

Uncomplicated Technologies and Erstwhile Aids: How PowerPoint, the Internet, and Political Cartoons can Elicit Engagement and Challenge Thinking in New Ways

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THIS PAPER IS BASED ON THREE BELIEFS. First, technology can engage and challenge students' thinking. Second, technology can assist students in creating quality work. Finally, computer-generated student-work can be used as educational tools in productive ways that other student-work cannot.

The first two premises are both seemingly simple and readily accepted in educational circles. All teachers seek new techniques to engage and challenge students' thinking. While diverse technologies can entice teachers and students, their "bells and whistles" can distract or be too complex to be deemed useful.¹ In other words, certain technologies may interest but not cognitively challenge students, or they may not be user-friendly. This demonstrates some complications with technology that emerge in the classroom.

The third premise—that computer-generated student-work can be used as an educational tool in ways other student-work cannot—has not been researched to the same degree as the first two. I believe it is an untapped teacher resource for engaging students and eliciting critical (and creative) expressions of new understandings.

This article suggests new ways to use old technologies to fulfill all three premises. More specifically, I propose inventive uses for Microsoft PowerPoint, Microsoft Paint, and Internet imagery in ways teachers will deem effective and students will find accessible and engaging. I apply these techniques to one portion of the social studies that has stagnated in finding ways to creatively engage students: current events.

Current events teachers seek to interest students in contemporary issues. However, most current events curricula are based on repetitive methods, usually reading, summarizing, and presenting a news story or a political cartoon (an erstwhile classroom aid) for the class to discuss.² This article is intended to provide a creative spark for current events methodology. Using the aforementioned technologies and sound pedagogical methods, students constructed *original* political cartoons to express their understanding. These technologies and methods offer innovative ways to elicit engagement and thinking, enable quality work, and employ the students' work to facilitate other students' thinking and engagement. I will show how the technology more effectively enabled these learning goals than had students used pencils and paper to construct original political cartoons. To document the results, I preserved students' work, videotaped class discussions, coded students' discussion contributions, and interviewed students.

This article is broken down into four sections. First, I will describe the curriculum. This section contextualizes (a) how teachers typically manage current event curricula and how my curricular methods enlivened the classroom, and (b) how teachers have typically used political cartoons and how they can be employed more effectively and creatively. Second, I will compare and contrast students' original political cartoons, specifically those constructed with and without the aforementioned technologies. In this section, I will detail how technology affected students' work. Third, I will explore how my uses of students' political cartoons affected students' thinking. In particular, I will examine how students uses (and non-uses) of technologies influenced their engagement, criticality, and the class's discussions. Finally, during the implications section, I will discuss how these methods can be applied to other curricula.

The Curriculum

Research indicates that students learn best when cognitively challenged and actively engaged.³ Social studies researchers have documented significant successes obtaining such objectives when students actively examine and connect an array of primary and secondary historical documents.⁴ However, research suggests teachers' successes and students' interest in *current events* falls short.⁵ This research aims to engage students in and

facilitate critical thinking about current events using the aforementioned technologies. This research articulates the technologies' positive impact on the above student behaviors.

In a typical current events unit, students select a topic on which to focus and search for interesting articles. Upon selection, students read, summarize, and present the article. At this point, most current events curricula end.⁶ This is *not* an innovative approach to engaging students and eliciting higher order thinking.⁷ Using this methodology, my middle school students' appeared disengaged and seemed to work simply to fulfill an obligation. Further, their thinking peaked at best in the bottom levels of Bloom's Taxonomy.⁸ To provide further challenge and elicit complex thinking, I enabled students to construct original political cartoons. (The reader will later see the impact of technology on students' original work, their thinking, and the class's discussions.)

To do so, students first brainstormed words connected to both their current event article and their resulting opinions. Second, students generated a word web based on their article, their brainstormed words, and their opinions.⁹ Third, students mined the word web for ideas that could be expressed through imagery and symbolism. Finally, students used the symbolic concepts and images to create an original political cartoon that expressed their opinions about the current event. (Students' were graded for their employment of symbolism and embedded messages.)

