study revealed that HyperDocs professional development encourages social studies educators to integrate technology into their lessons that move beyond the substitution of paper and pencil tasks. HyperDocs assist teachers in creating lessons that focus on big ideas or topics of study. Due to high-stakes testing, more importance has increased the teaching of standards rather than big ideas in social studies. A lasting impact of high-stakes testing is that instead of building an understanding of a particular historical era, students only can recall people or events. Teacher-created HyperDoc lessons facilitate students using technology to demonstrate content knowledge. The integration of technology in HyperDocs lessons is through the inclusion of ISTE Standards and the SAMR framework.

The HyperDocs professional development will allow social studies educators to construct lessons that help students display mastery of an objective or a big idea. The use of HyperDocs is not limited to a single standard or objective. A strength of HyperDocs is that they can show mastery of learning for a unit by creating a digital product. Project-based learning assignments are a reliable method to use as an end-of-unit assessment.

After learning more about HyperDocs, teachers will create lessons that offer additional opportunities for students to demonstrate their learning. The share step (See Appendix B) allows students to receive feedback from their peers and teachers. Students can also learn from one another about various topics during the share step. HyperDocs also create an opportunity for enrichment in the Extend Step (See Appendix B). Enrichment can help build students' knowledge and interest in a topic. The Share and Extend steps allow for students to develop their expertise while working in a collaborative environment.

The HyperDocs training pushes social studies educators to create lessons that include technology to transform student learning. When designing HyperDocs, the creators used ISTE standards and the SAMR model (Highfill, Hilton, & Landis, 2016, p. 44-45). ISTE created standards that focus on digital literacy and communication skills students need to develop as twenty-first-century learners. HyperDocs do meet " ISTE standards by facilitating students' learning, inspiring creativity, designing and delivering digital age learning experiences or assessments, modeling digital age work and digital citizenship, and engaging in professional growth" (Highfall et al., 2016, p. 44). The SAMR model created by Dr. Ruben Puentedura showcases different levels of technology integration. For example, the diagram shows a progression of technology from substituting pencil and paper tasks to transforming how the student is completing the assigned task. With ISTE Standards and the SAMR model, HyperDocs can revamp how social studies classrooms use technology.

Connect to the Context

A study of the relevant literature revealed that social studies courses are not a subject area where teachers have openly embraced a union with educational technology. Traditionally, instruction in social studies is more lecture-based. High-stakes testing has marginalized social

studies due to the increased importance of math, language arts, and science. Tested subject areas face a battle to cover an enormous number of standards in an effort for students to show mastery on the assessment. Teachers also face additional pressure to use technology tools with students due to the importance of twenty-first-century learning and current events such as the pandemic. HyperDocs facilitate social studies teachers in finding a union between instructional technology and content.

My HyperDocs professional development session provides an example of a lesson model that integrates technology to transform learning. The design of the professional development is a simulation (See Appendix B). The teachers go through a HyperDoc lesson as a student. Their digital project at the end is a lesson that they could use with their students. This experience will enable teachers to leave the training with the ability to create their HyperDoc lessons.

One of the issues revealed in the literature is that teachers need training and supports after the training. The HyperDocs professional development session provides both of these items. First, the training document provides teachers with examples of HyperDocs in the handout and after the training. Second, they share part of the training (See Appendix B) including a Paldet where the training participants post their creation. Third, sharing lessons allows the attendees to leave with many examples of HyperDocs they can refer to during the school year. Finally, the rubric (See Appendix A) provides feedback to the teachers about their HyperDoc.

Connect to the Field of Study

Current events such as the pandemic and the literature revealed that social studies courses have many areas for improvement in technology integration. Assignments in the social studies classroom tend to use technology in a manner that replaces pencil and paper. Instruction often includes teacher-center methods such as a lecture. The ideal situation would be technology

transforming the desired task. HyperDocs are tools that guide teachers in creating content-based lessons that include authentic digital integration. Creating a training allowed me to create a pathway to share HyperDocs with other social studies educators.

