

Learning to Teach History through Documentary Making: A History Teacher's Professional Development

Bruce Fehn
University of Iowa

With free and easy access to digital movie making software, as well as online archives, history teachers have integrated historical documentary making into their classrooms. Using Technological Pedagogical Content Knowledge (Mishra & Kohler, 2006), or "TPCK," as an interpretive framework this study investigated one pre-service teacher's experiences with desktop documentary making. The research exposed how the pre-service teacher enacted technological (T), pedagogical (P), and historical practices (CK) in the course of making her documentary on the United States internment of Japanese Americans during World War II. The study suggests that desktop documentary making is a worthwhile compositional method for refining prospective history teachers' knowledge of desktop technology, history teaching, and the ways historians construct the past.

Keywords: documentary making, history teaching, professional development

INTRODUCTION

As desktop documentary making has excited students' interest, history teachers and social studies educators have sought ways to harness the technology to improve history teaching (Hofer & Swan, 2006; Swan, Hofer & Levstik, 2007; Coventry, Felten, Jaffee, O'Leary & Weis, 2006; Fehn, Johnson & Smith, 2010). Throughout the United States, teachers have asked students to produce historical documentaries using computer software and online primary sources. On popular websites, above all YouTube, (www.YouTube.com) students share productions with viewers worldwide.

Desktop documentary making, also called "digital moviemaking" (e.g. Swan, Hofer & Levstik, 2007) and "digital history" (e.g. O'Leary, 2006), takes various forms. In this article, "desktop documentary making" refers to the process of assembling images, music, and video clips into a short movie of a past event or development. To produce the documentary, authors locate primary sources, usually through visits to online archives.

From archives they download and store images, sounds, or other primary sources in a computer. Next, documentary producers maneuver images in a storyboard within the computer software often returning to archives for additional material. In the process of documentary construction they also add sound and apply special effects to a storyboard's individual slides.

By focusing on the case of a single pre-service history teacher, this article presents my four years' experience integrating documentary making into a secondary social studies methods course. Given new computer software developments and potential for secondary school students to make documentaries, I sought answers to the following questions: 1. What technological and historical practices do pre-service teachers enact while making desktop documentaries? 2. What do pre-service teachers learn about history teaching and learning from producing them? In light of answering these two questions I was in a position to answer the article's central question: Should teacher educators integrate desktop documentary making into pre-service history teachers programs of study?

To answer these three questions, I investigated a pre-service teacher's production of a documentary titled *Japanese Internment: This Is the Enemy*. (Hereafter shortened to *This Is the Enemy*). Gretchen Jahn Bertram, the documentary's author, used Photo Story 3 software to fashion her production. Four years ago, in 2007, Jahn Bertram composed the first version of *This is the Enemy* as part of an assignment required in the secondary social studies methods course that I regularly teach. After graduating with her MA degree in social studies education, Jahn Bertram (2007) produced a revised version of the documentary which she shared on You Tube. She also contributed the revised version to *eHistory* the multimedia history website associated with The Ohio State University (Jahn Bertram, 2011).

LITERATURE BACKGROUND

Previous research indicates documentary making can enhance and advance history teaching and learning at all levels of instruction: elementary, secondary and tertiary. Hofer and Swan's (2008) study suggested 6th grade teachers with robust knowledge of history, pedagogy, and technology can productively harness students' enthusiasm for desktop documentary making. As the teachers increasingly recognized the unique history making practices required for documentary making they made better decisions for effective teaching and learning through movie production. Schul's (2010a, 2010b) close study of a secondary school teacher demonstrated that instructors with strong content knowledge, together with robust pedagogical and technological skills, can transform students' enthusiasm for moviemaking into cultivation of historical thinking skills such as analysis, perspective taking, critical evaluation of sources, and narrative synthesis.

Tertiary faculty associated with the Visible Knowledge Project discovered documentary making software provided them with powerful instructional tools for deepening students' understanding of history production (Coventry, Felten, Jaffee, O'Leary and Weis, 2006; Jaffee, 2006). While making documentaries, college and university students enacted conventional historical practices associated with writing the past such as analysis and interpretation. Desktop documentary making, however, afforded teachers and students opportunities to compare written with audiovisual productions of the past. By means of this comparative method, students and faculty found new and "innovative opportunities for expression of historical understanding" (Coventry, et al., 2006, p. 1374).