In the first session, students used pencils and paper to create an original political cartoon. In the second session, students employed computer technologies and Internet-based media to construct original political cartoons. During both sessions, I used students' original political cartoons during class discussions for other students to interpret and to challenge their thinking about the topic. Standing alone, these methods appear uninspiring. Students' use of technology and media, however, strongly affected engagement, the quality of work, and their thinking. This impact was noted in individual students' work, in students' comments about and satisfaction with their work, and in peers' interpretations of students' work. I selected political cartoons as a tool for two reasons: (a) they are frequently employed and (b) their uses suggest a regrettable pattern.

Political cartoons are frequently employed in various social studies curricula. Researchers have examined teachers' uses of political cartoons in U.S. history,¹⁰ women's history,¹¹ current events,¹² art,¹³ and media studies.¹⁴ Others have examined teachers' employment of political cartoons for across-the-curricula purposes like with gifted students¹⁵ and to engage multiple intelligences.¹⁶ Rule, Sallis, and Donaldson examined pre-service science teachers' perceptions of and uses for political cartoons.¹⁷ Finally, researchers have explored how students interpret political cartoons and

the classroom context needed for interpretation. For instance, Heitzman identified the “taxonomy of subskills” needed for interpretation¹⁸ while Werner classified the “rhetorical devices” that political cartoonists employ and described the type of classroom context needed to elicit multiple and divergent interpretations.¹⁹ This illustrates the frequent use of political cartoons.

I characterized political cartoons as *erstwhile* because their uses have stagnated in creativity. The aforementioned researchers’ and teachers’ uses of political cartoons can be neatly summarized to fit one (or more) of four purposes. Teachers used political cartoons to enable students to: (a) decode professional cartoonists’ (visual) interpretations of an event, (b) infer meaning based on the artists’ use of symbolism, (c) understand imagery’s role in shaping public opinion, and/or (d) detect cartoonists’ historical and/or political perspective. (While space does not allow its demonstration, my students did all of the aforementioned within this curricular unit.) These purposes are not unproductive, but a regrettable pattern has emerged.

For three reasons, the aforementioned purposes for political cartoon usage, while not unproductive, represent creative stagnation. First, most of the cited researchers used political cartoons to enable students to interpret *professional* (read: published) cartoons. Students engaged in this interpretative work are expected to “guess what the teacher is thinking.”²⁰ In this context, there is one (and only one) “right” answer. This does not encourage divergent and creative thinking promoted by the National Council for the Social Studies (1994).

Second, by using *only* professional political cartoons, students examined how another person viewed an event. This is regrettable because it does not enable students to creatively express their *own* understandings and interpretations of the event. While one researcher did elicit students’ interpretations of an event, I found it to lack depth. Kirkwood-Tucker enabled such a broad range of student-created products (puzzles, maps, travel information, and political cartoons) that students would not likely comprehend the nuances involved in political cartooning as well as they would from a focused project with full classroom participation.²¹ To contrast a student-created political cartoon with a student-created puzzle would be akin to comparing apples with oranges. The research lacked students’ creative expressions within an *assortment* of political cartoons.

Third, little research has been done on how students *use* political cartoons to creatively express ideas, how students can best *construct* political cartoons, or the impact of technology on these student products. Larson enabled students to create original political cartoons, but without the use of technology.²² Greene as well as Rolling each enabled students to cre-

ate original political cartoons, but focused on students' understanding of the political cartoon creation process.²³ This limits our understandings of technologies' impact on students' original political cartoons and does not address how each shapes students' thinking and engagement.

Again, I do not characterize the aforementioned methods or purposes as unproductive. However, there are better creative pathways to enable students' engagement, thinking, and creative expression. Further, I assert it necessary to do so within current event curricula, which research suggests is in need.²⁴

This article will show how students' understandings can be more fully expressed through construction of and discussion about their own *and* their peers' original political cartoons. Moreover, I will contrast students' work and comments about their work when they did and did not use technology. This will demonstrate how use of the aforementioned technologies more fully engaged them and challenged their thinking than when they simply used pencils and paper.