Comparing the HyperDocs professional development to the Madeline Hunter model shows the benefits of using an organized lesson plan model. One of the essential elements of the Hunter model is that learning experiences should build on past knowledge and allow learning to occur. The Engage section of the HyperDoc (See Appendix B) allows the teacher to build on what students already know while preparing them for the upcoming lesson. The Share and Reflect sections of the HyperDoc (See Appendix B) create an experience that allows students to showcase and evaluate what they have learned. The Extend (See Appendix B) provides for the students to explore topics further.

Another critical element of the Madeline Hunter Model that HyperDocs include is focusing on what students will be learning and how they will demonstrate mastery. An objective or standard should be the basis of the creation of HyperDoc lesson. Each step of the HyperDoc guides the students towards learning more about the topic. Social studies teachers create experiences that have students explore primary sources, documentaries, images, and even podcasts to learn more about the subject matter. The Apply section of the HyperDoc (See Appendix B) allows students to create a digital project demonstrating their knowledge of the assignment topic. The experience of creating a product for mastery and receiving feedback ensures the transfer of knowledge.

Lesson Learned

An important lesson gathered from my record of study is the importance of modeling in the learning process. Madeline Hunter put great importance on the teacher modeling their

expectations as well as their thinking for students. The practice of modeling allows for the student to clearly understand the expectations or what will demonstrate mastery. If we want teachers to improve their instructional practices, professional development sessions should showcase optimal lessons. Therefore, professional development training should incorporate modeling to see an excellent example of the desired outcome of the training.

Training teachers to use HyperDocs through a simulation experience uses modeling to help improve a problem. The HyperDocs professional development includes modeling. First, the teachers go through the HyperDoc lesson as a student. This simulation allows them to have the same experiences and visualize any issues that their students may have. Modeling also occurs when examples of HyperDocs are provided in both the Apply and Extend sections of the training document (See Appendix B). These concrete examples of HyperDocs allow teachers to view the elements that make up a good lesson. Finally, modeling again occurs with the use of a rubric for feedback. Modeling the practice of giving constructive feedback gives the teachers an example of using rubrics with their students.

Recommendations

I recommend that a future research study concerned with social studies and technology integration include using HyperDocs in secondary social studies classrooms. There is a need to gather additional evidence to see if HyperDocs aid students in developing digital literacy skills while building content knowledge. We also need to see if HyperDocs allow social studies educators to tackle the problems created by high-stakes testing. In addition, more opportunities for project-based learning will occur with the growth of distance learning and other changes in education due to the Coronavirus Pandemic. Finally, social studies would benefit from a study on

HyperDocs by teachers in a blended or hybrid learning environment. A pivotal few elements of consideration for this study would be a variety of learners and a course that is state tested.

Another recommendation is for social studies teachers to use concrete lesson plan models such as the Madeline Hunter Model with ISTE Standards and the SAMR framework to integrate technology seamlessly. Social studies is an excellent subject for this to happen due to the need for students to explore primary and secondary sources. In addition, using a well-developed plan such as a HyperDoc lesson builds teacher confidence in using technology and model best practices.

Closing Thoughts on Chapter V

The design and assessment of a professional development session using HyperDocs was the basis of this record of study. The need addressed by the study was to help social studies teachers better embrace educational technology as a tool to transform learning. My personal experience as a social studies educator influenced my desire to study this topic in great detail. Exploring the available literature concerning social studies instruction and technology helped me gather several reasons why the problem existed. While there are multiple ways for teachers to incorporate technology into their lessons, several factors pushed the study towards HyperDocs. My decision to create a training for HyperDocs was due to their inclusion of various sources, focus on creating a digital project to show mastery, and incorporates lesson steps.

The Madeline Hunter model was used to show how the HyperDoc lesson plan fits a researched and well-known lesson plan format. A common viewpoint of the Hunter model is that it is primarily evaluative and thus has a checklist of necessary steps to include in every lesson. However, research on Hunter and her critics shows that is not the case. Instead, educators view Madeline Hunter as a series of steps teachers can use to create lesson plans. Following these

steps helps the teacher plan a lesson that builds on prior knowledge, focuses on an objective, demonstrates the learning expected, provides opportunities for feedback and concludes in demonstrating mastery. These steps are essential, no matter if the learner is a secondary student or an educator.

