In thoughtful articles in the *Journal of American History*, historians Michael Coventry, Peter Felton, David Jaffe, and others described how the “pictorial turn” in cultural studies and the “digital turn” in the history profession were changing their teaching. They argued historians’ increased use of visual material (the pictorial turn) necessitated teaching students how images influenced past developments and how historians increasingly employed images to shape versions of the past. The accessibility of online images and new technological capacities for organizing and presenting visual material (the digital turn) motivated the authors “to [help] their students become sophisticated readers – and perhaps even authors – of image-based historical narratives.” “While an emerging body of scholarship addresses the development of historical-thinking skills using textual sources,” the historians observed, “little has been published on how the pictorial turn might simultaneously complicate the study of history and offer new opportunities for faculty to teach students to think historically.” Moreover, new multimedia enables students and teachers to explore alternative ways of composing, presenting, and contesting historical knowledge.¹

With evidence from a small study involving pre-service history teachers, this essay explores PowerPoint slideshow’s capacities for introducing history teachers and students to the pictorial and digital turns for representing and narrating the past. Based upon this research I argue image-dominated PowerPoint slideshow provides teachers and students with a unique and powerful tool for composing and interrogating historical evidence and narrative. By putting slides together in new ways slideshow history composers have surprises, insights, and even
new worries – all part of the emotions and cognitive activity required of historians. As history educator Walter Werner observed, moreover, image-based presentations “open” opportunities for teachers and students to generate many possible meanings that rich “visual texts” contain. Encounters with visual material, enables viewers to detect a “storyline” and offer “plausible” “alternative storylines.” In a manner unique to PowerPoint, students and teachers “uncover” the elements and structures of historical narration for analysis, interrogation, and improvement. With slideshows containing ten, fifteen, twenty or more images composers and viewers participate in what historians Alan Munslow and Robert A. Rosenstone would identify as an “experiment in history”; a narration of the past “where being playful, inventive and imaginative is. . . part of the knowing.”

Historians, history educators, and teachers agree that development of historical thinking requires students to compose narratives. Through collection, analysis, evaluation, and synthesis of historical materials into compositional forms students refine their understanding of history as construction. The National Standards for History claims synthesis of historical material into a narrative represents a central component of historical thinking. The Standards assert “K through 4 students should create historical narratives of their own.” and older students (grades 5 through 12) can only attain “[r]eal historical understanding” by creating historical narratives and arguments. “Such narratives and arguments,” the Standards observe, “may take many forms – essays, debates, and editorials, for instance.” PowerPoint slideshow has emerged as a new medium for narrative production and exploration.

This investigation into PowerPoint’s potential for history teaching and learning draws upon evidence from twenty-seven slideshow compositions produced by twenty pre-service history teachers. In the absence of instruction on PowerPoint slideshow and narrative history, the study found, subjects quite predictably composed slideshow histories mimicking narrative structures featured in PowerPoint lectures frequently observed in classrooms and lecture halls. The first productions were akin to what Richard Paxton identified as “school writing”; a veritable
duplication of the “knowledge structure” of history textbooks. They also contained features such as heavy reliance on bulleted sentences and sentence fragments. Rather than exerting agency upon, and transforming, written and visual sources into their own interpretation and voice, subjects’ first PowerPoint compositions tended to serve as vehicles for “knowledge telling” presentations. After instruction on PowerPoint and history, however, some subjects designed compositions demonstrating the medium’s capacities to compose a different kind of historical narratives. These slideshows were dominated by images and much more open than subjects’ first efforts to conversations about possible meanings a historical slideshow narrative may contain.

Historical Narrative, PowerPoint, and Pedagogy

Prevailing historical narratives, such as texts, monographs, articles, lectures, and books-on-tape, present readers or listeners with fully developed, seamless products. They render invisible (at least to the novice reader or hearer) writers’ struggles to produce complete and coherent historical narratives. When history teachers or lecturers employ newer modes of composition such as PowerPoint slideshow they also tend to project a seamlessness disguising the struggles to render a coherent past from fragmented evidence. They typically project slides with words to help students or audiences follow the developing historical narration or argument. Students write down lecturers’ observations and arguments for restatement on examinations. Successful learning consists of following a line of reasoning rather than acting upon or challenging the logic and evidence presented. The lecturers’ slides may indeed offer recipients examples of primary sources employed to develop the argument. However, images or other documents serve as illustrations of the professors or teachers’ narrative rather than sources for students to interpret.

While having the capacity to assist composition and presentation of a conventional closed narrative structure, PowerPoint slideshow should instead open with students a
pedagogical space to analyze and critique historical narratives. In the process of composing and presenting, teachers should position students to interpret an individual slide, clusters of slides, or challenge slide inclusion or arrangement. Unlike with slow and clunky predecessor technologies (slide and opaque projectors) teachers and students using PowerPoint may project many images in rapid succession and return quickly and easily to previous images for further analysis and interpretation. Together presenter and viewers can assume agency over the words, images and narrative structure. Students and teacher may reorder individual slides into new juxtapositions, clusters, or sequences to refine or re-fashion a narrative’s meaning(s). Such revisions represent a critique of the narrative or rhetoric contained in the original slideshow. Ultimately PowerPoint historians, like their “conventional” counterparts, alight upon a configuration or succession of visual and verbal material enabling viewers to construct a story of a past event or development.