In the next section, I will demonstrate how students creatively expressed their critical understandings about a current event through original political cartooning. I will also demonstrate how the aforementioned technologies productively affected their work, satisfaction with their work, and thinking.

The Impact of Technology on Students' Work

This section focuses specifically on students' original political cartoons. In it, I contrast students' work both with and without technology. This will demonstrate that original political cartooning enabled active and creative opinion expressions. However, the reader will also see a real difference in *how* students' perceived their own work. This difference is directly connected to students' artistic talent and/or employment of technology. When using pencils and paper, only greatly talented artists felt satisfied with their cartoon's readability (or the ease with which peers could interpret their work). Less-experienced artists, who comprised the majority of the class, expressed frustration in their ability to create readable political cartoons. Stated differently, the majority of the class was less than satisfied in their ability to express opinions through original political cartoons. However, when utilizing technology, most students felt satisfied with the readability of their original political cartoons. This phenomenon illustrates the positive impact technology had on students *creating* original political cartoons. Research suggests this is due to adolescents' desire to work in a hands-on way with media and technology.²⁵ (Later sections focus on the positive impact technology had on students' thinking.)

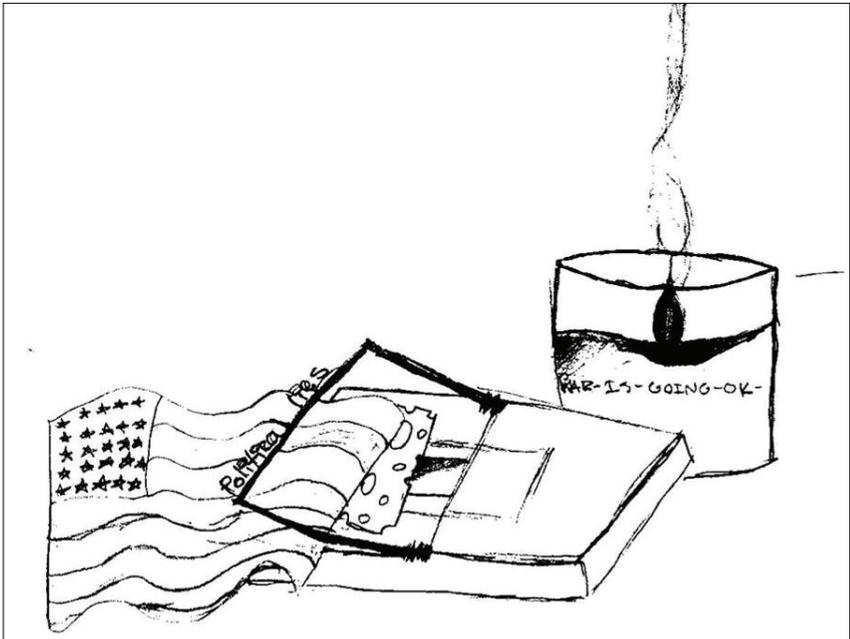


Figure 1: Ada's original political cartoon regarding her chosen current events article, CNN's "Bush Will Add More than 20,000 Troops to Iraq" (hand-drawn by student with pencil and paper).

Hand-Drawn Original Political Cartoons

During the first session, as previously mentioned, students created original political cartoons using paper and pencils. Ada's and Nathan's political cartoons are representative examples. (All names are pseudonyms.)

Using as inspiration a CNN article announcing an increase in U.S. troops for the Iraq War,²⁶ Ada drew an American flag caught in a mousetrap fused with the words "political lies" and sitting next to a burning candle labeled with the words "WAR-IS-GOING-OK-" (Figure 1).