As was the case with *writing* historical narratives, the professors found documentary production helped them teach students that every primary source has been created with

intention, must be viewed skeptically, and interpreted in conjunction with other sources. From producing audiovisual histories, furthermore, students shaped and disrupted earlier understandings of historical events. By experimenting with combinations of image and sound students better understood history as a construction requiring careful evaluation of evidence and complicated narrative synthesis (Coventry, et al., 2006).

In the article's next section I provide context for Jahn Bertram's production of her historical documentary. Subsequently, in light of Jahn Bertram's experiences, I return to questions raised at the beginning of this article: What historical practices do pre-service teachers learn while making desktop documentaries? What do pre-service teachers learn from desktop documentary making about history teaching and learning?

THE DESKTOP DOCUMENTARY MAKING PROJECT

When she composed *Japanese Internment: This Is the Enemy*, Jahn Bertram was a twenty-nine year old student enrolled in a secondary social studies methods course, which I have taught each semester for the last seventeen years. She produced the documentary as part of a lesson plan on Japanese internment she designed and taught to her peers – a project (peer teaching) required of all students in the course. As such, from the outset of her documentary making experiences, Jahn Bertram produced the documentary with pedagogical purposes in mind. She wanted her peers to better understand how and why the United States interned Japanese Americans through viewing and discussing her documentary.

At the time of Jahn Bertram's participation in the methods course I was, for the first time, working to integrate desktop documentary making into the professional development of history and social studies teachers. The methods course had been always informed by Shulman's (1986) "pedagogical content knowledge" (PCK) as further elaborated by Wineburg (1991) in the realm of historical thinking. While each semester the course attended to teaching and learning in other disciplines (e.g. political science and psychology), the central focus was upon history, which nearly every student enrolled in the course was preparing to teach.

The course fostered prospective teachers' PCK via exercises and practice with primary sources to cultivate historical thinking. To develop pre-service teachers' pedagogical content knowledge I explicitly linked historical thinking to instructional methods. To provide teacher candidates with practice converting lesson plans into actual instruction, I required them to design and implement a plan with their peers termed "demonstration lessons." Students' demonstration lessons were typically rich in primary source material and immersed classmates in a variety of historical documents to elicit historical thinking. Within this context of pre-service history training, Jahn Bertram composed her documentary.

Jahn Bertram, as noted above, used Photo Story 3 to make *This Is the Enemy*. Photo Story 3 is a free software package from Microsoft that anyone with online access can download to produce a desktop documentary. The software enables documentary makers to gather and store images and sound from online archives or websites. Unlike iMovies, for instance, Photo Story 3 does not contain a feature allowing users to integrate video clips into their productions. Jahn Bertram relied strictly on "still" images using panning and fading to "animate" them. A Photo Story 3 user employs a storyboard in the software to align visual and aural sources. The documentary maker may choose to employ his or her own voice, music, sound effects or voices of others, to advance the narrative. Sometimes desktop historians use words or numbers placed over an image or on a separate "slide" to orient viewers geographically or chronologically, e.g., "Manzanar Internment Facility, 1943."

Although Jahn Bertram made her first version *This Is the Enemy* within the context of my social studies methods course, she has continued her interest in desktop documentary making up to the present time. Going beyond course requirements, Jahn Bertram posted her production on YouTube. In addition to sharing the documentary, she offered viewers an explanation of why she made *This Is the Enemy*. She explained to YouTube visitors that knowledge of Japanese internment was important for understanding democracy and how threats to democracy can emerge. Moreover, Jahn Bertram explained that she was a history teacher; a person interested in furthering historical knowledge in service of fostering democracy. She further explained that she was interested in comments on her documentary – whether viewers posted them as documentary “replies” or written responses. Indeed, *This Is the Enemy* generated hundreds of comments. As discussed in one of this article’s sub-sections, Jahn Bertram’s YouTube postings, as well as viewers’ replies, provided additional data for describing her technological, pedagogical and content knowledge.