Among historians, David Staley has argued most vigorously for image-dominated slideshows as “a serious form of historical narrative” whose composers follow the same “design principles” as those employing words to construct written narratives. “Whatever our individual historical specialties,” Staley observed, “all historians . . . ask questions, seek relevant primary sources, discern patterns in the evidence, and then arrange the evidence into a meaningful narrative strung together by words, sentences and paragraphs.” In an article titled “Sequential Art and Historical Narrative: A Visual History of Germany,” Staley maintains that historians who create visual narratives employ the same processes. To illustrate, he provided a “visual essay” containing a sequence of exclusively visual primary sources (e.g., photos, advertisements and diagrams) from post-World War II Germany. Staley claimed his sequential ordering of images “make them a history, instead of merely a haphazard collection of pictures or ‘gallery of images.’” Creation and comprehension of visual narratives emerges from the juxtaposition of images side by side and in longer sequences. “The sequence of images,” Staley wrote, “creates a context which affects the meaning of each image. Change the arrangement of the images,
alter the selection of the images so juxtaposed and the meaning of the individual images is changed.  

Although Staley discussed neither PowerPoint nor history teaching, he made stimulating suggestions about the interaction of teachers and students with sequences of slides, many featuring visual primary sources. Viewers create historical meaning by reading, in Staley’s words, “the conceptual space between two images.” Drawing upon studies of sequential art, such as comic strips, Staley believes historians using visual sequences require viewers to “fill in” the spaces between images to create meaning. By implication, authors of visual narratives give readers wider latitude for interpreting or even changing an essay’s meaning than historians who produce written narratives. If we think of teachers and students composing, reading, or evaluating/critiquing a visual historical narrative, Staley continues, the essay’s meaning emerges as they make “the conceptual and associative connections between [the] images.”

Further, by connecting a slideshow’s images readers may construct, or complicate and challenge, the author’s intended historical narrative. It is within this pedagogical and collective process of identifying and debating possible meanings and narratives contained in slideshows that students deepen their understanding of history as a provisional human construction open to disruption and contestation.

To borrow a phrase from literacy scholar Ilana Snyder, a well-constructed PowerPoint history slideshow, especially those intended for pedagogical purposes, contains a “rich field of narrative possibility.” Narrative possibility evolves from varying combinations and permutations of a slideshow’s constituent compositional elements: word, phrase, sentence, image, sequence/order, speed, flexibility, number of slides. These elements are combined with presenter’s voice, style, and intentions as well as the authors’ interaction with the audience. In a history slideshow with robust narrative and pedagogical potential, classroom conversation opens many possibilities for exploring narrative story line. Such compositions contain slides with both intra- and inter-slide interpretive richness. Many individual slides enable the reader to
ponder the meaning of several elements within them. Pairs of slides contain specific features suggesting analogies that create additional possibilities for narrating the past. Clusters or sequences of slides enable complicated even competing stories of what happened and why or how. Audience or class members may “compare impressions” as they discuss, contest, or elaborate each others’ readings of the material encountered. The teacher or student relinquishes control, while twenty-five or thirty class members each respond differently to the overall slideshow and individual slides composing it. The role of the presenter, teacher, or student is to facilitate student or audience member responses – individually and collectively. Although the presenter has selected, clustered, and ordered images into a narrative or argument, the students or audience members may contest the narrative or argument contained in the visuals presented them.

Based upon my design, instruction, and presentation experiences with PowerPoint slideshow, I became convinced the technology offered instructors and students a potentially valuable device for teaching and learning history. Pre-service teachers in my social studies methods course, I decided, should encounter the easy-to-use technology’s potential to spark historical imagination, understand history-as-construction, and introduce their future students to PowerPoint as a medium for representing and narrating the past. I had observed, moreover, that students had a distinct attraction to PowerPoint and most knew already how to construct a slideshow. In spring 2004 I first required pre-service teachers enrolled in the social studies methods course to construct and present archival-based, visual representations for pedagogical purposes. After three semesters of creating, observing, and critiquing slideshows with students, I decided in fall 2005 and spring 2006 to explore systematically, through a small exploratory research study, pre-service teachers’ understanding of PowerPoint as a tool for teaching and learning history as a narrative construction.
Description of the Study

I. Data Generation and Collection

To generate data pre-service teachers in the fall and spring semesters of 2005 and 2006 produced slideshows for presentation to classmates. Instructional requirements varied for each of the assignments. The eight fall 2005 subjects were first assigned to produce a slideshow without any instructions on how to proceed. Data from these slideshow compositions would either validate or complicate the expected result that subjects’ first “move” would be to produce conventional slideshows with words driving historical narratives. Images used would have few interpretive possibilities, e.g., a portrait photograph or illustrative clip art. These first efforts also would provide baseline data for assessing whether, and how, subsequent instruction affected later slideshow productions. Hence, for the first assignment, fall 2005 participants were told simply to “create a slideshow for presentation to the class.” Before preparation of a second slideshow, fall 2005 subjects received instruction on the preparation and presentation of slideshows. This included presentation of instructor-created slideshows and discussion with subjects of constituent elements of slideshow production and presentation. The following semester, spring 2006, subjects designed and presented only one slideshow. This also followed presentation of the instructor’s slideshow compositions and included a different set of instructions from those given subjects the previous (fall) semester. The spring pre-services teachers were required to compose slideshows using visual material only – no words allowed.