Ada articulated in an interview how she embedded meanings within her original political cartoon to express her opinions about President Bush's justification for the Iraq war:

Isn't this awesome? In the article, [President] Bush talked about how Iraq is so important for stopping terrorists, but I think it's ridiculous. We went there because of lies about weapons that aren't there. He has told us forever that everything is fine, but no one believes him now. Or, almost no one. The candle is showing this. Notice how it's burning up? ... Now, we're trapped. That's what the flag in the mousetrap is showing.



Figure 2: Nathan's original political cartoon regarding his chosen current events article, *The Boston Globe's "Milford Mother Charged in Death of Infant in Garbage Truck"* (hand-drawn by student with pencil and paper).

Ada's work and comments represent a talented artist's ability to express opinions about a current event through original political cartooning. Her comments convey satisfaction in her product and its readability. In other words, Ada was comfortable with her ability to clearly convey opinions using original political cartooning as a medium. In artistic talent and satisfaction with their product's readability, Ada was an anomaly among classmates. The class's majority did not share this satisfaction in their artistic skills or their original political cartoons' readability. Nathan was a representative example.

As basis for his original political cartoon, Nathan used an article from *The Boston Globe* that described a woman's intentional abandonment of her newborn boy in a garbage truck.²⁷ Nathan drew a curly-haired stick figure placing a baby into the garbage. A "speech bubble" containing a Holy Bible centered on a shining Christian cross underlined with the words "Don't Do It!" complicated the scene (Figure 2).

In an interview, Nathan explained how his original political cartoon represented his speculations about what this teenage girl (possibly) thought at the time:



Figure 3: Seth's original political cartoon regarding his chosen current events article, *About.com's "Bush's Speech Sees Iraq as Fatal Battleground for Terrorism vs. Freedom"* (computer-generated by student with Internet-retrieved images and media software).

This girl had to have known she was going to kill her baby [by abandoning it in the garbage truck]. I guess I wanted to show that she knew it was against God, but I don't know. I tried [to express this idea] but I just couldn't show it good [*sic*]. The girl is a stick person. The baby looks like a ball. I didn't even try to draw a garbage truck so I drew a garbage can. The Bible is supposed to be saying, "Don't do it" but it doesn't look like that. I didn't do good [*sic*].

While some might argue that Nathan's political cartoon did successfully express his view, *he* was not satisfied with his political cartoon's readability. Most students held a similar dissatisfaction with their own work, both in terms of their artistic abilities *and* consequently their cartoon's readability. To provide students with only pencils and paper thus presents a real problem for teachers: students do not feel comfortable with their product's readability. (I will examine how this hinders learning in the next section.)



Figure 4: Michaela's original political cartoon regarding her chosen current events article, Gotham Gazette's "The Fight Against Drunk Driving" (computer-generated by student with Internet-retrieved images and media software).

Computer-Generated Original Political Cartoons

During the second session, students employed the aforementioned technologies and Internet imagery to construct their original political cartoons. Technology appears to nullify students' dissatisfaction in their products' readability. Seth's and Michaela's original political cartoons are representative examples.

For his current event, Seth employed an article about President Bush's disclosure that no weapons of mass destruction (WMDs) had been found.²⁸ Seth effortlessly searched the Internet for images that could bring to fruition his opinion about the WMDs in Iraq. Seth employed clip art of a "thought bubble" containing the caption "Nukes!?!? I'll find 'em! [sic]" (referencing President Bush's accent) hovering over two photographs, one of a vast, empty desert and one of President Bush's face in a comical pose (Figure 3).

Seth's comments illustrate an adolescent's satisfaction with his work's readability:

I don't think [President] Bush has a clue where they [read: WMDs] are. He kept talking about how he'd find them, how Saddam [Hussein] hid them. But now he admits he don't know [*sic*]. I wanted to use a pic [read: picture] that made Bush look silly to show how ridiculous it is. This shows it.

Like Ada, but in contrast to Nathan, Seth expressed satisfaction in his cartoon's readability. Seth's comments about his satisfaction with his political cartoon are representative of students employing the technologies in the second session. Only when using the aforementioned technologies did *most* students share this level of confidence. Without technology, most students similarly felt Nathan's concern over readability.