Since the Spring of 2020, educators have relied on technology tools to reach students. Educators have spent the last school year using technology in a multitude of ways. However, we need to ensure that the technology tools employed support content and practices that use technology effectively. Hyperdocs or any method that employs ISTE standards and considers the SAMR model should be at the forefront of consideration.

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APPENDIX A
TECHNOLOGY LESSON EVALUATION RUBRIC

Lesson Name:
Teacher:
Subject: Grade Level:
Unit: Topic:
TEKs:
Learning Objective:

Rating Scale

5 = excellent (observed at least 90% of the time in the lesson)
4= good (observed at least 80% of the time in the lesson)
3=average (observed at least 70% of the time in the lesson)
2= fair (observed 60-50% of the time in the lesson)
1= poor (observed less than 50% of the time in the lesson)

Creativity and Innovation - The student demonstrates creative thinking, constructs knowledge, and develops innovative products and processes using technology.	Rating (1-5)
Apply existing knowledge to generate new ideas, products, or processes	
Create original works as a means of personal or group expression	
Use models and simulations to explore complex systems and issues.	
Identify trends and forecast possibilities.	

Communication and Collaboration - Students use digital media and environments to communicate and work collaboratively, including at a distance, to support individual learning and contribute to the learning of others.	Rating (1-5)
Interact, collaborate, and publish with peers, experts, and others employing a variety of digital environments and media	
Communicate information and ideas effectively to multiple audiences using a variety of media and formats	
Develop cultural understanding and global awareness by engaging with learners of other cultures	
Contribute to project teams to produce original works or solve problems	

Research and Information Fluency - Students apply digital tools to gather, evaluate, and use information	Rating (1-5)
Plan strategies to guide inquiry	
Locate, organize, analyze, evaluate, synthesize, and ethically use information from a variety of sources and media	
Evaluate and select information sources and digital tools based on the appropriateness to specific tasks	
Process data and report results	

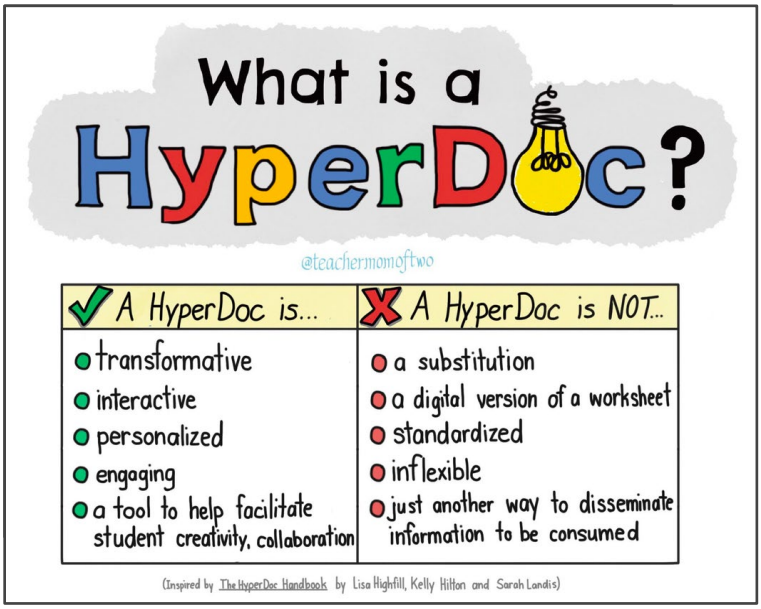
Critical Thinking, Problem Solving, and Decision Making - Students use critical thinking skills to plan and conduct research, manage projects, solve problems, and make informed decisions using appropriate digital tools and resources	Rating (1-5)
Identify and define authentic problems and significant questions for investigation	
Plan and manage activities to develop a solution or complete a project	
Collect and analyze data to identify solutions and/or make informed decisions	
Use multiple processes and diverse perspectives to explore alternative solutions.	

Digital Citizenship - Students understand human, cultural, and societal issues related to technology and practice legal and ethical behavior.	Rating (1-5)
Advocate and practice safe, legal, and responsible use of information and technology.	
Exhibit a positive attitude toward using technology that supports collaboration, learning, and productivity	
Demonstrate personal responsibility for lifelong learning	
Exhibit leadership for digital citizenship	

Adapted from International Society for Technology in Education (ISTE) Standards for Students and *The HyperDoc Handbook* by Lisa Highfill, Kelly Hilton, and Sarah Landis.