INTERPRETIVE FRAMEWORK AND RESEARCH METHODS

To interpret data I employed Mishra and Kohler’s (2006) formulation “technological pedagogical content knowledge” or “TPCK.” As new technologies made inroads into educational settings, Mishra and Koehler argued effective teachers must possess robust knowledge, not only of subject matter content and instructional methods (Shulman’s PCK), but technological competence as well (TPCK). Competent teachers, they insisted, must now constantly consider how technology, especially computer software programs, can further enhance instructional practices and enrich students’ encounters with subject matter. As such, teacher educators should now teach pre-service teachers how technology provides *unique* instructional opportunities for students’ engagement with subject matter content.

TPCK provided a dynamic model through which to describe and interpret Jahn Bertram’s experiences with desktop documentary making, as well as to answer this study’s research questions: What historical practices do pre-service teachers learn while making desktop documentaries? What do pre-service teachers learn from desktop documentary making about history teaching and learning? Should teacher educators integrate documentary making into the professional development of history teachers? The TPCK heuristic enabled description of documentary making that took place within a “complex system” whose parts had interdependencies and dynamics that “[could not] be meaningfully reduced to a few discrete variables and linear cause-effect relationships” (Patton, 1990, pp. 40-41). To locate data for a “rich description” (Swan & Hofer, 2005, p. 105) of this system I employed methods to expose the particularities of Jahn Bertram’s TPCK.

To obtain data on this complex and emerging system, I conducted two interviews with Jahn Bertram to elicit the “story” of her production experiences (Stake, 1994, 239-240). During the second audio recorded interview, Jahn Bertram viewed both a Power Point slideshow of images she used to make the documentary, as well as the “final cut” of *This Is the Enemy*. In addition to interviews I repeatedly viewed the documentary to discern how Jahn Bertram aligned images, aligned images with sound, and applied special effects. By interviewing Jahn Bertram while we viewed individual slides, as well the complete final cut, I elicited responses revealing her historical practices. I asked her, for example, how and why she placed specific images side by side or overlaid certain clusters of images with particular musical selections.

While we watched *This Is the Enemy*, furthermore, Jahn Bertram pointed out to me specific parts of the production and provided reasons for technological maneuvers such as

focusing and fading on an image to call viewers' attention to specific details. She explained how she made specific moves to create emotional impact upon intended viewers. When she first completed *This Is the Enemy*, intended viewers were Jahn Bertram's fellow pre-service teachers enrolled in my methods course. Now the intended viewers she had in mind were future students; those whom she envisioned someday teaching about the United States internment of Japanese-Americans during World War II. During the interviews, Jahn Bertram explained how and why she made content decisions (CK) together with technological maneuvers (T) to realize pedagogical intentions (P). In other words, she described to me the interrelated and continually emerging relationships between Photo Story 3's technological operations (T), her pedagogical understanding (P), and the historical practices and content employed to make the documentary (CK).

As mentioned above, Jahn Bertram's posting of her documentary on YouTube also provided a site for investigating her technological, pedagogical content knowledge. Of course, the site, and hence *This Is the Enemy*, were continually available for me to visit and conduct research. Furthermore, viewers' comments on the documentary provided data for how documentary viewers, who may be properly regarded as students of history and the internment, responded to the documentary's content and production features.

FINDINGS

FINDING 1: HISTORICAL PRACTICES

What historical practices did Gretchen Jahn Bertram enact while composing her desktop documentary? This was the first of three questions guiding this case study. By "historical practices" I mean the observed or reported behaviors Jahn Bertram enacted to unearth materials from the past (primary sources); the ways she transformed the historical material, in this case images, using software operations such as "zoom in" and "zoom out" applications; and the methods she employed to align images with each other, as well as with sound, to produce a narrative, i.e., a history of Japanese internment.

In identifying the historical practices Jahn Bertram enacted, it is important to mention again that Jahn Bertram's technological, pedagogical and content knowledge developed simultaneously, not separately. As such TPCK required an ecological approach to studying and representing her activity – desktop documentary making. The constituent dimensions (T, P, and CK) were separately useful for analysis and description. The reality was, however, that they emerged together from the start of Jahn Bertram's selection of her topic until she contributed *This Is the Enemy* to YouTube for viewers to watch. I would argue, in fact, that her TPCK still emerges when she occasionally responds to a viewer's comments on the documentary.