Michaela, like Seth and Ada, expressed satisfaction in her technologically aided original political cartoon. Michaela used an article about efforts to reduce drunk driving in New York City.²⁹ Michaela found a photograph of a car crashed and crumpled into a tree on a grassy medium, which she used for the foundation of her image. She then surrounded the crash scene with clip art of televisions emitting speech bubbles containing slogans such as "The King of Beers!" and "Don't Drink and Drive!" The catchy phrases from both beer advertisers and safety organizations juxtapose two realities: the effects of drunken driving and the ubiquity of alcohol advertising (Figure 4).

During an interview, Michaela asserted palpable satisfaction in her ability to express an opinion through a political cartoon *when using technology and media*. However, Michaela expressed real dissatisfaction with her cartoon's readability *when using pencils and paper*.

The experience with Michaela, Seth, and their fellow students demonstrates, first, that technology assisted students in creating quality original political cartoons, which provided student-cartoonists a sense of satisfaction in their cartoons' readability. Second, students were quite engaged during the activities, possibly due to their desire for hands-on work with media and technology³⁰ or their interest in expressing opinions in unique ways.³¹ These findings encompass the paper's first two premises. The third—that quality, computer-generated student-work can be used as educational tools in productive ways that other student-work cannot—is focused on in the next section on students' thinking.

The Impact of Technology on Students' Thinking

Students' use of technology enabled more skillful thinking and cogent articulations for two reasons. First, hand-drawn political cartoons dis-

tracted both the artist and his/her peers in various ways. Second, students' technologically generated political cartoons were far more complex. These two reasons, while interrelated, are both distinct and meaningful. They need to be separated for discussion.

Distractions Inherent with Hand-Drawn Political Cartoons

Students' hand-drawn original political cartoons distracted the artist and significantly hindered students' thinking during the construction process. For clarity, I would categorize the student-artists into three groups: (a) highly talented artists, (b) less-talented artists with a *complex* idea for a political cartoon, and (c) less-talented artists with a *simplistic* idea for a political cartoon. All three types were distracted in different ways when hand-drawing political cartoons. For brevity, I will speak in generalities.

The highly talented artists, when using pencils and paper, were distracted in three distinct ways. First, they focused more on displaying their art ability than on embedding complex symbolism within their work. Thus, these students' art ability distracted their thinking and hindered their production of complicated work. Ada's political cartoon was unique because it illustrated her artistic talent *and* expressed complex symbolic messages. Second, the highly talented artists' friends frequently asked for help during work time, taking time away from their work and thinking. Third, talented artists expressed worry about how their art would be graded by the teacher and judged by their peers. This certainly distracted their thinking and was seen when many talented artists scrapped ideas that did not seem "perfect" in their mind. For these three reasons, talented artists were distracted when using pencils and paper to construct original political cartoons.

Less-talented artists with a *complex* political cartoon idea were also distracted when using pencils and paper. These artists worried that their embedded messages would be overshadowed due to a lack of palpable talent. Many feared peers' comments about their lack of artistic talent, which certainly distracted their thinking. Nathan's artistic abilities fit within this group and his comments demonstrated both the aforementioned anxiety and the distracted thinking. Thus, less-talented artists with a complex idea were distracted using pencils and paper.

When using pencils and paper, less-talented artists with a *simplistic* idea for a political cartoon were the most distractible of all three groups. They repeatedly claimed to have few good ideas (even if their word web was filled with ideas and I offered much support). They expressed anxiety about being graded for artistic ability (even though I frequently refuted this claim). They worried peers would mock their (lack of) art skills and/or misinterpret their messages and symbolism. For these reasons,

less-talented artists with a simplistic idea for a political cartoon proved to be most distractible when using pencils and paper. This all certainly hampered their thinking during cartoon-construction.

This distractibility, while quantifiably immeasurable, proved powerful and detracted from most every student's thinking when working with pencils and paper. Further, the two most recurring themes among all student groups—being graded by the teacher and judged by peers—were *only* present when using pencils and paper to construct original political cartoons. These worries were virtually non-existent when using the aforementioned technologies.

