Schul, J. E. (2010). Necessity is the mother of invention: An experienced history teacher's integration of desktop documentary making. *International Journal of Technology in Teaching and Learning, 6*(1), *14-32.*

Necessity Is the Mother of Invention: An Experienced History Teacher's Integration of Desktop Documentary Making

James E. Schul
Ohio Northern University

Desktop documentary making elicits a new and unique way of doing history, and an examination into its integration into classroom instruction is warranted. This qualitative study explored one experienced teacher's integration of desktop documentary making into a secondary history classroom. In addition to examining the teacher's instructional practices, the compositional practices of five of this teacher's students were investigated in order to illuminate the teacher's integration of desktop documentary making as it related to history teaching and learning. Data were collected and coded to summarize the emergent themes. The findings reveal that the teacher's integration of desktop documentary making complimented and enhanced inquiry-based practices already present in his classroom.

Keywords: desktop documentary making, historical thinking, technological pedagogical content knowledge, technology integration, constructivism

INTRODUCTION AND THEORETICAL FRAMEWORKS

Secondary school history teachers have ignited, in recent years, a surge of interest in desktop documentary making (DDM) (Ferster, Hammond, & Bull, 2006). With the advent of free and easily accessible documentary-making software, as well as the rapid expansion of online archives, history students and teachers can for the first time in history efficiently compose and share documentary productions. Although history teachers have integrated desktop documentaries into their instructional practices, only a small number of studies have focused on its employment in the classroom. While demonstrating that DDM has gained traction among history teachers, researchers have mostly highlighted technological issues associated with teachers' integration of documentary making into their curricula and students' efforts to produce documentaries. Kearney and Schuck (2005), for instance, found that DDM promoted student voice, but the teacher's instruction leaned heavily toward technology instruction rather than content. Hofer and

James Schul is an Assistant Professor in the Education Department at Ohio Northern University. Please contact Dr. Schul at j-schul@onu.edu.

Owings-Swan (2005) highlighted the need for teachers to teach technology in stages because students' struggles with technology substantially impeded efforts to produce a documentary. Additionally, Yow and Swan (2009) found that a geography teacher's deficiency in technological knowledge obstructed integration of documentary making in the classroom. Hofer and Swan (2008) determined that technology's unpredictable nature discouraged some teachers who wanted to integrate DDM into their history curricula. Inclusion of DDM was also shown to be unnerving for teachers accustomed to a more chronologically-based, teacher-centered approach to history instruction because desktop documentary making is primarily a student-centered activity (Hofer & Swan, 2006). What these studies have in common is that they focused on teachers who were at the beginning stages of integrating DDM into their instruction. Moreover, the results of these studies emphasized the physical execution of the employment of digital technology into the classroom environment. This study departs from this previous research by focusing on a teacher who has robust experience with integrating DDM into his classroom instruction. As a result, this study delves into the philosophical intentions of the teacher, and subsequently his understanding of DDM's effect on his students.

To purposefully integrate DDM into their instruction and to understand its effects on students, history teachers and history educators, who prepare pre-service teachers, need to understand what students *practice* while completing a desktop documentary. History making practices emphasizes the researcher's efforts to research and describe either the utterances made or the observable history making behaviors that this teacher and his students enact while integrating DDM into their teaching and learning. Historians, as professional practice, scrutinize and interpret primary and secondary sources in an attempt to either contest or validate common historical interpretation. These unique practices of historians used to assess and compare documents representing historical thinking (Wineburg, 1991, 2001). Historical thinking, as conceived by Wineburg (1991), is also based on the idea of historical inquiry, a practice developed by professional historians where evidence is fitted together into a coherent synthesis, which can be assessed by the discipline – the community of historians. Contemporary research on history teaching and learning (e.g., Barton & Levstik, 2004; Seixas, 1993; VanSledright, 2002; Yeager & Davis, 1996; and Wineburg, 2001) has created a knowledge base for inquiry-based instruction to be heralded as the "signature pedagogy" (Calder, 2006) of history instruction. With regard to the role of the teacher in history instruction, Seixas (1993) argued that secondary history teachers serve as arbiters between the discourse community of professional historians and the discourse community of secondary school students. This discourse community of inquiry within the secondary school history classroom is founded upon primary and secondary document-based instruction, with the teacher in the position of transforming the content for the students while allowing space for students to engage in historical practices of their own.

Separate frameworks were used in this study to analyze and describe the practices engaged by the teacher and his students because of their complicated design and flexibility (Schul, 2010). Technological Pedagogical Content Knowledge (TPCK) (Koehler & Mishra, 2008; Mishra & Koehler, 2006), referred to by some as TPACK (e.g., Hammond & Manfra, 2009b; Marino, Sameshine, & Beecher, 2009), enabled systematic scrutiny and articulation of the teacher's instructional philosophy and practices: his comprehension of technology; his understanding of the processes of historical construction; his knowledge of, and facility with, documentary making technology's operations including visual and aural effects; and his knowledge of the subject matter of history. As a result of assigning students the project of making a desktop documentary, a teacher inaugurates a complex activity system from which students employ various resources, including the teacher's instruction, as they compose

their desktop documentaries. Figure 1 displays what this complex activity system may look like using the Cultural Historical Activity Theory (CHAT) heuristic created by Engeström (1987).

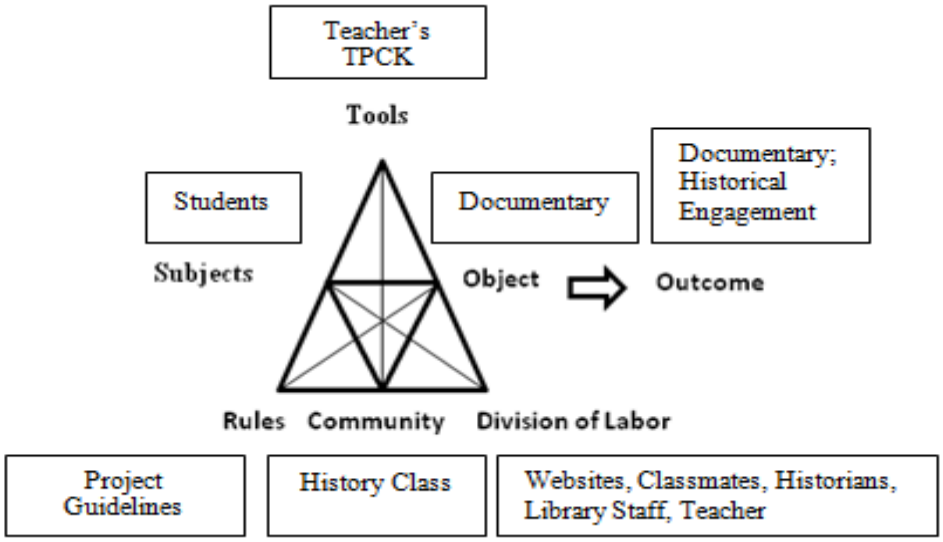

Figure 1. Activity system inaugurated by the teacher's TPCK.