For purposes of later analysis and interpretation I collected subjects’ PowerPoint on computer hardware for later analysis and interpretation. In addition I took notes on subjects’ class presentations of their slideshows. The handwritten notes were later converted for computer storage soon after the subject presentations.
II. Study Context: Social Studies Methods Course for Pre-Service Teachers

The study of PowerPoint as a medium for teaching and learning history took place in a social studies methods course informed by what Lee Shulman first termed "pedagogical content knowledge." While each semester the course attended to teaching and learning 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 students' pedagogical content knowledge via exercises and practice with primary sources to cultivate historical thinking. As advocated by history education researchers, the course deepened prospective teachers' knowledge that history is constructed, debated, and revised. At the same time, it introduced them to instructional methods to cultivate such knowledge among secondary school students. In short, the course explicitly linked historical thinking to instructional methods in order that prospective teachers might develop pedagogical content knowledge.

In adherence to the content-and-pedagogy approach, pre-service teachers in the course often analyzed and interpreted historical artifacts such as song lyrics, photos, documentary films, diary entries, advertisements, paintings, and oral history testimony. In addition to these exercises, participants wrote brief historical narratives utilizing historical evidence. They also created lesson plans centered upon primary source materials and taught one of these lesson plans to their peers.

Exercises used to develop pedagogical content knowledge were neither time consuming nor elaborate. For example, participants read and interpreted ten runaway slave advertisements taken from issues of the Savannah Georgia Gazette during the age of the American Revolution. Candidates read and interpreted the advertisements with this question in mind: What was slavery like for those held in bondage? After participants interpreted the documents, the entire class collaborated on a list of assertions about what slavery was like and cited evidence from the advertisements to support their claims. For example, participants always observed that
some advertisements referred to marks or scars on slaves and cited these as evidence that some slaves were beaten or tortured.

Lastly, participants took fifteen minutes in class to write their own history of slavery based on the evidence from the slave advertisements. The class established criteria for judging some historical narratives as better than others and then applied these criteria to select the best historical essay. The essay judged as best usually provided a coherent narrative, made imaginative and appropriate use of evidence, and cited sources (i.e., individual slave advertisements). Of course, these are basic standards academic historians use to judge each other's work.

To develop the pedagogical side of pre-service teachers' pedagogical content knowledge, the methods course placed heavy emphasis on lesson planning. Because I wanted prospective teachers to empower young people to create original historical narratives, students designed lessons that would engage students in the interpretation of primary sources. To provide teacher candidates with practice converting lesson plans to 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. Each teacher-for-the-day immersed classmates in a variety of historical documents that elicited higher order thinking. Can online research, downloading of historical documents and organization of the material into a Power Point slideshow presentation contribute to an overarching goal of the course: namely, deeper comprehension of the historical enterprise, especially history as a narrative construct and how to teach this understanding to secondary school studies?

III. Study Participants / Pre-Service Teachers

To explore PowerPoint slideshow’s effects I secured voluntary participation of twenty-five pre-service secondary history and social studies teachers enrolled the social studies methods course. In the fall 2005 semester, seven of ten students produced data that could be
used in the study. Of this group, five were men and two were women. In the spring 2006 semester, all thirteen of fifteen students generated slideshows that could be used in the study. Of the spring group eight were women and five were men. Both groups of volunteers signed a University Human Subjects Office approved “Informed Consent Document” acknowledging their willingness to have their productions (lesson plans and PowerPoint slideshows) analyzed and potentially cited in a publication(s). All the subjects were white, middle-class and, with one exception, were between the ages of twenty-one and twenty-nine. (The exception was a fifty-seven-year-old man, who had many years of history teaching experience. He also served as an informal teaching assistant, while earning independent study credit in conjunction with the course.) With the exception of one student, therefore, the study’s subjects reflected attributes of many students who enter the secondary teaching: white, middle-class and in their twenties.

Of the fall group, six were history majors or former history majors. As such these students had completed at least ten history courses, five in U.S. history and five in non-U.S. history. Ten of the fifteen students enrolled in the spring group were history majors. Of the fall group one was a master’s degree candidate in social studies education, a former history major, and taking additional history courses. Another student (the informal teaching assistant) was a doctoral degree candidate in social studies education program, who was also taking additional history courses at the university. Of the other students in the fall 2005 group, one majored in geography, and another was a psychology major, who both pursued licensure to teach American history. The non-history was a math student who pursued a psychology certification. In the spring 2006 group twelve of the thirteen subjects were history majors. The non-history major was a psychology student who pursued certification to teach American history. To obtain American history licensure the non-history majors in the fall and spring groups had to complete five courses in concentrated in either U.S. or non-U.S. history.
Study Instructions to Participants

I. Fall 2005 PowerPoint Assignment I / Instructions to Subjects

To assess the effects of instruction on PowerPoint slideshow composition, the fall 2005 methods group of pre-service teachers produced slideshow narratives before any instructional intervention. In early October 2005, 10 pre-service teachers were instructed “to create a PowerPoint slideshow for presentation to the class.” Two weeks they made their presentations.