Complexity within Technologically Generated Political Cartoons

Students' technologically-generated political cartoons were far more complex. This suggests cogent thinking *during* the cartoon-creation process. This complexity also enabled animated discussion during the interpretation process, which suggests it significantly challenged *other* students' thinking. While these two findings are undoubtedly connected, they are distinct enough to be discussed separately.

First, the complexity of technologically-constructed original political cartoons indicated substantive thinking during the cartoon-creation process. Students were better able to bring ideas to fruition when not burdened by lack of artistic ability. For instance, while it proved quite difficult to draw faces by hand, students could easily find the appropriate face on the Internet and modify it using technology. In short, students more ably included, modified, and mocked people and events when using the aforementioned technologies than when hand-drawing cartoons. While errors abounded when students worked either by hand or with technology, the technology enabled students to easily fix and hide mistakes, which they could not do otherwise. Thus, since students could easily incorporate whatever idea (or face) fit best and effortlessly fix any errors, their thinking flourished as they used the aforementioned technologies to embed messages and employ symbolism within original political cartoons. These complex products facilitated peers' thinking during the interpretation process, which is this section's second point.

Second, technologically generated political cartoons challenged students' thinking (specifically, their interpretational skills) far better than hand-drawn political cartoons. The complexity of content and (seeming) clarity of message elicited multiple and divergent interpretations of the same political cartoon. Numerous times, class discussion lasted more than twenty minutes on the same technologically generated cartoon, which was not the case with hand-drawn cartoons. Further, and related to the

previous point, students focused more on the political cartoons' (intended) messages and less on the artists' talent (or lack thereof). This indicates an intellectual engagement to the content that was not seen in hand-drawn cartoons. This appeared to appease students' concerns about peers' criticism of hand-drawn work.

For these reasons, technologically generated political cartoons challenged students' thinking to a far greater extent than hand-drawn political cartoons. Further, technologically generated political cartoons did not distract in ways that hand-drawn cartoons did. These findings have implications on both the current events topics within the social studies and on other curricula.

Implications

As the title suggests, this paper offers *uncomplicated* technologies intended to engage and challenge students' thinking. These technologies and strategies elicited three meaningful educational findings.

First, the students' work and individual comments about their work indicate engagement and thinking. Technology magnified these results. Ada's political cartoon was the only example of a hand-drawn product with embedded messages and employed symbolism in which the artist's talent (or lack thereof) did not overshadow the cartoon's message. With technology, many students' original political cartoons had the same result, as can be seen in Seth's and Michaela's work and comments.

Second, students' work challenged peers' thinking and enabled discussion during interpretation. As before, technology amplified these results. Hand-drawn political cartoons elicited more comments about the artists' ability (or lack thereof) and less interpretation about the cartoons' message(s). With technology, students' engagement and interest in interpreting cartoons' message(s) increased dramatically. Most technologically generated political cartoons elicited multiple, divergent interpretations and robust discussion. In short, technologically generated political cartoons facilitated students' examination of each cartoon's employed "rhetorical devices."³² Further, large class discussions about technologically generated political cartoons created a real "interpretative community."³³

When the findings in the previous two paragraphs are combined, it suggests the importance of employing *original* political cartoons (and the aforementioned technologies) as an educational tool for current events curricula. These technologies, while *uncomplicated*, proved to effectively challenge students thinking and efficiently engage tech-savvy youth, which are things most teachers seek. Further, I assert that these technologies constructed a new use of an erstwhile educational aid, political cartoons.

I believe these findings speak with authority about integrating current events curricula, technology, and political cartoons. When combined, they engage students and enable critical thinking. While this paper focused on current events curricula, these tools and strategies can easily fit within any curriculum. Researchers have employed reproduced political cartoons in U.S. history, women's history, current events, media studies, science, and art. However, I believe this approach to *original* political cartooning can engage and challenge students in new and different ways within both these curricula and others.

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