CHAT serves as a useful lens to understand this phenomenon because it posits human *activity* as the unit of analysis, influenced by various mediating tools and selected aspects of the surrounding social environment. CHAT (Engeström, 1987, 1999) enables interpretation of the teacher's influences in the process of students' documentary making, as well as to evaluate the tools students employed to construct their historical documentaries. Inspired by Vygotsky (1978) and Leontiev (1974) and developed by researchers (e.g., Kaptelinin & Nardi, 2006; Roth, 2004; Roth & Lee, 2007; Yamagata-Lynch, 2007), CHAT views human activity as taking place within a social and cultural system, that includes various mediating agents, as displayed in Figure 1, such as rules, community, division of labor, and tools, where an object such as a desktop documentary is created. With regard to the activity of desktop documentary making, *rules* represent the requirements of the project set by the teacher, *community* represent the history class, made up of the teacher and students, and *division of labor* refers to any resources, albeit human or web-based, that a student drew upon to complete their desktop documentary. Students use these mediating agents together in a fluid and continuous fashion as they produce their documentaries. Students may produce a multitude of *outcomes* throughout their compositional process, with the culminating outcome being a completed documentary. In the process of DDM, students likely experience *tensions* within their particular activity systems. These tensions are essentially difficulties that a student encounters as he or she works within the activity system to compose their respective documentaries.

In response to the need for a study that explored the instructional practices of a teacher and compositional practices of students as they together integrate DDM into their classroom experience, this study focused on an experienced teacher's instructional practices with regard to DDM and how the instruction affected students' compositional practices while they made a documentary. This investigation was guided by three primary research questions:

1. What was the teacher's rationale and purpose with integrating DDM into his classroom instruction?
2. How did the teacher integrate DDM into his classroom instruction?
3. How, if at all, did the students' historical practices reflect the teacher's instructional rationale as they composed their desktop documentaries?

RESEARCH METHODS

This research was a case study of a history teacher and students as they engaged in an instructional unit that employed DDM. The setting of the study was a suburban public high school in the Midwest. For the purposes of this study, the high school will be called Southview to protect anonymity. Southview high school shares a community with a Research I university. The university attracts academically oriented professionals whose children attend the local public school resulting in a demand for accelerated coursework at the secondary level. This study focused upon one such accelerated course, Advanced Placement European History, which served as the bounded setting for this case study (Stake, 1995). The teacher incorporated DDM as a final project near the end of the school year, just prior to the students' taking their AP exam. It was the last of three projects that he required of his students, all of which ask students to construct history in a unique fashion. The first was a timeline where students had to physically construct a visual timeline that explored and explained a specific period of time, connecting student-written underlying course themes with student-selected key events. The second was a research paper where students practiced the skills of professional historians. The final project, the focus of this study, required students to make a desktop documentary (See Appendix for the project assignment sheet distributed to students).

PARTICIPANTS

A purposeful sampling method was used to select this study's primary participant. Purposeful sampling is a typical method employed in case study research to garner maximum information about a phenomenon (Patton, 1990). The primary participant was a teacher who, at the time of this study, had five years of experience with implementing DDM in his classroom. The teacher, Harlan Jones (a pseudonym), was in his fifth year of teaching high school social studies at Southview at the time of this study and was selected because of his robust experiences with integrating DDM into his instruction. In his early thirties, Jones was a graduate of the local university and of the program within which this researcher was at the time of the study, working toward a doctoral degree. The five student participants in this study, all high school sophomores, were randomly selected amongst a group of students who volunteered to participate in this study. The study used only five students as a way to make the qualitative data more manageable and to avoid saturation or redundancy (Lincoln & Guba, 1985) as Jones' classes were highly homogeneous. The selection of students was based primarily upon the students' schedules and their availability to participate in this research. A secondary criterion for participants involved a concern for gender balance. Two of the students were white Caucasian females, with the other three being male, two white Caucasian and the other Asian-American.

The five student cases (all names are pseudonyms) and their documentary topics in parenthesis are as follows: Luke (The Manhattan Project), Charlie (Vichy France), Harmony (Benito Mussolini), Maria (Stalin and the Purges), and Min (Benito Mussolini). The profile information for the research participants is briefly displayed in Table 1.

Table 1. The Profile of the Participants

Name	Gender	Role	Race	Age	Topic
Harlan Jones	Male	Teacher	Caucasian	32	N/A
Luke	Male	Student	Caucasian	16	Manhattan Project
Charlie	Male	Student	Caucasian	16	Vichy France
Harmony	Female	Student	Caucasian	16	Benito Mussolini
Maria	Female	Student	Caucasian	16	Stalin and the Purges
Min	Male	Student	Asian	15	Benito Mussolini

PROCEDURE

I used qualitative research methods primarily because they were well-suited for studying processes (Glaser & Strauss, 1967) like those at the core of my research questions. Data collections for this study consisted of observations, interviews, document retrieval, and think-aloud protocols for the students' compositional processes. Collecting a variety of records infused depth to the study as it allowed me to check my conception of the reality of the phenomenon from one data source to another (Creswell, 1998; Stake, 1995). Upon receiving IRB approval from the University, data collection commenced with classroom observations and one semi-structured interview for each of the five students. In the midst of the eleven day instructional unit, documents relevant to the study's research questions were collected and one formal semi-structured interview and several informal interviews of the teacher were conducted. Additionally, the researcher conducted think-aloud protocols (Ericsson & Simon, 1993; Smargorinsky, 1998; Wineberg, 1991, 2001) for each of the students' compositional sessions. The number of compositional desktop documentary sessions in this study, which were conducted in the Southview library, was dependent upon how much time each student needed to finish a composition, with ten sessions being the most and eight being the least, totaling forty-four in all for the students. These compositional sessions varied in length, between twenty-five minute sessions to nearly two-hour sessions, which was dependent upon the availability of the student and the school schedule.

DATA ANALYSIS

All observations and think-aloud protocol sessions were both audio and video recorded. The formal interview and most of the informal interviews of the teacher were audio recorded with the exception of an impromptu classroom tour which was video recorded. Upon the conclusion of the instructional unit, a post-composition interview was conducted with each of the students and all of their completed documentaries were collected. Coding categories were developed on an ongoing basis (Erickson, 1986), guided by the study's theoretical frameworks that revealed patterns within the case (Bogdan & Biklen, 2003; Lincoln & Guba, 1985; Shank, 2002). Numerous analytical strategies were employed to ensure validity of the findings, including inter-rater reliability of the coding process with two graduate students in education disassociated from this study, and member checking with the teacher (Lincoln & Guba, 1985; Stake, 1995).