II. Fall 2005 PowerPoint Assignment II / Instructions to Students

The second PowerPoint compositions presentations were based upon instructions given in a handout. It stated:

For the first PowerPoint assignment, you were given minimal instructions. You were asked to create and present to the class a PowerPoint presentation on a topic in history or social science. For this assignment, you will be a teacher who constructs and presents a slideshow to educate students on a different topic [from those composed for PowerPoint Assignment I].

On the handout, students also were instructed to “take into consideration the following elements of PowerPoint presentations that we discerned from the first set of slideshows” (i.e., elements of slideshows identified and discussed in class following the first set of slideshows). The handout identified the features of slideshows provided below:

A. Basic Elements of Slideshows

Number of slides, speed of slides, reversibility, image, word, presenters’ intentions and behaviors, audience participation and behaviors
1. The Presenter

The presenter of images can present the material unilaterally or bring the audience into the conversation. The presenter could present slides one by one, in clusters, or move through all of the slides without comment.

2. Words Alone

Serve as verbal cues for the presenter’s elaborations and extensions. The audience may be asked to interpret the words on the screen.

3. Images Alone

Images (individually or in lines and clusters) alone serve as visual cues for the presenter’s lecture or as illustrations for the presenter’s argument or narrative. The presenters show images to ask the audience commentary (i.e., analysis or interpretation). The audience can use images to create a story or narrative.

4. Images and Words

Presenter can use images with words to create meaning for the audience. This means the presenter may use words to dictate or enforce the image’s meaning. Words may also appear with images as visual cues for the presenter to elaborate on the image’s meaning or significance. The presenter may allow the audience to interpret words and images together.

5. Juxtaposition of Images (Interspersed Images)

Images of difference can be interspersed. For example, images of white supremacy can be interspersed with images of black resistance. The images of supremacy and resistance could be one after the other or they could be aligned in long sequences. They could all be shown without comment by the presenter. Images could be shown “split-screen” side-by-side for students to observe tensions, contrasts, or similarities.
6. Criteria for evaluations of the PowerPoint compositions

Criteria for evaluating slideshows: What prevents a series of slides from being “just a bunch of pictures,” as one historian said upon being presented a PowerPoint slideshow? Potential answers include: 1. the audience can make meaning or connect the images. 2. individual images contain a significant number of objects, subjects, or symbols to observers to read. 3. the image sequences contain analogies that audience members can impose. (They know enough to imagine connections). 4. the presenter has a pedagogical or dialogical intent; i.e., he or she wants to invite the audience into the meaning making.

III. Spring 2006 PowerPoint Assignment / Instructions to Students

The following semester, spring 2006, pre-service teachers prepared only one PowerPoint composition and were given different instructions. The subjects were provided with the “Elements of Slideshows” above that also were given to the fall 2005 group as part of their preparation for their second slideshow production, However, the spring 2006 group were told that they could employ only images in the construction of their slideshows. The group also observed a sixty-six slide, images only production, exploring white supremacist imagery and images of African American resistance.

Findings: Students’ Slideshow Compositions

Tables I, II, and III display data from the slideshow compositions. In each table, the first column shows the PowerPoint slideshow numbers I, II (fall 2005), and III (spring 2006), as well as a number assigned individual subjects and the topic of each subject’s slideshow(s). The other columns record: number of slides; number of slides containing words only; number of slides with words and images; number of slides containing images only. Slides containing “words only” refer to slides that the composer wrote on the slides. Slides with “words and images” are slides containing
original images accompanied by words written by the subjects. “Images only” refers to slides that contain exclusively images or the words are part of the images. At the bottom of each column for each PowerPoint, averages for each category (column) have been supplied.

Table I:

PowerPoint Productions: Fall 2005

<table>
<thead>
<tr>
<th>Topic/Subject</th>
<th>Total Slides</th>
<th>Words Only</th>
<th>Words &amp; Images</th>
<th>Images Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Normandy Invasion</td>
<td>11</td>
<td>0</td>
<td>11</td>
<td>0</td>
</tr>
<tr>
<td>Sunnis and Shiites</td>
<td>9</td>
<td>6</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Montgomery Bus Boycott</td>
<td>7</td>
<td>4</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Camp Algona: Midwest POWs</td>
<td>18</td>
<td>6</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Murder of Emmett Till</td>
<td>5</td>
<td>2</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Battle of Antietam</td>
<td>11</td>
<td>7</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Polio Epidemic</td>
<td>9</td>
<td>3</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Averages</td>
<td>10</td>
<td>4</td>
<td>5.43</td>
<td>0.57</td>
</tr>
</tbody>
</table>
Table II:
PowerPoint Productions: Fall 2005