What primary sources did Jahn Bertram consider and select in fitting together her documentary? Why did she select specific images or sounds, while rejecting others, for the final cut? How did she "handle" the sources (i.e., analyze and interpret them) while constructing her documentary? What technological maneuvers and historical practices did Jahn Bertram employ to construct her narrative of the United States internment of Japanese Americans during World War II? Providing answers to these questions help pin point Jahn Bertram's and other documentary producers' history making practices. Knowledge of these practices, in turn, help teacher educators, and their pre-service teachers, make informed decisions about whether or how to integrate these practices into professional development programs and history classrooms.

Fitting Sources Together. While academic historians write history based upon facts contained in primary sources, they must base books and articles produced upon limited

and selected sources. While writing monographs or articles historians “fit together” selected evidence in a way sufficiently plausible to satisfy, or even impress, an audience of their colleagues in the profession (Gaddis, 2002).

Desktop documentary makers also fit together primary source evidence in their compositions of the past. Like their counterparts who write the past they select and synthesize sources. Unlike historians who write the past, they compose history by employing primarily sounds and images (the actual artifacts of history) in their productions. In contrast, academic historians employ words almost exclusively, with only occasional deployment of quotes from sources or images within the body of their texts.

While finding sources for her documentary, Jahn Bertram continually performed the “recursive iterations” (O’Leary, 2006) and “adductive reasoning” (Fisher, 1971) that academic historians employ to write accounts of the past. Consistent with historian David Hackett Fischer’s view (1971) of adductive reasoning, Jahn Bertram “fitted together” images and sounds in “a complex process of mutual adjustment” (pp. xv-xvi, n1; see also Gaddis, pp. 49-50). Using Photo Story 3’s storyboard, she continually aligned and re-aligned images and sound to shape a narrative of what happened to Japanese Americans and why. Often she returned to online archives in search of images or sound clips to more finely shape the emerging narrative -- the “recursive iteration” or “reiteration loop” (Gaddis, p. 46) necessary for production of well-crafted historical narratives.

Research, Source Collection, Source Selection, Storyboarding, Synthesis and Source Citation. As historian Sol Cohen (2006) observed, “the details in any picture are infinite. [One] needs a perspective, a point of view, to give them meaning. So interpretation lies at the center of the enterprise” (p. 255). Jahn Bertram’s perspective, or point of view, emerged as she collected, selected, interpreted, maneuvered, and shaped images, music and voice, heading toward the final cut. From the beginning she conducted research in online archives; stored sources on her computer; used Photo Story 3’s storyboard to align and re-align images and sound; and experimented with how images and sounds advanced an emerging historical narrative. Jahn Bertram fixed her attention on details and interpreted how those details in one image aligned with those in other images.

Synthesis and data collection were ongoing practices and took place concurrently. Jahn Bertram visited dozens of online archives and downloaded some 300 images for potential inclusion in *This Is the Enemy*. From storage files in her computer, she selected images and integrated them into the Photo Story 3 storyboard for *potential* inclusion. In the re-iterative process of aligning images, and images with music or voice, Jahn Bertram shaped and re-shaped the documentary’s historical content.

Citations provided in the endnotes for *This is the Enemy* demonstrated Jahn Bertram’s concern with scholarly practices. The fifty-five citations provided the source of each slide and indicated to viewers that she used historical material strictly from reliable archival repositories (Jahn Bertram, 2008). The sites included the Library of Congress, Franklin Delano Presidential Library and Museum, and National Archives and Records Administrations. Other images came from university library archives such as the University of Maryland and University of Mississippi. Jahn Bertram’s exhaustive endnotes were a strong gesture or signal affirming the practices of academic historians.

Juxtaposition, Image Alignment, Image-Sound Alignment and Special Effects. The eminent diplomatic historian John Lewis Gaddis (2002) explained how historians engaged in “thought experiments” (p. 43) as they exercised imagination on primary sources to compose what they intended to be an “affecting narrative” (p. 43). Jahn Bertram employed Photo Story 3’s storyboard to experiment with juxtapositions while composing her documentary. Juxtaposition, as a moviemaking maneuver, draws upon the

fact, at once simple and profound, that two images together created meanings different than a single image standing alone (e.g., Eisenstein, 1975). In the example below from her documentary, Jahn Bertram paired an aggressive Uncle Sam with a photo of Japanese-American children waiting relocation to an internment camp. Juxtaposing these images evoked a meaning different than either of the images by themselves. In Figure 1, Uncle Sam exerts muscle against Japanese-American children.