FINDINGS

Four themes emerged from this study. These themes point out that: (a) DDM compliments inquiry-based instruction, (b) DDM can be used by some teachers to create cognitive dissonance with regard to the subject matter of history, (c) student networking can be used by some teachers as a means for technological instruction, (d) DDM can be used by some teachers to bridge the gap between professional and student history. This section discusses these findings as they relate to this study's research questions.

FINDINGS ON RESEARCH QUESTION 1

Research question asked: What was the teacher's rationale and purpose with integrating desktop documentary making into his classroom instruction? By looking at the phenomenon of Harlan Jones integrating DDM into his history instruction through the TPCK-CHAT theoretical lens, I was able to pinpoint Jones' technological instruction and see how, if at all, it matched the students' compositional practices. CHAT allowed me to examine the students' compositional activity. With response to this particular question, CHAT was especially helpful in enabling me to observe the students' interaction with various mediating agents (tools and division of labor) as well as observe any tensions that may have occurred during their compositional processes. This section discusses the two themes that emerged from this research question.

DDM as an Inquiry-Based Practice

Advanced Placement history courses are source-based by nature. In order to pass the exam at the end of the year, Advanced Placement history students are required to analyze and interpret secondary and primary sources. As a result, AP courses typically practice Document-Based Questions (DBQ's) on a routine basis. Harlan Jones's class was no different. He taught his students about the nature of history from the very first day of his class with his assignment of an article by Edwin Fenton (1964) entitled *History as Interpretation*. A study of the nature of history was woven throughout Jones's teaching. Through classroom observations, for instance, it was customary for Jones and his students to explore and discuss the meaning behind primary and secondary historical sources that were provided to students. At the start of each instructional unit, for example, Jones assigned daily readings from the class textbook, *The Western Heritage* by Donald Kagan, Steven Ozment, and Frank Turner (2007). In addition he assigned readings from the aforementioned documentary packets. These primary and secondary sources played a key role for Jones's class as he and students together spent an extensive amount of time discussing and scrutinizing them. The following activity about the Nazi's 25-point plan was an example of how Jones and his students dissected documents to form their own interpretation:

> Let's spend a couple of minutes with our [document] packets. What I'd like to look at now is the 25 pts. on pages 4 & 5. I think we can do this real, real fast. Here's a meeting from the Haufbrahaus in the early 1920s – and they list 25 pts. of what they [the Nazis] would like to see happen. (Classroom Observation, March 24, 2008)

Harlan proceeded to put the students into pairs to work on a couple of points. "Take about 2-3 minutes to share what you think the meaning is and be ready to present it," Harlan told the students as they began working diligently on the activity (Classroom Observation, March 24, 2008). In another instance during class, Harlan and the students reviewed a worksheet called "The Mind of the Nazis." The directions asked students to

read quotes provided by major Nazi leaders and to indicate which individual's influence was connected with the statement. The worksheet provided the names of Machiavelli, Robespierre, Bismarck, Darwin, Nietzsche, Freud, and Einstein. Jones proceeded to ask the students what answer they put down for each statement and why they put that answer down. On one occasion there was a disagreement about the correct answer for one of the statements. Jones then looked up the answer key from the publisher of the activity. Just as with the historical content under study, the textbook and handouts were even subjective to interpretive scrutiny by Jones and his students, as showcased in this lesson with "The Mind of the Nazis" worksheet: "I don't agree with the answer given by the book," Harlan told the students in the midst of discussion, "and because the book didn't give a reason for their answer they're all wrong" (Classroom Observation, March 25, 2008).

In a recent study, Manfra and Hammond (2008) asserted that a teacher's pedagogical aims dominated both their planned and enacted curriculum when integrating DDM. Similarly, Harlan Jones integrated DDM into his instruction while under the notion that it closely resembled other source-based methods of historical inquiry that he used in class. For instance, both DDM and document-based instruction require the reading and interpretation of text. Document-based instruction is solely based on the reading and interpretation of text while desktop documentary making requires a reading of text primarily for background information and content understanding, serving as an essential feature for a narrative structure. DDM is, perhaps, most strongly associated with integrating the visual into the fray of historical inquiry. However, visual imagery is not excluded from document-based instruction as historical photographs are widely used for historical interpretation. Likewise, aural sources are commonly used in document-based instruction through analysis of music and speeches, while desktop documentary making incorporates aural sources within a narrative framework.

Although DDM possesses similar characteristics of the signature pedagogy of history instruction, Harlan Jones also believed that DDM added new dimensions to the classroom culture that other methods lacked the capacity to provide:

> If I read a DBQ essay that you wrote, it might have a big impact on me. But if I were to read a DBQ that each of the thirty kids in the class wrote, maybe the impact wouldn't be as lasting or as powerful as the power of the video source, whether that's moving pictures or still pictures, or narration, or whatever. (Teacher Interview, March 28, 2008).

Jones believed that the technology of DDM enabled students to easily share their inquiries in a meaningful and culturally relevant fashion, which subsequently allowed students to inquire about those inquiries. Moreover, Harlan Jones aspired to make his classroom a learning community that generally nurtured students to inquire. His classroom walls were filled with ideas and projects generated by his students. His pedagogical philosophy and classroom activities were geared to position the student to inquiry about the content and nature of history. To do this, Jones allotted three separate days at the end of the instructional unit as a sort of film festival. This film festival involved Jones showing each student's documentary to the entire class. He showed the documentaries in chronological order because he believed "this makes the most sense" since the subject matter of the course was already arranged chronologically. To ensure that the students paid attention to the documentaries, he purposefully mixed in other activities between the viewing experiences so as to not overly saturate students with the passive experience of watching each others' documentaries. Jones wanted to foster a community of inquiry within his classroom that "establishes and makes intellectual connections and communicate those connections between the different things that

[students] think are important" (Teacher Interview, March 28, 2008). DDM played a central role in Jones's formation of this community of inquiry.