<table>
<thead>
<tr>
<th>Topic/Subject</th>
<th>Total Slides</th>
<th>Words Only</th>
<th>Words &amp; Images</th>
<th>Images Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Deal and the Arts</td>
<td>17</td>
<td>1</td>
<td>10</td>
<td>6</td>
</tr>
<tr>
<td>Seven Wonders of the World</td>
<td>32</td>
<td>0</td>
<td>8</td>
<td>24</td>
</tr>
<tr>
<td>Triangle Shirtwaist Fire</td>
<td>24</td>
<td>7</td>
<td>9</td>
<td>8</td>
</tr>
<tr>
<td>Eugenics Movement</td>
<td>15</td>
<td>4</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Harlem Renaissance</td>
<td>18</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>War Plans during World War I</td>
<td>16</td>
<td>8</td>
<td>7</td>
<td>2</td>
</tr>
<tr>
<td>Wright Brothers</td>
<td>14</td>
<td>1</td>
<td>9</td>
<td>4</td>
</tr>
<tr>
<td>Averages</td>
<td>20</td>
<td>4</td>
<td>7.4</td>
<td>8.3</td>
</tr>
</tbody>
</table>

Table III:
PowerPoint Productions: Spring 2006

<table>
<thead>
<tr>
<th>Topic/Subject</th>
<th>Total Slides</th>
<th>Words Only</th>
<th>Words &amp; Images</th>
<th>Images Only</th>
</tr>
</thead>
<tbody>
<tr>
<td>Atomic Attack: Japan</td>
<td>104</td>
<td>1</td>
<td>0</td>
<td>103</td>
</tr>
<tr>
<td>Prohibition</td>
<td>52</td>
<td>1</td>
<td>0</td>
<td>51</td>
</tr>
<tr>
<td>Television</td>
<td>49</td>
<td>2</td>
<td>0</td>
<td>47</td>
</tr>
<tr>
<td>World War I Technology</td>
<td>21</td>
<td>1</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Japanese Internment</td>
<td>13</td>
<td>1</td>
<td>0</td>
<td>12</td>
</tr>
<tr>
<td>Feminism</td>
<td>49</td>
<td>0</td>
<td>0</td>
<td>49</td>
</tr>
<tr>
<td>Atomic Bomb</td>
<td>35</td>
<td>2</td>
<td>2</td>
<td>31</td>
</tr>
<tr>
<td>Western Frontier</td>
<td>24</td>
<td>1</td>
<td>1</td>
<td>22</td>
</tr>
<tr>
<td>Korean War</td>
<td>92</td>
<td>1</td>
<td>5</td>
<td>86</td>
</tr>
<tr>
<td>Civil Rights Movement</td>
<td>27</td>
<td>1</td>
<td>2</td>
<td>24</td>
</tr>
<tr>
<td>Native American Stereotypes</td>
<td>15</td>
<td>2</td>
<td>0</td>
<td>13</td>
</tr>
<tr>
<td>Great Depression</td>
<td>37</td>
<td>5</td>
<td>0</td>
<td>32</td>
</tr>
<tr>
<td>Holocaust</td>
<td>29</td>
<td>2</td>
<td>0</td>
<td>27</td>
</tr>
<tr>
<td>Averages</td>
<td>42</td>
<td>2</td>
<td>0.77</td>
<td>39.8</td>
</tr>
</tbody>
</table>

Analysis and Interpretation

*Power Point I (Fall 2005)*
Subjects designed and presented the first set of PowerPoint slideshows in response to the simple directions to produce and present a slideshow. As noted earlier, these compositions were prepared without any instruction on slideshow features or the technology’s potential for instructional purposes. Of the ones collected and analyzed, Table I clearly indicates that these PowerPoint productions contained on average the fewest total slides. While having the fewest slides overall these slideshows also had on average the most “words only” and “words and images” slides. In four of seven cases the slides contained no “images only”; in the three where images only appeared, subjects included only one or two slides.

The seven subjects’ predictable reliance upon words to compose a slideshow history reflected many years of previous exposures to word-based narratives of the past narrated through history monographs, textbooks, and lectures. In recent years, moreover, history presentations often include PowerPoint as integral to them. The individual slides composing the first slideshows contained many bulleted sentences or phrases that stood alone without any images accompanying them. Words-only slides told the historical narrative in a closed fashion without inviting others to interpret the narrative or its individual slides. When the authors’ included images, they were accompanied by words explaining the images. The composers did not take advantage of the capacities of images for opening interpretations to viewers. Even the three subjects who included one or two images used the slides as illustrations. They neither used the images to create meaning within the narrative nor to enlist class members into the narrative construction.