APPENDIX B

TRAINING DOCUMENT FOR ABOUT HYPERDOCS PROFESSIONAL DEVELOPMENT



Engage:

- What is a HyperDoc? by @meacherteacher
- HyperDocs by @christanorum
- HyperDoc Sketchnote definition by @itsmyschool
- Why HyperDocs by @jeffcoEdtech

Examine this image or one found on the provided links, **think** about your own teaching, how can HyperDocs enhance your instruction?

- The students would be…
- The class would be...
- I would be…

HyperDocs T Chart

So far, I think HyperDocs are	**Questions I have about Hyperdocs**

Explore:

You have the **choice** of how you would like to explore the content. You **HAVE TO** watch at least one video. For your second explore activity, you may **CHOOSE TO** watch another video, read an article/blog post, or listen to a podcast about HyperDocs.

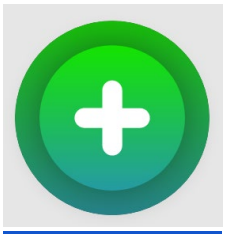
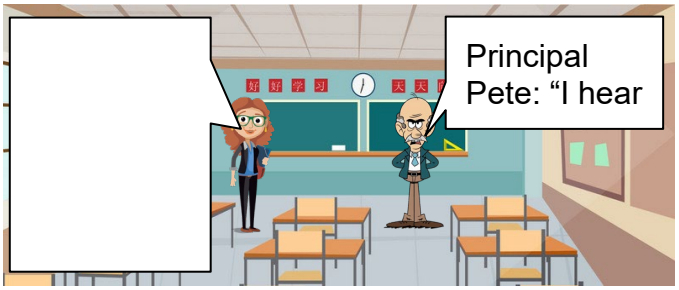
Watch:	Read:	Listen:
Hyper Docs Defined	Cult of Pedagogy	PodcastPD Ep 17
Hyper Docs Sample	Wicked Good EdTech	Cult of Pedagogy Ep 70
The Hype Around Hyperdocs	Teaching, Tech & Twitter	Hacking Engagement Ep 58

✏️ List three reasons to use HyperDocs (or let Matt Miller give you 9 Reasons):

•
•
•

Explain:

✏️You have the **choice** of how you would like to explain your understanding of a HyperDoc now that you have explored what they are. **Choose** between recording a response on Flipgrid or completing the comic in the embedded Google Drawing.

 Insert Flipgrid link	 Double click to open the Google Drawing

Apply:

No one said a HyperDoc has to be on just a Google Doc! **HyperDoc** is a term for an innovative digital lesson; it can be packaged on any web tool. You've heard the saying, "It's not about the tech"; that couldn't be more true for HyperDocs. They are all about the quality of the lesson and the elements of lesson design. HyperDocs can be packaged on Google Slides, Drawings, Forms, Sites, and Maps, just to name a few. Start with the tool that makes the most sense to YOU, and create your own HyperDoc or use the link in Borrow & Tweak to explore existing HyperDocs and tweak the lesson you choose to fit the needs of your students.