Cognitive Dissonance and History Instruction

The second theme that emerged from the first research question was that DDM can be used to create cognitive dissonance with the subject matter of history. Harlan Jones's purpose for integrating DDM into his classroom emerged from his constructivist pedagogical philosophy. His primary instructional philosophy, which pervaded his instructional practices, was based on a desire to create intellectual conflict for his students. As put in Jones's words:

> [The] best way to instruct them [the students], probably with anything, is when there's a perceived deficiency, or perceived need, or perceived problem – it's a 'necessity is the mother of invention' thing – they're (the students) not going figure it out unless they have that problem right then. (Teacher Interview, March 28, 2008)

The activity of DDM acted in unison with Harlan's ideal of conflict in his classroom instruction. Jones believed that conflict was essential for students as they transformed subject matter with their desktop documentaries:

> To do it well, I think they'll have to have a sense of some notion of conflict related to their topic. Was there a debate between Trotsky and Stalin about how fast to industrialize the Soviet Union in the 1920s after Lenin died? Was there a debate whether Cubism or Surrealism was really art or were artists just going off on the deep end and acting crazy and producing things that weren't really art at all? So, if they don't have a sense of conflict or differences of historical interpretation, then it's hard for them to go beyond just telling a story to asking questions about a story. (Teacher Interview, March 28, 2008)

Harlan Jones essentially believed that history was a subject matter perfectly suited for conflict because of its interpretive nature. The past comes alive for students, according to Jones, when they can see the interpretive nature of it and therefore see possibilities of adding their own interpretive contribution to historiography. The best desktop documentaries, according to Jones, are composed by students who experience interpretive conflict at some point during their compositional processes because that leads them to inquire about their topic. This philosophy of teaching was strikingly similar to Piaget's (1952, 1957) notion of cognitive dissonance which states that tension created by dueling ideas leads to an individual's change in attitudes and beliefs.

Most of the students in this study experienced conflict with subject matter as they composed their desktop documentaries. As a weapon to solve this conflict, these students engaged in the historical practice of speculation. To speculate means that opinion was formed without sufficient evidence to completely substantiate that opinion. History construction naturally involves the practice of speculation, for history making requires judgment on the part of the historian. As students came across various images and information during a compositional process, it was essential for them to make judgments based on scant or lacking evidence, or else they would not have been able to complete their project on time because they would not have been able to advance their narratives. For example, Charlie and Maria speculated on why they had a difficult time finding a certain type of image. For Charlie, the difficulty rested in his inability to find images of anti-Vichy war propaganda images. He concluded that Europe was simply too war torn to spend time manufacturing propaganda images. Maria had difficulty finding images of Soviet peasants at work, which she concluded was due to the absence of technology in

isolated, rural areas during the time. As both Harmony and Min worked to present Mussolini as an ambitious and powerful political leader, they drew their own conclusions as to why others often associated him as evil. Min concluded that the popular perception of Mussolini as evil came as a result of his conquest over other nations. Harmony also speculated about Mussolini's notoriety by concluding that bad influences, such as Hitler, were the roots behind the cause. This conclusion came after Harmony saw images from Mussolini's childhood and family life. Rather than portraying him as a ruthless villain, as had often been the case in popular culture, Min and Harmony passed judgments on Mussolini that allowed them to portray him in the way that they believed the information and imagery portrayed him. While the other student cases showed evidence of speculation, Luke, on the other hand, showed little or no speculation. Luke's case was unique in that he began his composition with a certain ideological perception of the Manhattan Project and did not waver much from it. While Maria and Min also stayed true to their original intent to show the Purges as the Holocaust and Mussolini as an emotional, violent, and nationalistic figure, they engaged in historical speculation during their image selection. Luke did little, if any of this. For this study, Luke was the exception, and not the norm. Most students in this study used speculation to advance their narrative construction rather than being mired in the midst of the details of the content-based tensions that they encountered.

FINDINGS ON RESEARCH QUESTION 2

Research question 2 asked: How the teacher integrated desktop documentary making into his classroom instruction? The TPCK framework enabled me to pinpoint Harlan Jones' particular technological instruction as it related to his integration of DDM. I observed that Jones placed a strong emphasis on student networking. CHAT positioned me to observe the students' compositional processes as an activity that included a myriad of mediating agents, including whether or not they recruited other individuals (division of labor) as they experienced technological difficulties (tensions) in their activity. This section discusses the one theme that emerged from this second research question.

Reliance on Student Networking

Harlan Jones understood that technological skills are not easily mastered by people who are not regularly required to use them. He also understood that many of his students knew more about technology than he did. As he integrated DDM into his classroom, Jones embarked into a sphere of instruction that, quite frankly, scares many teachers and, as he claimed, sometimes scared him. Two days after Jones initially assigned the Museum Exhibit Project, and one day prior to providing students time in the computer lab, Jones spent a class period directly instructing the students how to actually make desktop documentaries. With his laptop computer connected to a projector screen, Jones walked the class through the ins and outs of the *Photostory 3* software, although he did not require that his students be limited to using that particular software. Jones's intent with setting apart time for specific mechanical instruction was to aid the students who were not necessarily technologically adept. However, Jones's instructional approach toward technology was actually a mirror image of his cognitive dissonance approach to teaching history.

> I think that they're [the students] going to learn best also by figuring it out: the cognitive dissonance approach. I want to synchronize this audio clip with this particular picture, how do I work with the storyboard to do that? (Teacher Interview, March 28, 2008)

Jones believed that students learned skills, such as those required with technology, when they have motivation to learn it in order to accomplish a broader task. For this reason Jones believed that the teachable situation was the most effective method to teaching technological skills to his students:

> Some of the most detailed instruction on how to use those programs is in response to a perceived need that students have rather than try and tell them all in advance and make them learn it all now and go out and do it. Tell them to go out and do it, let them get confused and frustrated, and then when they come in with questions, answer that question. They pay a lot more attention that way. (Teacher Interview, March 28, 2008)

An Advanced Placement history classroom is often times filled with students who are adept at digital technology because of their incessant exposure to it, both at home and at school. Advanced Placement students also share a common desire with one another: to succeed in school. Harlan Jones understood these dynamics about his students and used them to his advantage as he introduced the dynamic, yet unpredictable, features of digital technology into his classroom instruction. Jones believed that directly instructing technology was dangerous because it required his students to view him as the owner of problem solving skills, as he explained: "[I]t makes it seem like I'm the one with all the knowledge and that they're just people to receive that knowledge" (Teacher Interview, March 28, 2008). Jones, in fact, shared a story about how students networked with one another in one of his classes about "saving target as" as a technique to alter the make-up of the video so that certain audio files could have been saved onto their iMovie composition. "I frankly think that story about those students helping one another with embedding the video and so forth is really the best approach" (Teacher Interview, March 28, 2008). In essence, Jones believed that it was important for his students to have a sense of autonomy, and with that came helping to solve each other's problems. He explained this philosophy:

> I feel like I'll create road blocks for my students in a whole host of ways, not just on this project, if they think that to learn how something works, they need to come to me. I really think it's best if they're coached to be able to solve their own problems or solve each other's problems. Because frankly, a lot of them are smarter than I am and a lot of them have more experience or know-how with the technology than I do. And if they don't see each other as resources they can learn from, I don't know, it's like tying one of your hands behind your back as a teacher. (Teacher Interview, March 28, 2008)

Jones's philosophical approach to teaching was rooted in the idea of valuing the student's decision making in such a way that they are actually free to make some decisions on their own in his classes. This freedom to decide was also expressed, as mentioned earlier, in how he approached integrating the Museum Exhibit Project. "I didn't ever tell kids, and I still don't, frankly, that they have to use a particular program or any one particular medium," Jones said with regard to whether he preferred his students use Photostory or iMovie (Teacher Interview, March 28, 2008). This freedom was particularly helpful and necessary, Jones believed, when it came to the complex nuances of working with digital technology. This belief in student autonomy was also colored by the fact that he was a teacher of high achieving students. Jones confessed that his approach to teaching technology might not be workable if he taught a general education course:

> Because they're advanced or accelerated students, I might do it differently than if I were doing this for lower functioning or lower level students. For one, they'd need a lot more class time on their own.