The slideshow titled “The Murder of Emmett Till” (Table I, Student 5) exemplified a structure wherein the slideshow directs the viewer to a closed, uncomplicated historical narrative told through bulleted words with photos as illustrations. The author titled the first slide “The Murder of Emmett Till: Civil Rights in Mississippi.” The second slide contained the following question: “Who was Emmett Till?” a photo of Emmett with his mother and three bulleted statements: “14 year-old African-American boy from Chicago”; “Liked to tell jokes, very outspoken”; “his mother Mamie, sent him to Money, MS in 1955 to visit family.” The “simple” picture of Emmett and his mother had few interpretive possibilities. So, the author explained the photo with bulleted phrases. There was no room for interpretation of this slide on the viewer’s part. The third slide was titled “The Scenario” and five bulleted sentences told the famous grocery store incident, as well the abduction and murder of Emmett Till and arrest of the accused killers.
The fourth slide included the words “The Trial,” the killers celebrating their acquittal, (they later confessed to the murder in a Life magazine interview), and four bulleted sentences about the trial and the historical significance of the trial’s outcome. The fifth and final slide elaborated the trial outcome’s “Historical Significance” and contained four bulleted sentences emphasizing how Roy Bryant and J.W. Milam’s torture, murder, and mutilation of Emmett Till was a catalyst for the civil rights movement. The final slide contained a photo of Martin Luther King Jr. leading a mass march. This photo, given that marchers carry a variety of picket signs with claims for equal rights, has richer interpretive potential. To in effect close this slide’s richer interpretive potential, however, the author used bulleted words to enforce meaning and effectively blocked discussion. The words told viewers how Emmett’s death was historically significant.

Like “The Murder of Emmett Till” other PowerPoint I authors designed narrative structures that closed viewers off from interpretation of evidence and participation in a process of narrative construction. “The Montgomery Bus Boycott” contained seven slides: “Setting for the Boycott (5 bulleted phrases); “Unfair Transportation Practices” (four bulleted phrases beside clip art of a bus); “Taking Action” (four bulleted phrases); “Outcome of the Boycott,” (five bulleted phrases beside a reproduction of the front page of The Montgomery Advertiser); “Important Contributions” with three bulleted phrases next to another reproduction of a front page from The Montgomery Advertiser. The final slide contained a list of “Works Cited.” Similarly “The Battle of Antietam” provided photos (of generals) and two maps illustrating army maneuvers. Slides with bulleted sentences identified generals and told the battle’s “Prelude,” “An Unexpected Turn,” “Aftermath,” and “Conclusion.” In the “The Normandy Invasion 06-06-1944” every slide contained images. However, the images’ meaning (which did not contain many interpretive possibilities, i.e., bodies on a beachhead), were explained by the sentences and words accompanying them. Although images alone contained potential narrative possibilities involving invasion, brutal fighting, and death, the composer defaulted to the conventional narrative structure that performed virtually all of the interpretive work for viewers. Finally, the PowerPoint titled “A Childhood Epidemic: Polio” also possessed a narrative structure closed to viewers’ agency. However, the author included two slides with image collages more open to readers’ intra-slide interpretation. However, this nine-slide composition was closed to inter-slide space for viewers to potentially transform the overall narrative.
In sum, with instructions only to create and present PowerPoint slideshows to an audience, the “naïve” students produced historical narratives almost exclusively through words and words-and-images. There were few openings or spaces for viewers to construct intra- or inter-slide meanings. Relying upon slides almost exclusively containing words and words-and-images, including many bulleted phrases, the pre-service teachers assumed the pedagogical standpoint of telling the historical narrative, with words or images serving as verbal cues and driving the narrative storyline. Images served neither central elements of the storytelling nor data as offered to viewers for interrogation. Slideshows contained intra- and inter-slide elements commonly found in PowerPoint slideshows available online or presented in elementary, secondary, and tertiary classrooms. Presentations were unidirectional. There was no use of PowerPoint technology’s rapid reversibility feature to intentionally loop back chronologically or in response to audience requests to open alternative interpretive or narrative possibilities.

*PowerPoint II (Fall 2005)*

Following instruction on PowerPoint slideshows (see, above, “Fall 2005 PowerPoint Assignment II / Instructions to Students”), subjects’ productions contained compositional elements different from their first efforts. With one exception, subjects produced historical narratives with slightly different structure, which was a bit more conducive to interpretive agency on the part of viewers. (The exception was Student 6’s historical narrative “War Plans of World War I” which contained a compositional structure almost identical to his first effort.) As Table II above indicates, these PowerPoint productions had on average many more slides than those highlighted in Table I. The second productions also had significantly fewer slides with “words only” and many more slides with words-and-images. Most noteworthy all subjects’ second efforts contained many more image-only slides, including in three instances image-only slides in short clusters of three to eight slides. The single and clustered image-only slides presented audience members with richer interpretive opportunities. In particular the slide clusters potentially suggested, rather than enforced, the meaning of at least a segment of the slideshow. However, the subjects’ second PowerPoint retained many slides with words or pictures that tended to structure and enforce his or her control of overall historical narrative meaning.
In response to the second slideshow assignment, for example, Student 5 (see Table II, Student 5, “Harlem Renaissance”), produced an eighteen-slide historical narrative titled “The Harlem Renaissance 1920-1930 [:] A Cultural Explosion in the North” with more open interpretive and narrative possibilities than his first five-slide narrative on “The Murder of Emmett Till.” After presenting seven slides narrating with words and words-and-images African-American’s Great Migration from south to north and aspects of the Harlem Renaissance, Student 5 offered viewers seven consecutive image-only slides containing artistic representations of black life. This succession of Harlem Renaissance paintings invited audience members to interpret the starkness of urban life; African roots of black culture; adult black leisure expressed through night life, music and dance; black imprisonment and the chain gang; the black artist; and an image I interpreted as depicting culture of black resistance through gaming and flamboyance. Following the seven slide image-only cluster, the author ended with two bulleted slides stating the Harlem Renaissance’s “Outcomes” and “One last Quote” from, and photo of, Langston Hughes. While the final slides re-imposed the author’s narrative construction of the Harlem Renaissance, the image-only slides potentially enabled viewers to complicate the overall’s slideshow’s meaning with their interpretations of images suggesting how African Americans constructed their lives individually and collectively.