					
Docs	Drawings	Slides	Forms	Sites	Maps

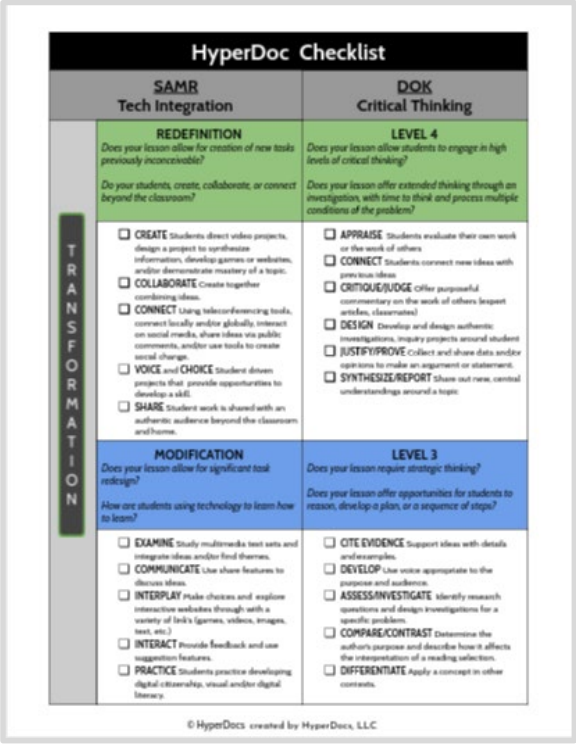
Borrow & Tweak (Remix) ****Give Credit****	Create
Find examples to remix: • HyperDocs for Social Studies • Various Social Studies HyperDocs • US History Examples from Mr. Mac's Room • Google Drive Link • Mentor HyperDocs • Live Binder • Blank Templates	Create using the elements of a HyperDoc: • Engage • Explore • Explain • Apply • Share • Reflect • Extend ****This is your own creation/tweak. Add only what your students need. This planning sheet may help you organize your thinking for your HyperDoc****

Share:

✏️ **Collaboration** is a major component of HyperDocs. Please share with your colleagues by contributing to our **Padlet** wall.

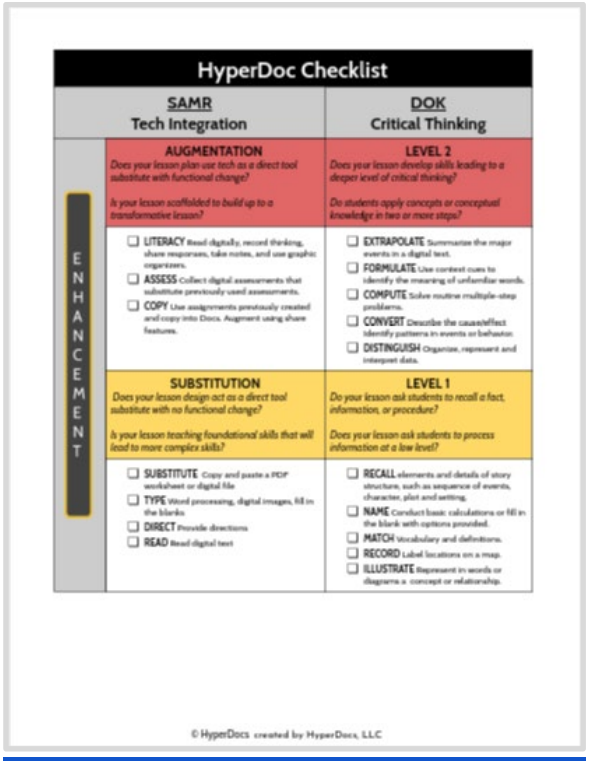
Reflect:

💡Use this **checklist** to assess your digital lesson. We suggest using this **before** & **after** implementation.



HyperDoc Checklist

SAMR Tech Integration	DOK Critical Thinking
TRANSFORMATION	
REDEFINITION *Does your lesson allow for creation of new tasks previously inconceivable?* *Do your students, create, collaborate, or connect beyond the classroom?*	**LEVEL 4** *Does your lesson allow students to engage in high levels of critical thinking?* *Does your lesson offer extended thinking through an investigation, with time to think and process multiple conditions of the problem?*
☐ **CREATE** Students direct video projects, design a project to synthesize information, develop games or websites, and/or demonstrate mastery of a topic. ☐ **COLLABORATE** Create together combining ideas. ☐ **CONNECT** Using teleconferencing tools, connect locally and/or globally, interact on social media, share ideas via public comments, and/or use tools to create social change. ☐ **VOICE** and **CHOICE** Student driven projects that provide opportunities to develop a skill. ☐ **SHARE** Student work is shared with an authentic audience beyond the classroom and home.	☐ **APPRAISE** Students evaluate their own work or the work of others ☐ **CONNECT** Students connect new ideas with previous ideas ☐ **CRITIQUE/JUDGE** Offer purposeful commentary on the work of others (expert articles, classmates) ☐ **DESIGN** Develop and design authentic investigations, inquiry projects around student ☐ **JUSTIFY/PROVE** Collect and share data and/or opinions to make an argument or statement. ☐ **SYNTHESIZE/REPORT** Share out new, central understandings around a topic
MODIFICATION *Does your lesson allow for significant task redesign?* *How are students using technology to learn how to learn?*	**LEVEL 3** *Does your lesson require strategic thinking?* *Does your lesson offer opportunities for students to reason, develop a plan, or a sequence of steps?*
☐ **EXAMINE** Study multimedia text sets and integrate ideas and/or find themes. ☐ **COMMUNICATE** Use share features to discuss ideas. ☐ **INTERPLAY** Make choices and explore interactive websites through with a variety of links (games, videos, images, text, etc.) ☐ **INTERACT** Provide feedback and use suggestion features. ☐ **PRACTICE** Students practice developing digital citizenship, visual and/or digital literacy.	☐ **CITE EVIDENCE** Support ideas with details and examples. ☐ **DEVELOP** Use voice appropriate to the purpose and audience. ☐ **ASSESS/INVESTIGATE** Identify research questions and design investigations for a specific problem. ☐ **COMPARE/CONTRAST** Determine the author's purpose and describe how it affects the interpretation of a reading selection. ☐ **DIFFERENTIATE** Apply a concept in other contexts.