> Another thing … is that the quicker the connections they make, the less patience they have for reading directions and rules in a chronological order or in some kind of pre-prescribed order, and the more they want to be in charge of discovering things for themselves, and the more they'll have the self-confidence as a learner to figure out how the software works by just playing around with it. (Teacher Interview, March 28, 2008)

Jones's philosophy with regard to technological instruction fit nicely into his general philosophy of history teaching. He believed that his students should have some academic freedom to explore and inquire on their own.

Students in this study who experienced technological tensions fulfilled Jones's aims by enlisting other individuals for assistance. For instance, Min lacked confidence when working with digital technology prior to this project and felt that technology usually "worked against" him (Min, Session 3 Think Aloud, March 13, 2008). Unfortunately, Min's fears about using digital technology were reinforced in this project. He encountered numerous tensions with technology, specifically with downloading audio and with the Photostory 3 software. In his fifth session, Min turned his attention to his voice over. He already had recorded his voice at home but had problems putting his voice over onto his storyboard. "It's weird," Min remarked, "I can record myself at home and put it on Itunes, but if it [the school computer] doesn't play Itunes, then we've got a problem" (Session 5 Think Aloud, March 14, 2008). Min called on the help of a classmate and later, a member of the library staff, as he experienced difficulty with playing his voice recording on the school computer via Itunes. Min also experienced technological tension in his sixth session as he couldn't convert his audio files from his USB flashdrive onto the school's computer: "I don't understand it, it's not recognizing my flashdrive. No way!" (Session 6 Think Aloud, March 24, 2008). He proceeded to turn to a member of the school library staff for help with downloading his audio files before he decided to do it "the old fashioned way." "I can just take my Ipod, hook up some speakers and record it that way. It'll lose some quality but it'll be ok" (Min, Session 6 Think Aloud, March 24, 2008).

Min's tensions with technology, though more significant than the other students in this study, revealed how other individuals could be and were used to allow students to proceed with their compositional processes. Min, despite all of his technological difficulties, provided technological help to his classmates on numerous occasions. Like Min, Maria experienced a tension with recording her own voice onto her storyboard. To relieve this tension, Maria enlisted help from both the school library staff and Min as she checked out a microphone from the library during her tenth session and asked one of the staff members how to operate it. Additionally, Luke sought help from the school library staff to assist him with downloading audio clips onto his storyboard after he spent a lengthy amount of time trying to problem solve independently. As Jones integrated DDM into his classroom, he anticipated that students would encounter technological difficulties and hoped that they would solve most of those problems on their own through networking. The student cases in this study revealed that, for the most part, Jones's hopes came to fruition.

FINDINGS ON RESEARCH QUESTION 3

Research question 3 asked: How, if at all, the students' historical practices reflected the teacher's instructional rationale as they composed their desktop documentaries? TPCK enabled me to observe Jones' pedagogical (P) rationale as it related to his use of DDM (T) in teaching the subject matter of history (C). CHAT enabled me to examine

how Jones, as a mediating tool, affected the students' compositional process. Moreover, CHAT provided me with the ability to observe the students' activity as it related to various guidelines (rules) that Jones had set overtly or covertly before them. This section discusses the one theme that emerged from this research question.

Bridging Professional and School History

Jones's instructional practices created a unique activity system from which students could compose their desktop documentaries. This activity system uniquely featured qualities prominent in professional history making as well as school history making. School history, according to Holt (1990) is where students "invent" history within their classroom community with all of the dynamics that the community entails (i.e., time restrictions, classmates as audience). When allowed to create their own histories, students do so in a way that is meaningful to both themselves and their peers (Holt, 1990). As students composed their documentaries they also engaged in practices of professional historians as they conducted research online, often exploring online archives as they fashioned their narrative, and cited most of their sources when doing so. Harlan Jones, by integrating DDM into his classroom instruction, bridged the discourse community of professional historians and students (Seixas, 1993) for his students when he provided them with the guidelines and "space" to create serious histories for one another through the medium of documentary making.

Professional history. Students in this study brought with them to Jones's AP European history course the habituated practices of successful history students or students of any other subject for that matter. These successful secondary students were ambitious, eager to complete assignments, disposed to take notes, and concerned to produce an attractive and meaningful historical documentary. Other academic practices Jones taught them, however, were new to students. Jones taught them the academic practices, for example, of citing sources for assertions and comparing sources in the process of writing a historical synthesis, all the while within the constraints of schools and classrooms. Jones's view of the student as scholar ebbed and flowed into how and why he integrated desktop documentary making into his classroom. Right away, upon assigning the Museum Exhibit Project to his students, Jones emphasized to his students that they needed to conduct themselves in a scholarly manner throughout their compositional process. "Let's cite our sources," Jones told his students. "We should attribute and give credit to places to where we found it" (Classroom Observation, March 11, 2008). Jones wanted his students to behave as scholars and he positioned them to be a scholar with the Museum Exhibit Project. This practice of the professional historian trickled down to the students' compositional behavior. For instance, Maria assiduously took notes. She took notes from various secondary texts and web-based sources and then compared them with one another as a way to garner a more in-depth understanding of her topic. Luke was also very organized throughout his compositional process. This organization was crucial to Luke as a he continuously checked his chronology of the Manhattan Project for accuracy. Min, also practicing professional history, documented his claims about the past with primary source evidence throughout his documentary. "I wanted to back up my information with speeches," Min said, "so that people could put it together to know what he was saying from the primary source document" (Interview, March 28, 2008). Like the professional historian, these students ensured that the history that they produced was accurate and documented.

School history. The student's voice was essential for Jones. Jones's classroom walls and bulletin boards reflected this belief as their students' quotes were plastered throughout the learning space: "Something may come up and I'll get a marker and ask the student to write it down and we'll put it up right away … If someone wants to bring something in – maybe from the dance team or something – they can bring that in" (Room Tour, March 24, 2008). His underlying message with his room décor was that students matter: "I guess an underlying message that I want to be sent is that things that the students generate are important," Jones told me, "more important than the things that I generate" (Room Tour, March 24, 2008). Jones believed that an environment where students share their thoughts was a place where students can learn and grow.