Student 3 also produced a much longer slideshow. Whereas the subject’s first slideshow on the “Montgomery Bus Boycott” contained only seven slides, his or her second effort, on the “Triangle Shirtwaist Factory” fire held twenty-four slides. The author employed political cartoons potentially engaging viewers some interpretive activity. However, the slideshow, with word-only and words-with-images slides, constructed an almost seamless historical narrative, which presented the conventional argument that the tragedy led to a “movement for safer working conditions” (slide 24) and labor legislation to protect workers’ safety and health.13 The composer did intersperse a slide(s) showing latter day, difficult working conditions for women either in the United States or other countries. Such material could have opened to the audience a more complicated re-visioning of the Triangle Shirtwaist Fire’s meaning and significance for contemporary times.

Six of the seven second slideshow productions, in sum, opened slightly greater interpretive and narrative possibilities. As with the first set of PowerPoint productions, however, the second set of slideshows tended to enforce a storyline designed and narrated by the composer. Although more
individual slides had richer interpretive possibilities, the slideshows still relied upon bulleted words, phrases, and sentences to propel the historical narrative, with words explaining most of the images. There was little allowance of the authors’ own voices to frame complicated storylines or open narrative constructions to viewers for refinements or reinterpretation. In other words, while there were clusters of slides with inter-slide potentialities for meaning making, the slideshows’ overall narrative structures were not conducive to narrative agency on the part of presenter or viewers.

*PowerPoint III (Spring 2006)*

Spring 2006 students’ historical narratives differed significantly from the fall 2005 productions in terms of basic properties -- number of slides, number of words, number of image-only slides, and slides with words-and-images. Under instructions to employ images only, the PowerPoint slideshows included in Table III contained an average of 42.1 slides, more than four times the average number of slides produced by fall subjects for the first set of PowerPoints (10.0) and over twice the average number fall subjects produced for the second set of PowerPoints (19.9). And, of course, these comparatively long slideshows contained almost exclusively images. Hence, they had very few word-only and image-and-word slides.

Although subjects in the spring group employed many more images, some of them designed visual-dominated slideshows with narrative structures akin their fall counterparts. For these slideshow authors the restriction to employ “images only” triggered production of visual histories that told a story of the Great Depression or the dropping of the atomic bomb. Single slides and clusters of images were arranged in such a way that little was left open to the viewers’ historical imaginations. These narratives contained, in their effects on viewers, structures imposing story lines with clearly defined beginnings, middles, and endings. So, the presentations retained vestiges of conventional written narrative history to inform a slideshow expressed in visual terms. While individual slides were interpretively rich, the compositions offered image after image which largely imposed the narrative upon the viewer.

Student 1’s long 104-slide production, while very long and composed exclusively of images, contained conventional narrative structure largely closing interpretation to the viewers. The presentation began with a photo of Einstein and his urgent letter to President Roosevelt (slide 2) describing scientific
developments that could lead to development of atomic weapons of great destructive potential. The long “middle” of the visual narrative provided photos A-bomb construction; eight slides showing in sharp detail the gradual unfolding of an atomic test explosion; the destructive aftermath of atomic tests; scenes of Hiroshima before the atomic attack; and a long cluster of nineteen slides showing the devastation wrought by the attack. Subsequently, a long series of slides provided a similar story of preparation, attack, and consequences for Nagasaki. The long “end” of the slideshow (nineteen slides) focused on the human dimensions of the tragedy. Other subjects in the spring groups composed visual slideshows with visually dominated narratives with structures akin to written history. Subject 3’s composition on the atomic bomb, while much shorter (forty-four slides), possessed a narrative structure almost identical to Subject 1’s. While variously more open to reading between slides, subjects 13 (The Holocaust), 10 (Civil Rights Movement), and 5’s (Japanese Internment) slideshows possessed structures containing beginnings, middles, and ends, which left little room to complicate or revise the historical narratives’ overall meanings.