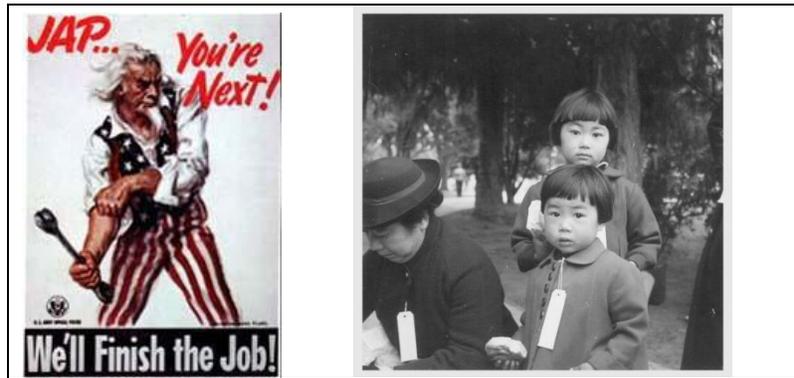


Figure 1: Juxtaposition of Aggressive Uncle Sam and two Japanese-American children awaiting relocation. Sources: Flagg (1942) Lange (1942).

If she would have juxtaposed the same image of Uncle Sam with an image from the Japanese attack on Pearl Harbor, the meaning created would have been completely different (see Figure 2).

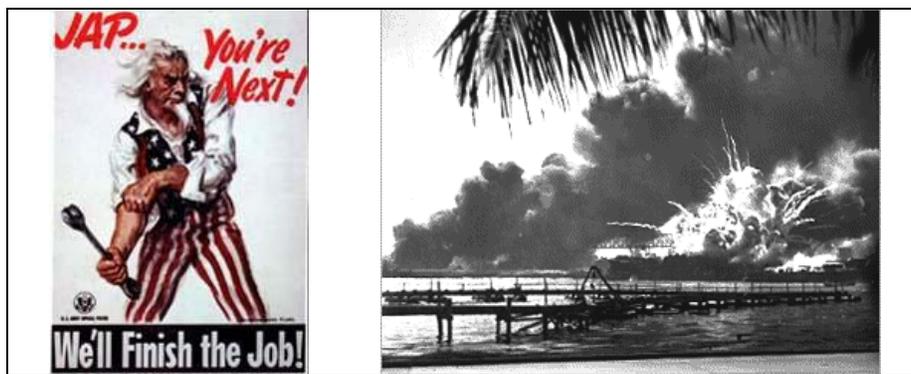


Figure 2: Juxtaposition of Aggressive Uncle Sam and Japanese attack on Pearl Harbor. Sources: Flagg (1942) and USS *Shaw* (1941).

Jahn Bertram used juxtapositions as a central device for shaping her documentary's argument that the United States unwisely fanned the flames of racism to unjustly imprison innocent Japanese-American citizens.

Jahn Bertram also used Photo Story 3's capacity to align images with aural sources. Combining sound with image is, of course, standard for motion pictures, whether feature films or documentaries. Jahn Bertram's alignment of sound and image required facility with the Photo Story 3 storyboard to experiment with, and move into place, these two different kinds of historical content. For example, she overlaid FDR's voice delivering his famous "Four Freedom's" speech with images showing interned Japanese-Americans

-- an image-voice juxtaposition. The message: Japanese Americans did not experience “Freedom from Fear”; one of FDR’s “four freedoms.” As another example, she overlaid photos of Japanese-Americans with “inuyasha,” a form of contemporary Japanese music. Jahn Bertram intended the photos, together with inuyasha, to stir viewers’ feelings of sympathy with Japanese Americans’ situation.

