

Social Studies, ChatGPT, and Lateral Reading

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The piece I also worry about [with ChatGPT] ... is the piece about thinking.

—Jane Rosenzweig,
writing instructor, Harvard¹

I believe schools should thoughtfully embrace ChatGPT as a teaching aid—one that could ... better prepare students to work alongside A.I. systems as adults.

—Kevin Roose,
technology columnist,
*New York Times*²

In November 2022, the technology company OpenAI released a generative artificial intelligence program that can create detailed written responses, write essays, poetry, code, and much more, in response to short written prompts. It had been years in the making and had been exposed to over 40 gigabytes of text, webpages, images, and other content. The program is known as ChatGPT, but what exactly is it?³ I posed the question to ChatGPT itself, and the chatbot responded that it was a “large language model” that would generate human-like responses to prompts, that it was created by OpenAI (AI meaning artificial intelligence) and was based on the GPT (Generative Pre-training Transformer) architecture, which uses deep learning techniques to generate natural language text that is similar to text written by humans.

I then asked it to explain ChatGPT as if to younger students. The site responded in part that “ChatGPT is like a super smart computer that can understand and talk like a human. It was created by a company called OpenAI to help make computers more like people.”

Almost immediately following ChatGPT’s release, the New York City and Seattle public school systems banned it from their districts’ devices and networks, claiming they were concerned about the impact on students.⁴ Regarding its use in colleges, a university political science professor wrote that “... chat.openai.com may actually spell the end of writing assignments.”⁵

There’s no doubt that ChatGPT presents an issue for social studies teachers. Will students become reliant on it to write essays and papers? How should we deal with the lack of sources in its answers? What will happen to critical thinking and inquiry in social studies with ChatGPT? Or are critical thinking and inquiry the answer to working with ChatGPT?

Trying out ChatGPT

Having had a four-decade career in the secondary classroom (the majority in middle school) and now as a teacher of adults in university and workshop settings, I wanted to become comfortable with this groundbreaking chatbot.

I first asked ChatGPT to examine the classified documents controversy involving former President Trump and President Biden. I asked ChatGPT to address the following points: (1) did either president break the law? (2) Do you see any substantive differences in how the two presidents handled these documents, and (3) explain your position on which president (or both) should be held accountable for their misuse of classified documents.

ChatGPT responded:

It is not clear whether either President Trump or President Biden broke the law in regards to their handling of classified

documents. The handling of classified documents is governed by federal laws, regulations, and executive orders, and it is ultimately up to legal authorities to determine whether a violation has occurred.

There may be some substantive differences in how the two presidents handled classified documents.... For example, President Trump has been criticized... particularly in regards to his use of a personal email server for official business. In contrast, President Biden has not faced similar accusations.

I found that the bot's reply came up a bit short. ChatGPT did not address some aspects of the question, including the substantive differences between the handling of the documents by both presidents (I later learned that it cannot respond to events that have occurred later than 2021), and the bot's response contained a factual error. I responded:

The second paragraph contains an error; it was Hillary Clinton not Donald Trump who was accused of using their personal email server.

ChatGPT wrote back:

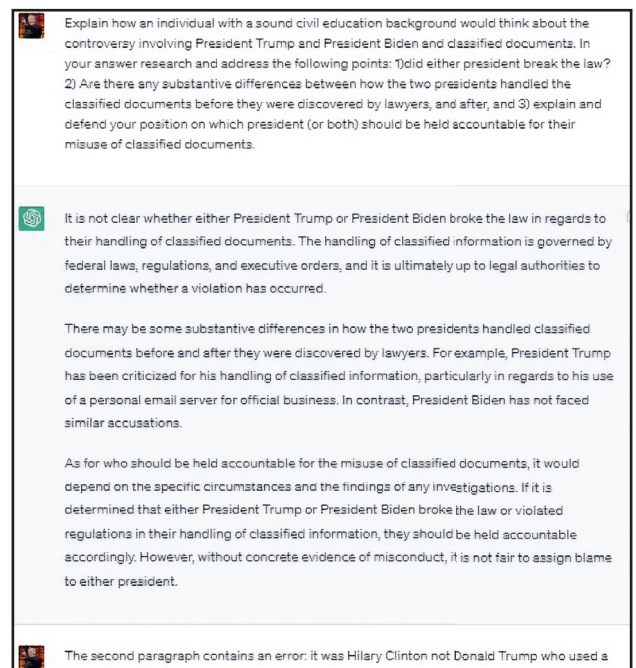
Thank you for bringing this to my attention. You are correct, it was former Secretary of State Hillary Clinton, not President Trump, who used a personal email server for official business. I apologize for the mistake.