Jones's belief that the student voice should be heard resonated with his intentions with DDM. When a student asked Jones, upon the assignment of the project, how he would grade the project, Jones pointed out that each student should view their composition through a pedagogically purposeful lens:

> I'm looking for usefulness and usability by your classmates. I'm also looking whether you encourage your classmates to think. There's something else about the quality of the filmmaking. Some are edited well; some are choppier and a little less polished. (Classroom Observation, March 11, 2008)

The students were commissioned, by Jones, to make the documentary as a teaching instrument where classmates were enlightened of the topic through their work. Essentially, Jones aimed to nurture a scholarly discourse amongst his students by having them make presentations for one another. Jones wanted his students to be more than passive recipients of information, and to get this point across he honored and encouraged student contribution: "You should be able to learn from other scholars just as you learn from your teacher, because we're all each other's teachers, right?" (Teacher interview, March 28, 2008).

Positioning students as teachers while composing their desktop documentary was key to Jones's overall pedagogical philosophy. Essentially, Jones aimed to nurture a scholarly discourse amongst his students by having them make documentary presentations for one another.

A key element to The Museum Exhibit Project, therefore, was that each student produced a desktop documentary that was useful for his or her classmates. Moreover, Jones's decision to provide an opportunity for a public viewing of the final projects was a crucial step in fulfilling his pedagogical purpose that the students make their documentaries "useful" to their classmates. An effective museum exhibit, according to Jones, rested with "the balance that exists in a museum between the curator's intent and the audience interpretation/freedom" (Classroom Observation, March 10, 2008). Students, as a result, focused primarily on the interests of their classmates, and sought to consciously follow the time limit restriction set by the teacher.

As a consequence of this focus on the usability of the documentary for classmates, concern with professional practice was not adhered to by all of the participants all of the time. Charlie, for example, took short-cuts in citation: "Here's a picture of Petain and Hitler that I should save, but I don't think I need to worry about citing everything. It's not 100% accurate since it's not a professional paper" (Session 4 Think Aloud, March 14, 2008). Another instance of a student engaging in school history was Maria who wanted to include an audio clip of Stalin's voice as he gave a speech. However, the only audio clip that Maria could find was one that did not pertain to the Purges. Because her audience was her English speaking classmates, she thought that the content of the speech would not matter to them. It was the sound of his voice that she wanted her classmates to

hear. "His voice sounds so powerful," Maria said, "and with the cheers, it just shows how he brainwashed the society" (Session 5 Think Aloud, March 14, 2008).

Student-participants operated under different constraints than professional historians because, among other reasons, they had less time than professional historians and did not, for example, benefit as much from colleagues' suggestions for strengthening arguments or bolstering evidence. School history, thus, has a different discourse community than professional history. The consumers of school history, or history made by teachers and students in secondary classrooms, usually are students themselves. The dynamic of making history for other students sometimes caused the students in this study to stray away from practicing professional historical scholarship, a trait not foreign to even professionally trained historians (Williams, 2003). However, because of Jones's training that students support their historical arguments with multiple sources and to cite those sources, students were also able to practice professional history.

DISCUSSION & CONCLUSIONS

The observations taken from this study shed much needed light for researchers and teacher educators on how and why DDM can and should be integrated in a history classroom. This study, therefore, has significant implications for the enhancement of teacher preparation. First, this study reveals how one experienced teacher used the awkwardness and instability of digital technology to his pedagogical advantage as he fit technological instruction into his overall constructivist stance toward education. Hofer and Swan (2006) asserted that a teacher's overall pedagogical orientation must be conducive to the nuances involved with the instruction of transformative technologies like DDM if it is to be successfully integrated in classroom instruction. This study of Harlan Jones, whose overall pedagogical purposed did align with the nuances involved with integrating desktop documentary software in a classroom, showed how technological instruction can be used to nurture problem solving among students. In a recent case study of experienced middle school teachers who integrated DDM but lacked experienced with integrating technology, Hofer and Swan (2008) concluded that the necessary knowledge for integrating digital technology in classroom instruction is ever changing and is therefore a very personal undertaking by any teacher. Jones understood his limitations with integrating technology which was why he emphasized student networking. Students, regardless of the curricular track, are notorious for knowing more about technology than the adults who supervise them and are willing to assist others in need. Harlan Jones positioned students in his AP course to network with one another but believed that he would enforce more direct instruction with regard to technology instruction if he taught a general education course. It would be of great benefit, therefore, for this current study to be replicated on a history teacher who is experienced with integrating DDM in a general education setting to see how a teacher successfully integrating transformative technologies.

Along with the instruction of technology, this study also showed how DDM can enhance a constructivist philosophy toward learning history as each student constructed their own history in their own way and were encouraged to do so by their teacher. Swan & Hicks (2007) asserted that historical thinking does not occur naturally with mere exposure to web-based primary sources but it must instead be intentionally directed under the guiding hand of a teacher. Teachers, therefore, must understand the nature of history in order to successfully teach students how to inquire into the past. History as a construction has increasingly grown in popularity among researchers (e.g., Barton & Levstik, 2004; Booth, 1993; Van Sledright, 2002; Wineburg, 1991) interested in history teaching and learning, leading to historical inquiry as the "signature pedagogy" of history

instruction (Calder, 2006). This study showed the teacher effectively enacting this signature pedagogy of history instruction among his students through DDM. With that said, it would be interesting to see the results of a future study that contrasted the learning outcomes of a desktop documentary project with a traditional research-based project.

This study also revealed how DDM can uniquely bridge the gap between professional history and school history. Teachers often find themselves in a curricular quandary as they desire to enforce rules of academic rigor on their students while at the same time allow students to explore the possibilities of the subject matter on their own. For history teachers, this means that students should learn about history as an academic discipline as well as find enjoyment with a self-saturation in the subject matter. DDM can provide a bridge between the ends of this gulf. This bridge between school history and professional history allows students to create history that interests them without completely sacrificing the rules of professional history. Hammond and Manfra (2009a) concluded that teachers need to consider student agency in order to use DDM to teach content. This is true. However, there are more outcomes associated with DDM than merely learning content. DDM requires students to use their imagination and to speculate based upon evidence at hand, which is likely why students, like the ones in this study, seem to enjoy making desktop documentaries. Teachers should in turn nurture a classroom climate that critiques the content as well as the pedagogical intent of student-produced desktop documentaries in order to make DDM a true encounter with history for students rather than merely an another attempt to cover the facts. It would be useful for teachers and teacher educators, therefore, if future research focused on analyzing the TPCK of students as they compose their documentaries. An analysis of a student's TPCK may assist in understanding the professional practices of students, content knowledge, and the pedagogical techniques students lack and which ones they effectively use to teach their classmates. To know what students do and why they do it as they compose desktop documentaries is essential knowledge for teachers who yearn to nurture a community of inquiry (Seixas, 1993) through the means of DDM.