In addition to image juxtaposition and image-aural alignment, Jahn Bertram maneuvered Photo Story 3’s panning and fading effects. In one image, for instance, she focused on a child amidst a crowd. Then, she faded from focus on the child to reveal a crowd of people waiting to board a train. This simple motion took the viewer from the plight of an individual to the large numbers who shared the child’s fate.

The famous American documentary maker Ken Burns relied heavily on such techniques to produce his widely viewed documentaries “Civil War,” “Baseball,” and “Jazz.” “I’m willing to trust,” Burns said, “that the individual image can convey complex information. So, I’ll treat an old photograph as if it really was moving . . . , to see it as a long shot, as a medium shot, as a close shot, a tilt a pan a zoom in a zoom out” (Witter, 2003). While shaping the overall content of her documentary, Jahn Bertram purposefully deployed panning, fading and focusing (special effects) with each of the fifty-five images comprising *This Is the Enemy*.

FINDINGS 2: PEDAGOGICAL INTENTIONS

What do pre-service teachers learn about history teaching and learning from producing desktop documentaries? This was a second key question informing this case study. While investigating Jahn Bertram’s historical practices, I was attentive to whether and how Jahn Bertram’s pedagogical knowledge worked in tandem with the historical practices and technological maneuvers she enacted with Photo Story 3 software. Interview data indicated Jahn Bertram expected students would learn about the history of United States internment of Japanese Americans from viewing her documentary. However, she did not expect them to learn through passive intake of information contained in *This Is the Enemy*. Rather, Jahn Bertram expected students to actively interpret the sources and discern the argument of her audiovisual production. She explained to me, for example, why she decided *not* to use words (either placed on slides or through her own “voice-of authority” overlay) to tell the story. She wanted viewers to actively interpret or make meaning of her production rather than telling them what to think. In her own words:

I did not want to simply give them answers . . . This is why I didn’t use a ‘voice of authority’ talking over the images as they passed by on-screen. I wanted students to interpret the images, come up with their own thoughts on the topic using what they were seeing . . .

“Students would have something to say,” Jahn Bertram reasoned, “but it would not be parroting something they’d read or heard during the [P]hoto [S]tory.” From the beginning of the production process she intended to construct a desktop documentary that would place viewers’ in an active, rather than a passive position.

Conceiving of her audience as students, together with her understanding of history learning as a meaning making activity, Jahn Bertram eschewed conventional documentary making approaches. Rather than using narrative overlay or other devices to fix the documentary’s narrative, Jahn Bertram sought to leave viewers room for making meaning of her audiovisual messages.

For a good example of a conventional production that left little obvious interpretive space for viewers, (which focused also on Japanese internment), watch *Go for Broke: The Tragedy and Triumph of the Nisei Soldier* (Mediadew101, 2008). The author employed the conventional voice-of-authority, also termed “voice-of-God” narration, (e.g., Nichols, 2001) to propel the narrative. While the documentary competently represented Japanese-American internment it left little to viewers’ historical imagination. The voice-of-authority enforced the story line and interpretation. Without the kind of trained pedagogical knowledge we should cultivate in teacher candidates, in-service teachers seem less likely to position students to actively interpret and evaluate arguments historical documentaries inevitably contain.

FINDING 3: PEDAGOGICAL INTENTIONS AND YOUTUBE

Since the time Jahn Bertram (2007) shared *This Is the Enemy* on YouTube over forty six thousand visitors have opened the documentary. While her composition joined dozens of other documentaries on United States internment of Japanese-Americans, Jahn Bertram distinguished her production by explaining on YouTube her pedagogical concerns. Taking advantage of YouTube’s provision for moviemakers to give viewers information about their productions Jahn Bertram wrote:

. . . As a citizen, educator, & most importantly, [a] mother living within the United States, I see it as my duty to critique, criticize, & attempt to improve the direction of American society. This video is one way I attempt to reach that end. In my classroom, my goal is to empower students by giving them the knowledge of how their society works, & through this, how to alter its course. I endeavor to teach students about the interconnectedness of the world, that they have a place in it, & that they have the power to direct it. Without knowledge of their position in our democratic society as citizens, students may never realize their ability to direct society. Without the realization that they can change society, students may never try. . . . Without active citizenry, democracy dies.