HyperDoc Checklist

SAMR Tech Integration	DOK Critical Thinking
ENHANCEMENT	
AUGMENTATION *Does your lesson plan use tech as a direct tool substitute with functional change?* *Is your lesson scaffolded to build up to a transformative lesson?*	**LEVEL 2** *Does your lesson develop skills leading to a deeper level of critical thinking?* *Do students apply concepts or conceptual knowledge in two or more steps?*
☐ **LITERACY** Read digitally, record thinking, share responses, take notes, and use graphic organizers. ☐ **ASSESS** Collect digital assessments that substitute previously used assessments. ☐ **COPY** Use assignments previously created and copy into Docs. Augment using share features.	☐ **EXTRAPOLATE** Summarize the major events in a digital text. ☐ **FORMULATE** Use context cues to identify the meaning of unfamiliar words. ☐ **COMPUTE** Solve routine multiple-step problems. ☐ **CONVERT** Describe the cause/effect identify patterns in events or behavior. ☐ **DISTINGUISH** Organize, represent and interpret data.
SUBSTITUTION *Does your lesson design act as a direct tool substitute with no functional change?* *Is your lesson teaching foundational skills that will lead to more complex skills?*	**LEVEL 1** *Do your lesson ask students to recall a fact, information, or procedure?* *Does your lesson ask students to process information at a low level?*
☐ **SUBSTITUTE** Copy and paste a PDF worksheet or digital file ☐ **TYPE** Word processing, digital images, fill in the blanks ☐ **DIRECT** Provide directions ☐ **READ** Read digital text	☐ **RECALL** elements and details of story structure, such as sequence of events, character, plot and setting. ☐ **NAME** Conduct basic calculations or fill in the blank with options provided. ☐ **MATCH** Vocabulary and definitions. ☐ **RECORD** Label locations on a map. ☐ **ILLUSTRATE** Represent in words or diagrams a concept or relationship.

🖍 Possible improvement ideas:

-

Extend:

Live Binder
Google Drive Folder
Twitter

- HyperDoc Ladies
- #HyperDoc
- #HyperDocs
- #TsGiveTs

Google+
Facebook Group
Padlet
Pinterest
HyperDocs.co
Book
Blog Post: The HyperDocs Toolbox: 14 Engaging Example Activities
Blog Post: Idea Using Google Keep
Blog Post: Where Are Your Favorite Places to Find and Share HyperDocs?
Blog Post: Flipped Learning and HyperDocs - Reflections from my Classroom
Podcast & Blog Post: Hyperdocs: How To's and Tips for Teachers

Credits:

https://docs.google.com/document/d/1loPCNkVC6M_QfKZC5wll7WalgixWxsOFd5Wc57HrmDA/edit?fbclid=IwAR3mLawyrsP0ATcJqUPaxKtEnlbTd-ZGnrRSB9E0mcnn5wnDEXuTdKS-XnU

http://gallaghertech.edublogs.org/2018/05/04/a-hyperdoc-about-hyperdocs/?fbclid=IwAR021lU2kdvE6m_hCsdnSRvGbOP7xN6EFS1MVDlEsMADLdCfUefeeENEAiY