As is the nature of any research, this study propels new questions forward for those interested in exploring the dynamics of DDM as an instructional practice. Although AP courses are growing in numbers and in popularity (College Board, 2008), this setting represents a glaring limitation of this study as it is still atypical for a history classroom in the nation. The fact that the study focused on an AP course, therefore, suggests caution in transferring its claims and assertions to other history learning contexts, particularly to general education courses (Lincoln & Guba, 1985). With that said, a replica of this study on a general history course would lend greater insight into such areas as technology and content instruction with DDM. How does a teacher experienced with integrating DDM in a general classroom enact technology instruction? What is her/his instructional rationale with integrating DDM into the classroom? Is it based on a constructivist philosophy or is it based on a more general premise of meeting the strengths of more students who have a strong visual and aural learning approach? If a teacher, like Jones, believes in a constructivist philosophy with regard to technology and history instruction, how does he or she adapt to a classroom situation where there are many students such as Luke who are more insular in their learning habits and who would rather not explore unfamiliar terrain in their history explorations? Does the integration of DDM nurture a discourse community of inquiry amongst these students? In addition to replicating this study in a non-AP history classroom, a replication using an elementary or middle-childhood teacher and her or his students would lend great insight on how and why DDM could be integrated into an elementary classroom. Such a study on elementary and middle-childhood classrooms may also lend insight into whether or not the technique fosters a discourse community of inquiry amongst elementary and middle school students. These

prospective investigations can eventually lead to an improvement of teacher educators' instruction of DDM as well as improve how DDM is infused into history teaching and learning at all instructional levels.

REFERENCES

Barton, K. C. & Levstik, L. S. (2004). *Teaching history for the common good*. New Jersey: Lawrence Erlbaum Associates.

Bogdan, R. C. & Biklen, S. K. (2003). *Qualitative research for education.* Boston: Allyn and Bacon.

Booth, M. (1993). Students' historical thinking and the national history curriculum in England. *Theory and Research in Social Education, 21*(2), 105-127.

Calder, L. (2006). Uncoverage: toward a signature pedagogy for the history survey. *The Journal of American History, 92*(4), 1358-1370.

College Board (2008). *Bulletin for AP students and parents 2008-2009.* Retrieved March 4, 2009, from http://professionals.collegboard.com/profdownload/ap-bulletin-students-parents.pdf

Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions.* Thousand Oaks, CA: SAGE Publications.

Engeström, Y. (1987). *Learning by expanding*: *An activity-theoretical approach to development research.* Helsinki, Finland: Orienta-Konsultit Oy.

Engeström, Y. (1999). Activity theory and individual and social transformation. In Y. Engeström, R. Miettinen, and R. Punamäki (Eds.), *Perspectives on Activity Theory*, (pp. 19-38). Cambridge, England: Cambridge University Press.

Erickson, F. (1986). Qualitative methods in research on teaching. In M.C. Wittrock (Ed.), *Handbook of research on teaching.* Old Tappan, NJ: Macmillan.

Ericsson, K. A. & Simon, H. A. (1993). *Protocol analysis: Verbal reports as data.* Revised edition. Cambridge, MA: The MIT Press.

Fenton, E. (Ed.). (1964). *32 problems in world history: Source readings and interpretations.* Glenview, IL: Scott Forseman and Company.

Ferster, B., Hammond, T., & Bull, G. (2006). Primaryaccess: Creating digital documentaries in the social studies classroom. *Social Education, 70*(1), 147-150.

Glaser, B. G., & Strauss, A. L. (1967). *The discovery of grounded theory*. Chicago: Aldine.

Hammond, T. C., & Manfra, M. M. (2009a). Digital history with student-created multimedia: Understanding student perceptions. *Social Studies Research and Practice, 4*(3), 139-150. Retrieved April 28, 2010 from http://www.socstrp.org/issues/PDF/4.3.14.pdf

Hammond, T. C., & Manfra, M. M. (2009b). Giving, prompting, making: Aligning technology and pedagogy within TPACK for social studies instruction. *Contemporary Issues in Technology and Teacher Education*, *9*(2). Retrieved March 4, 2009 from http://www.citejournal.org/vol9/iss2/socialstudies/article1.cfm

Hofer, M. & Owings-Swan, K. (2005). Digital moviemaking – the harmonization of technology, pedagogy and content. *International Journal of Technology in Teaching and Learning*, *1*(2), 102-110. Retrieved April 28, 2010 from http://ijttl.sicet.org/issue0502/Hofer.Vol1.Iss2.pdf

Hofer, M. & Swan, K. O. (2006). Standards, firewalls, and general classroom mayhem: Implementing student-centered technology projects in the elementary school classroom. *Social Studies Research and Practice*, *1*(1), 120-144. Retrieved April 28, 2010 from http://www.socstrp.org/issues/PDF/1.1.13.pdf

Hofer, M. & Swan, K. (2008). Technological pedagogical content knowledge in action: A Case study of a middle school digital documentary project. *Journal of Research and Technology Education*, *41*(2), 179-200.

Holt, T. (1990). *Thinking historically: narrative, imagination, and understanding.* New York: College Entrance Examination Board.

Kagan, D., Osment, S., & Turner, F. (2007). *The western heritage* (7th Ed.). Upper Saddle River, NJ: Pearson Prentice Hall.

Kaptelinin, V. & Nardi, B. A. (2006). *Acting with technology: Activity theory and interaction design.* Cambridge, MA.: The MIT Press.

Kearney, M. & Shuck, S. (2005). Students in the director's seat: Teaching and learning with student-generated video, in P. Kommers and G. Richards (Eds.), *Proceedings of ed-media 2005 world conference on educational multimedia, hypermedia and* t*elecommunications.* Norfolk, VA: AACE.

Koehler, M. J. & Mishra, P. (2008). Introducing TPCK. In AACTE Committee on Innovation and Technology (Ed.), *Handbook of technological pedagogical content knowledge (TPCK) for educators*. New York: Routledge.

Leontiev, A. N. (1974). The problem of activity in psychology. *Soviet Psychology*, *13*(2), 4-33.

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.

Manfra, M., & Hammond, T. (2008). Teacher's instructional choices with student-created digital documentaries: Case studies. *Journal of Research on Technology inEducation, 41*(2), 223-245.