“One of the most important parts of social criticism,” Jahn Bertram continued, “is debate. The beauty of using imagery to teach history [is] that it evokes discussion, as evidenced by many of your comments. I welcome any video responses showing opposing or alternate viewpoints or covering related subjects” (Jahn Bertram, 2007).

YouTube technology enabled viewers to interact with Jahn Bertram well as with each other. In fact, *This Is the Enemy* has provoked over 400 comments. Viewers’ comments ranged from scholarly to name calling. It garnered praise as well as condemnation. Among the many commentators who praised the production was a Japanese-American who had been imprisoned in an internment camp. Others pushed back against her interpretation. The response below, for example, accused Jahn Bertram of unscrupulously manipulating a piece of historical evidence (a photograph) and fashioning a misguided interpretation of the United States internment of Japanese-Americans. The viewer asserted the

picture at 2[:]20 . . . has been altered. Two very happy females on each side have been cut away. These boys may be sad because they are not out playing but it has nothing to do with the internment. Most of those who were children at the time say they played constantly and had a good time.

These home made videos [including Jahn Bertram's] are intended to bash America and do not show how much was done to make the very necessary relocation as easy as possible on the Japanese.

Jahn Bertram, the viewer argued, manipulated the slide to maximize the pain of relocation and minimize the lengths to which the United States insured the well-being of Japanese adults and children (Jahn Bertram, 2007).

This viewer's critique of Jahn Bertram's use of evidence and her documentary's argument indicated the latter realized pedagogical purposes beyond those secondary school students whom she envisioned teaching. With its appearance on YouTube *This Is the Enemy* had an immediate and enduring impact. Many YouTube visitors applauded *This Is the Enemy*, including the internee mentioned earlier. Viewers agreed with her interpretation and the importance of knowing the history of Japanese internment. In an interesting confirmation of *This Is the Enemy*'s reach via YouTube, one viewer reported that her teacher in Oregon used the video in her history class.

CONCLUSION

Should social studies integrate desktop documentary making into pre-service history teachers programs of study? The record of Gretchen Jahn Bertram's experiences producing a desktop documentary indicates social studies educators should consider integrating documentary making into pre-service teachers' professional development programs. From her conception of a Photo Story 3 composition to its ongoing appearance on YouTube, Jahn Bertram has demonstrated possession of technological, pedagogical, content knowledge (TPCK). She looked upon desktop documentary making from a history teacher's point of view. While fashioning *This Is the Enemy* with pedagogical intention, she located, interpreted, analyzed and fit together primary sources. Working within the limits and possibilities of Photo Story 3's technological operations, she used historical practices to craft an audio-visual narrative. While checking for new viewer responses on YouTube she refreshed her TPCK.

With a TPCK foundation acquired during pre-service training and beyond, this case study suggests, in-service teachers are better equipped with a disposition and the confidence to integrate desktop documentary making into pedagogical practice. Teachers need this foundational support because desktop documentary making does not fit comfortably within the institutional structures of schools and classrooms. For example, desktop documentary making takes time. Teachers need to insure access to computers and the internet. While trying to integrate documentary making into the classrooms, questions surface: How do I assess a desktop documentary? Should every student show his or her documentary to classmates? What do students derive from viewing each other's documentaries?

Given that desktop documentary making's elicits historical thinking skills and mines students' enthusiasm for technology and moviemaking (Swan, Hofer & Levstik, 2007), we should work with pre-service teachers to envision how to productively integrate desktop documentary making into classrooms. As part of such a project, we need to understand the variety of ways documentary makers apply software operations to historical content thereby transforming it. We need to recognize that documentary making provides an engaging means for comparing and contrasting the knowledge generating practices of historians using primarily words and those using mostly images and sound. Such recognition provides confidence that documentary making raises serious historical questions and can be much more than "show and tell" (Fehn et. al, 2010). As part of this endeavor, I have described what one pre-service teacher learned from making,

sharing and reflecting upon her desktop documentary. From Photo Story 3 to YouTube, Gretchen Jahn Bertram's "story" suggests documentary making can have a productive place in the professional development of history teachers and their future students.