Other slideshows, however, contained quite complex narrative structures, integrating visual materials and combinations of slides that allowed viewers to ponder complex meanings the compositions contained. The authors “experimented” with juxtaposition, cluster, sequence, or anomalies (images seemingly out of chronological order or disconnected from previous or subsequent slides), which opened narratives to viewers’ own interpretations or narrative impositions. Subject 2’s fifty-two-slide narrative on 1920s and prohibition (playfully titled “open you mouth and let the moon shine in”) departed from conventional narrative structure. Rather than having a chronologically arranged beginning, middle, and end, the slideshow overlapped themes of temperance, enforcement of prohibition, resistance to prohibition, flappers, and gang violence. The author interspersed individual slides that required viewers to make meaning of relationships between women (temperance advocates and flappers), liquor and family life, alcohol consumption as a basis for jokes and criminal behavior. Individual slides, juxtaposed images, clusters, and anomalous slides revealed playfulness on the author’s part. Together the slides virtually required the audience to participate in the narrative’s possible interpretations by implicitly raising questions such as: “Who benefited from alcohol availability? Who suffered? Was there a relationship between women’s liberation and alcohol consumption behavior of the 1920s?” With a slide showing present day alcohol consumption (slide 24) the author used her PowerPoint composition to invite viewers
to construct questions possible connections between the past and present narratives of alcohol and, especially women's liberation.

Discussion and Conclusion

This study’s central purpose was pedagogical: to improve my own instruction and introduce pre-service teachers to PowerPoint as a new, unique, and legitimate form of historical narration. Ultimately, of course, I would want our shared experiences with slideshow to enhance subjects’ preparation as secondary history and social studies teachers. With critical perspective on PowerPoint’s potential for relatively closed or open narration, pre-service teachers would position their own students to compose and critique their own narrative constructions of the past.

The study yielded data on pre-service teachers' PowerPoint narratives under three kinds of instructions to produce slideshow compositions. Under instructions simply to produce a PowerPoint, subjects constructed closed slideshows with many words and few images. Clearly subjects had been thoroughly acculturated to the prevailing structure and presentation of PowerPoint slideshow. Their productions, which left little room for viewer interpretation, reflected the kind of bulleted presentations common in classrooms, lecture halls, and ubiquitous on the World Wide Web. Following instructions on the elements of slideshow production, these same students (Fall 2005, Table II) continued to produce slideshows for unilateral presentation to passive audiences. While they incorporated more images and clusters the second slideshow, like the first, left little room for viewer agency. Only spring 2006 students (Table III), and just some of them, composed image-dominated slideshows demonstrating the PowerPoint slideshows’ unique capacities for using images to open historical narrative to viewer’s compositional agency. With clusters of slides, they positioned viewers to interpret complicated historical themes such as the connection for some women in the 1920s of liberation and alcohol consumption. Using anamolous or juxtaposed slides interjected puzzles and surprised, potentially enabling, position viewers to learn about history-as-construction. Other spring 2006 participants created relatively closed slideshows using images rather than words. These seamless productions projected histories with a beginning, middle, and end. While the images opened interpretive space for viewers, the slideshow structures did not reflect intention to invite viewers to ponder and contest the slideshow’s overall narrative meaning(s).
While this exploratory study has obvious limitations, it opens further discussion of research how to understand the new media and alternative ways to represent and narrate the past. The study was based on a small sample of subjects and explored a way of narrating the past that, as far as I am aware, has not received previous systematic study. Although the study is open to, and welcomes, alternative strategies for interpreting slideshow historical narratives, it has presented a selection of the research evidence online for other researchers to read and interpret. It joins, moreover, a small body of research that pondered alternative media, but not PowerPoint specifically, for representing the past and improving history teaching and learning, particularly at the tertiary level.\textsuperscript{15} The study also connects with those historians who have composed “experiments in history,” and advocate for using film, poetry, comic strips, and other modes of expression for enabling the past to speak in new ways.\textsuperscript{16} Finally, with subjects’ PowerPoint productions online, viewers will evaluate claims made here about the narrative qualities of the presentations and impose their own meanings on the historical narratives available there.

This first effort to teach pre-service teachers how to use the teaching potential of slideshow will inform changed approaches in my own instructional practice. In fall 2007, I will offer prospective history teachers more direct instruction, with my own compositions, of relatively closed and open slideshows. We will more thoroughly discuss criteria for evaluating slideshow productions. (See David Staley’s “heuristic” in this issue of the \textit{International Journal of Social Education}). Based on assignments offered in the course, students will practice composing and identifying elements of slideshows including concepts evolving from this and other research: i.e. juxtaposition, cluster, and “associative assemblage.”\textsuperscript{17} Finally, we will discuss how student productions enable secondary students to comprehend history-as-construction open to dispute by those viewing PowerPoint productions.

PowerPoint slideshow and other pictorial and digital ways of expressing the past will not go away. Teachers and students increasingly employ these technologies as new ways to express the past, including easy-to-use, free online downloads as “Photo Story 3” for creating a kind of documentary film.\textsuperscript{18} History educators should work with pre-service teachers and history teachers at all levels to use these technologies to widen students’ narrative skills and options, as well as their historical imaginations.
NOTES


15. Coventry, et al., “Ways of Seeing,” 1371-1402. See also the article’s accompanying website called the Visible History Project at <crossroads.georgetown.edu/vkp/>

16. See the contributions to Munsow and Rosenstone, ed., *Experiments in Rethinking History*.


18. For an example of a Photo Story 3 composition, see Gretchen Jahn Bertram, “Japanese Internment” on the website linked to this article’s content. Readers may compare the Photo Story composition to Jahn Bertram’s slideshow narrative containing the identical images.