Marino, M. T., Sameshima, P., & Beecher, C. C. (2009). Enhancing TPACK with assistive technology: Promoting inclusive practices in preservice teacher education. C*ontemporary Issues in Technology and Teacher Education*, *9*(2). Retrieved April 28, 2010 from http://www.citejournal.org/vol9/iss2/general/article1.cfm

Mishra, P. & Koehler, M. J. (2006). Technological pedagogical content knowledge: A framework for teacher knowledge. *Teachers College Record*, *108*(6), 1017-1054.

Patton, M. Q. (1990). *Qualitative evaluation and research methods.* Newbury Park, CA: Sage Publications.

Piaget, J. (1952). *The origins of intelligence in children.* New York: International University Press.

Piaget, J. (1957). Logique et équilibre dans les comportements du sujet. In L. Apostel, B. Mandelbrot & J. Piaget (Orgs.), *Logique et équilibre. Etudes d'épistemologie génétique* (Vol. 2, pp. 17-117). Paris: Presses Universitaire de France.

Roth, W. (2004). Activity theory and education: An introduction. *Mind, Culture, and Activity*, *11*(1), 1-8.

Roth, W. & Lee, Y. (2007). "Vygotsky's neglected legacy": Cultural-historical activity theory. *Review of Educational Research*, *77*(2), pp. 186-232.

Schul, J. E. (2010). The mergence of CHAT with TPCK: A new framework for researching the integration of desktop documentary making in history teaching and learning. *Technology, Humanities, Education, & Narrative, 7*. Retrieved April 23, 2010 from http://thenjournal.org

Seixas, P. (1993). The community of inquiry as a basis of knowledge and learning: The case of history. *American Educational Research Journal*, *30*(2), 305-324.

Shank, G. D. (2002). Analyzing. In *Qualitative research: A personal skills approach* (Chapter 8, pp. 126-145). Upper Saddle River, NJ: Merrill Prentice Hall.

Smagorinsky, P. (1998). Thinking and speech and protocol analysis. *Mind, Culture, and Activity, 5(3),* 157–177.

Stake, R. E. (1995). *The art of case study research.* Thousand Oaks, CA: Sage Publications.

Swan, K. & Hicks, D. (2007). Through the democratic lens: The role of purpose in leveraging technology to support historical thinking in the social studies classroom. *The International Journal of Social Studies Education*, *21*(2), 142-168.

VanSledright, B. (2002). *In search of America's past: Learning to read history in elementary school*, New York: Teachers College Press.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes.* Cambridge: Harvard University Press.

Williams, R. C. (2003). *The historian's toolbox: A student's guide to the theory and craft of history*. Armonk, NY: M.E. Sharpe.

Wineburg, S. (1991). Historical problem solving: A study of the cognitive processes used in the evaluation of documentary and pictorial evidence. *Journal of Educational Psychology*, *83*(1), 73-87.

Wineburg, S. (2001). *Historical thinking and other unnatural acts: Charting the future of teaching the past.* Philadelphia: Temple University Press.

Yamagata-Lynch, L. C. (2007). Confronting analytical dilemmas for understanding complex human interactions in design-based research from a cultural-historical activity theory (CHAT) framework. *The Journal of the Learning Sciences*, *16*(4), 451-484.

Yeager, E. A. & Davis, O. L., Jr. (1996). Classroom teachers' thinking about historical texts: An exploratory study. *Theory and Research in Social Education*, *24*(2), 146-66.

Yow, S. & Swan, K. (2009). If you build it, should I run?: A teacher's perspective on implementing a student-centered, digital technology project in his ninth-grade geography classroom. In J. Lee, J. & A. Friedman (Eds.) *Research on Technology and Social Studies Education.*

APPENDIX

MUSEUM EXHIBIT PROJECT HANDOUT

AP European History
The Twentieth Century: Interwar years and World War II
Museum Exhibit Project

Your task is to put together a brief museum exhibit that illustrates a topic or issue from Unit 10. It will be an electronic exhibit that is emailed (to hjones@gmail.com by Thursday, March 27 before class) or brought in on a USB flash drive. Be sure we can open it on school computers. We will view the exhibits over a span of days beginning toward the end of the week we return from Spring Break. Each one may fill a maximum of 5 minutes.

What makes a good exhibit? An exhibit is a combination of artifacts (short quotes from primary or influential secondary accounts, paintings, video clips, audio recordings, photographs, maps, etc.) and your interpretations of them. Some of the interpretation of artifacts is revealed in the ones chosen, some is revealed in the order they are presented. A significant part of your "interpretation" of artifacts could be accomplished through asking questions. The best exhibits balance questions and text written by the exhibitor with displays of visual and textual artifacts. Together they should tell a story that is

suggested by your artifacts and explanations and pieced together in the viewer's own mind. It should provoke thought on our part rather than simply being your narrative of some events.

The exhibit is a presentation you are preparing for the class in which you won't technically be involved (you won't be talking to us). Use Photostory 3 (a free download), Windows Moviemaker, iMovie, or one of the other movie making software programs available. Splice audio and video imagery together for the most powerful exhibit.

To find useful, meaningful, and relevant materials, use the web: AP multimedia archive is wonderful, the New York Times Historical Archive allows you to take a small photo of a section of newspaper (headlines, pictures with captions, short textual excerpts), and colorful, technological, and animated documentary history from this time period is ubiquitous. Personal accounts, journals, posters, artwork, audio and video newsfile footage, stats, charts, and, photographs are all available on a wide variety of facets of European life in the twentieth century. Music inclusion can be a wonderful way to add to the experience others will have viewing your work.

Some possible topics are below, but we can add others in if needed. Having coverage of all of these topics would be preferable, so people can do more than one if they would like. If you wish to work on a topic not listed that is relevant to the unit we're studying, see me.

- Failure of the Paris Peace, Treaty of Versailles, and League of Nations
- Isolationist sentiment: both sides of the Atlantic
- Government by Coalition in France and Britain
- Surrealism: examples, analysis, philosophical and political implications
- Cubism and cultural criticism through art
- Radio and mass communication technology
- WWII: Aggression and Appeasement: views of Chamberlain and Churchill Occupied and Vichy France
- WWII: Battle for Britain and air power
- WWII: Domestic Effects: the home fronts of the Allies
- Russia becomes the USSR: from the revolution to the Stalinist takeover: Lenin's years
- Stalin: bio, life and times
- Soviet collectivization and purges: forced orthodoxy and elimination of kulaks
- Central Planning under communism
- Women's experiences under Soviet communism
- Mussolini: bio, life and times
- Police state repression in Italy
- Fascist Economics: Italy (and Germany)
- Fascist views of feminine roles: propaganda and reality
- Hitler's personal struggle
- The Weimar Republic and its failings
- Germany (and other European powers) in the Great Depression
- Police State Repression in Nazi Germany
- Holocaust Horrors and the Aryan Purity agenda of Nazi Germany
- WWII: Axis Unification and Alliances
- WWII: Treaties and Resolutions