REFERENCES

- Cohen, S. (2006). An innocent eye: The "pictorial turn," film studies, and history," *History of Education Quarterly* 43(2), 250-261.
- Coventry, M., Felton, P. Jaffee, D., O'Leary, C. & Weis, T. with McGowan, S. (2006). Ways of seeing: Evidence and learning in the history classroom," *Journal of American History*, 30(6), 1371-1377.
- Eisenstein (1975). *The film sense*. New York: Harcourt, Brace, Jovanovich.
- Fehn, B., Johnson M, & Smith, T. (2010). Way beyond show and tell: Strategies for integration of desktop documentary making into history classrooms, *Social Education*, 70(2), 101-104.
- Fehn, B. & Schul, J. (2011) Teaching and learning competent historical documentary making: Lessons from National History Day winners. *The History Teacher*, in-press.
- Flagg, J.M. (1942). *Jap...You're Next! We'll Finish the Job!* [Poster]. College Park, Maryland.
- University of Maryland Institute for Advanced Computer Studies. James Montgomery Flagg, artist. U.S. Army Official Poster. Retrieved from <http://narademo.umiacs.umd.edu>
- Fischer, D.H. *Historians fallacies: Toward a logic of historical thought*. New York: Harper.
- Gaddis, J.L. (2002). *The landscape of history: How historians map the past*. New York: Oxford.
- Hofer, M. & Swan, K.O. (2005). Digital moviemaking – The harmonization of technology, pedagogy and content. *Journal of Technology in Teaching and Learning*, 1(2), 102-110.
- 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 from <http://www.socstrp.org/issues/showissue.cfm?volID=1&IssueID=1>
- Hofer, M. & Swan, K.O. (2008). Technological pedagogical content knowledge in action: A case study of a middle school digital documentary project. *Journal of Research on Technology in Education*, 41(2), 179-200.
- Jaffee, D. (2006). Thinking visually as historians: Incorporating visual methods. *Journal of American History*, 30 (6), 1378-1382.
- Jahn Bertram, G. (2007). *Japanese internment: This is the enemy* [documentary]. Retrieved from <http://www.youtube.com/watch?v=JkaQqzumMGE>
- Jahn Bertram, G. (2011). *Japanese internment: This is the enemy* [documentary]. Retrieved from <http://ehistory.osu.edu/osu/mmh/internment/vid/streaming.cfm>
- Lange, L. (1942). Hayward, Calif – Two children of the Mochida family [Photograph]. Berkeley, CA. The Bancroft Library. Retrieved from <http://content.cdlib.org/ark:/13030/ft6z09p0nf/>

- Madiadew101. (2008). Go for broke: The tragedy and triumph of the Nisei soldier. Retrieved from <http://www.youtube.com/watch?v=5hKEShL8OUU>
- Nichols, B. (2001). *Introduction to documentary*. Bloomington: Indiana University Press.
- Oppermann, M. (2008). Digital storytelling and American studies; Critical trajectories from the emotional to the epistemological. *Arts & Humanities in Higher Education* 7(2), 171-187.
- Patton, M.Q. (1990). *Qualitative evaluation and research methods*. Newbury Park, CA: Sage Publications.
- Schul, J.E. (2010a). 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 from <http://thenjournal.org/feature/281/>
- Schul, J. E. (2010b). 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.
- Shulman, L. S. (1986). Those Who Understand: Knowledge Growth in Teaching, *Educational Researcher*, 15 (2), 4-14.
- Stake, R.E. (1994). Case studies. In N. Denzin and Y. Lincoln (Eds.), *Handbook of Qualitative Research* (pp. 236-247). Thousand Oaks, CA: Sage..
- Swan, K.O., Hofer, M. & Levstik, L. (2007). "Camera! Action! Collaborate with digital moviemaking," *Social Studies and the Young Learner*, Vol. 19(4), 17-20.
- U.S.S *Shaw*. (1941). U.S.S *Shaw* exploding during the Japanese raid on Pearl Harbor, December 7, 1971. Washington D.C. American Originals. National Archives and Records Administration. Retrieved from http://www.archives.gov/exhibits/american_originals/fdr.html
- Witter, D. (2003). "The 2003 Speaker Series featuring Ken Burns," The Ohio State University Lecture Series. Retrieved from <http://www.library.okstate.edu/friends/cobb/burns.htm>