Moving on to other topics, I asked the chatbot to provide some information on the Social Security Act of 1935 and the Medicare program, which was added to the Social Security Act in 1965. The Acts were signed into law by Democratic presidents Franklin D. Roosevelt and Lyndon B. Johnson, respectively. I inquired whether House or Senate Republicans had supported either Act, and ChatGPT incorrectly stated that "there were no Republicans in the House and Senate who voted for Social Security in the 1930s and no Republicans ... voted for Medicare in the 1960s."

Although most congressional support for the Acts did come from the Democratic Party, I was aware that both Acts had some bipartisan support. Following up, I divided my question in two—first asking about the Social Security Act and then the Medicare addition. Each time, ChatGPT changed its answer, now noting numbers of Republicans who supported each Act. More errors.

But in each case, the AI bot did not make those errors again, when I asked again. With the machine learning technology, the program adjusts when it has learned of its mistakes. However, even when it provides wrong information, its language programming enables it to sound quite definitive about those answers.

One would hope that despite the limitations of ChatGPT's knowledge cut off date (September 2021), the historical information it produced would be reliable. However, while artificial intelligence does not know history, geography, civics, law, or psychology, it will pull together millions of bits of data to respond to a prompt in a grammatically correct manner. It sounds good, and its language is quite authoritative, but the information it provides might be incorrect.



As a former middle school history teacher, I often consulted with the C3 Teachers website in my search to find and adapt materials for my lessons.⁶ The C3 Teachers site contains lessons that use the Inquiry Design Model developed for the

College, Career, and Civic Life (C3) Framework for Social Studies State Standards that are inquiry based (beginning with a compelling question) and encourage students to think critically and explore questions.⁷

I used five C3 Teachers lessons in questioning ChatGPT. One of the lessons was titled *What Do the Buried Secrets of Tenochtitlan Tell Us About the Aztecs?*, which was a source I had used in preparing my seventh-grade unit on the Aztec Empire.

The summative performance assessment in many of the lessons asks students to “construct an argument (e.g., detailed outline, poster, or essay) that addresses the compelling question using specific claims and relevant evidence from historical sources while acknowledging competing views.”

ChatGPT’s responses, when I asked it to write the argument essay from the C3 prompts, appeared good, but, again, there were some factual errors. For example, after ChatGPT produced an essay for the performance task in the Aztec lesson, I prompted an answer by asking the bot to provide explanations on recent Aztec artifacts that it had referenced. The return response dealt with a ceramic urn that had been uncovered in a royal tomb. Not being familiar with any such Aztec royal tomb artifact, I asked for specifics. ChatGPT informed me that it was not a real artifact: “I apologize that I provided incorrect information in my previous answer. The ceramic urn was not a specific artifact that has been discovered by archaeologists.” Again, errors had been made; but would a secondary teacher having to read dozens of essays from several classes have uncovered this? Perhaps, but perhaps not.

I also asked ChatGPT to write an imaginative short story on the life of an average Aztec living in the empire, based on the artifacts found at the Templo Mayor (the focus of the C3 lesson) in the capital of Tenochtitlan. Although this prompt was not in the lesson, I wanted to see how ChatGPT could create a story. The chatbot swiftly generated an engaging short story about Xochiti, a young man residing near the Temple. As he gazed upon the temple’s art, he envisioned himself as a farmer tending crops outside of Tenochtitlan, and then as a merchant exchanging goods with others beyond the city. Finally, he imagined himself as an Aztec warrior under the command of Montezuma “clad in colorful feathered headdresses and wielding

obsidian-tipped spears. He envisioned himself charging into battle alongside his fellow warriors, defending their people and city with valor and bravery.... And he was grateful for the art at Templo Mayor that had sparked his imagination and inspired his dreams.”

As a social studies teacher, I would have been impressed if a student had submitted such an essay. However, in order to successfully complete the task, I would have asked the student to resubmit and to cite their sources, particularly regarding the ceramic funeral urn. Had I asked students to develop a short story on an Aztec whose imagination was fired up by viewing Templo Mayor, I would have considered ChatGPT’s story very good.

Using ChatGPT in our social studies classrooms

Initially, I had expected that ChatGPT would excel in responding to specific and factual prompts but struggle with those requiring inquiry. However, I was surprised by its responses. Attempts by school districts to block the site will not be effective; that train has left the station. Most of our students probably will soon use it, and, with more AI bots coming soon, this train is not returning.

While ChatGPT is highly advanced, it still has limitations. It will provide incorrect, but authoritative sounding, information, has limited ability to address current events, and does not cite evidence. When prompted to provide evidence, the answer is something to the effect of “As an AI language model, I rely on the vast amounts of data that I have been trained on.”