APPENDIX C

COMPARING HYPERDOC LESSON WITH MADELINE HUNTER LESSON MODEL

Hunter Step	HyperDoc Activity	Activity During Training
Objective		Provided in presentation after 1st Anticipatory Activity
Anticipatory Set	Engage	Activity 1: Participants rate their tech lesson using the rubric (see Appendix A). They will post a strength and weakness statement about their lesson on a Padlet. Activity 2: Using the Engage section, the participants will choose a source to read more about HyperDocs. They will then complete a T Chart about what they think HyperDocs are and what questions they have about HyperDocs
Input & Modeling	Explore	Participants will pick two ways to find out about HyperDocs. Then they will write three reasons why they should use HyperDocs.
Check for Understanding & Guided Practice	Explain	Participants have the choice of a Flipgrid recording or a Google Drawing to demonstrate their understanding of HyperDocs.
Independent Practice	Apply and Share	The participants will create their own HyperDoc or tweak one they have found to fit their needs in the Apply section. In the Share section, they will post their HyperDoc in a Padlet.
Closure	Reflect and Extend	Reflect- Participants will review their lesson using a HyperDoc checklist and note areas of improvement Extend - Participants will be provided resources of HyperDoc examples to explore for future use.

APPENDIX D

COMPARING HYPERDOC LESSON WITH ISTE STANDARDS FOR STUDENTS

HyperDoc	ISTE Standard	Activity During Training
Engage	● Critical Thinking, Problem Solving, and Decision Making ● Research and Information Fluency ● Communication and Collaboration ● Technology Operations and Concepts	Activity 1: Participants rate their tech lesson using the rubric (see Appendix A). They will post a strength and weakness statement about their lesson on a Padlet. Activity 2: Using the Engage section, the participants will choose a source to read more about HyperDocs. They will then complete a T Chart about what they think HyperDocs are and what questions they have about HyperDocs
Explore	● Critical Thinking, Problem Solving, and Decision Making ● Research and Information Fluency ● Communication and Collaboration ● Technology Operations and Concepts	Participants will pick two ways to find out HyperDocs. Then they will write three reasons why they should use HyperDocs.
Explain	● Critical Thinking, Problem Solving, and Decision Making ● Research and Information Fluency ● Technology Operations and Concepts	Participants have the choice of a Flipgrid recording or a Google Drawing to demonstrate their understanding of HyperDocs.
Apply	● Creativity and Innovation ● Communication and Collaboration ● Technology Operations and Concepts	The participants will create their own HyperDoc or tweak one they have found to fit their needs in the Apply section.
Share	● Communication and Collaboration ● Digital Citizenship	In the Share section, they will post their HyperDoc in a Padlet.

	● Technology Operations and Concepts	
Reflect	● Communication and Collaboration ● Technology Operations and Concepts	Participants will review their lesson using a HyperDoc checklist and note areas of improvement
Extend	● Research and Information Fluency	Participants will be provided resources of HyperDoc examples to explore for future use.

APPENDIX E

COMPARING HYPERDOC LESSON WITH SAMR MODEL

HyperDoc	SAMR Model	Activity During Training
Engage	Augmentation Substitution	Activity 1: Participants rate their tech lesson using the rubric (see Appendix A). They will post a strength and weakness statement about their lesson on a Padlet. Activity 2: Using the Engage section, the participants will choose a source to read more about HyperDocs. They will then complete a T Chart about what they think HyperDocs are and what questions they have about HyperDocs
Explore	Modification	Participants will pick two ways to find out HyperDocs. Then they will write three reasons why they should use HyperDocs.
Explain	Augmentation	Participants have the choice of a Flipgrid recording or a Google Drawing to demonstrate their understanding of HyperDocs.
Apply	Modification	The participants will create their own HyperDoc or tweak one they have found to fit their needs in the Apply section.
Share	Augmentation	In the Share section, they will post their HyperDoc in a Padlet.
Reflect	Substitution	Participants will review their lesson using a HyperDoc checklist and note areas of improvement
Extend	Augmentation	Participants will be provided resources of HyperDoc examples to explore for future use.