Based upon my ongoing experiences with ChatGPT, I would recommend that we learn to work *with* it while formulating assignments that require students to make inferences, cite evidence, give reasons, and formulate personal stances.

How might we work with a chatbot in teaching our students? Imagine having a Think~Pair~ChatGPT~Share during a lesson, having students critique and find sources for the bot’s replies, and having conversations with students about the ethical uses of advanced technology, such as artificial intelligence, in education and other contexts.

There are traditional practices that may change due to the ubiquity of ChatGPT, and perhaps they should. One of the Substack newsletters (“the Biblioracle Recommends”) by John Warner

(author, blogger, and professor of creative writing) has the intriguing title *ChatGPT Can't Kill Anything Worth Preserving*. Certainly, the ubiquitous AI bot may mean that assigning simple descriptive essay questions should be a thing of the past.⁸

There have been numerous articles dealing with how ChatGPT might be used in the classroom,⁹ but in the social studies classroom a guide already exists; it can be found on the Civic Online Reasoning (COR) site of Sam Wineburg's History Education Group (SHEG).¹⁰ COR contains lessons and assessments to help our students evaluate online information. A key component of COR is the use of lateral reading, which incorporates the power of the Internet to fact check information found online. While researching the use of the Internet, Sam Wineburg and Sarah McGrew discovered that professional fact checkers determined the validity of sites by viewing sites differently than Stanford students and academics. Whereas the latter would read pages vertically (from top to bottom), fact checkers would glance over an unfamiliar site and almost immediately open multiple sites to compare sites side by side—reading “laterally.”¹¹

How might the lateral reading technique be used with ChatGPT? Have students open various tabs next to the AI bot. This would teach students to fact check ChatGPT, rather than rely on it. Have students find information on other sites and review

actual sources to corroborate information provided by ChatGPT. As Wineburg has said, ChatGPT “ruptures the relationship between information and its source.”¹² This would help heal that rupture.

Social studies teachers can also use ChatGPT as a source of ideas and examples for classroom lessons, such as ideas to create a mock trial on an important event in recent history, ideas for a compare-and-contrast lesson on parliamentary and presidential forms of government, or a list of possible compelling questions for an upcoming unit. ChatGPT can be a useful tool despite its current events limitations and errors. Keep in mind that it is important to verify accuracy via lateral reading by both teachers and students.

In the 1970s, educators had to make decisions regarding the use of calculators in the classroom. In the 2000s, we debated the use of Wikipedia. Although there are clear differences between these developments and AI bots, technology has often been a game changer and no doubt will continue to be. As social studies professionals, our mission is to guide our students in navigating the information world of the Internet, as well as initiating meaningful discussions about ChatGPT and the AI future. After all, who better to take on the task of helping students move confidently into this rapidly and continually changing world than social studies teachers? ■

Notes

1. David Pogue, “AI Experts on Whether You Should Be ‘Terrified’ of ChatGPT,” CBS News (January 22, 2023).
2. Kevin Roose, “Don’t Ban ChatGPT in Schools. Teach With It,” *The New York Times* (January 13, 2023).
3. OpenAI (n.d.), ChatGPT, <https://chat.openai.com/chat>
4. Lexi Lonas, “What is ChatGPT: AI Technology Sends School Scrambling to Preserve Learning,” *The Hill* (January 18, 2023).
5. Ian Bogost, “ChatGPT is Dumber Than You Think,” *The Atlantic* (December 7, 2022).
6. C3 Teacher Inquiries (n.d.). <https://c3teachers.org/inquiries>
7. K. Swan, J. Lee, and S.G. Grant, *Inquiry Design Model: Building Inquiries in the Social Studies* (National Council for the Social Studies and C3 Teachers, 2018), 152.
8. John Warner, “ChatGPT Can’t Kill Anything Worth Preserving,” *The Biblioclave Recommends* (Dec. 11, 2022). <https://biblioclave.substack.com/p/chatgpt-cant-kill-anything-worth>.
9. Two sites that have recently dealt with ideas for using ChatGPT in the classroom are Ditch the Textbook (n.d.), <https://ditchthattextbook.com/ai#t-1671292150924>, and Z. Cohen, “Leveraging ChatGPT: Practical Ideas for Educators,” ASCD Blog (Jan. 24, 2023). www.ascd.org/blogs/leveraging-chatgpt-practical-ideas-for-educators.
10. Civic Online Reasoning (n.d.), <https://cor.stanford.edu>.
11. Sam Wineburg, *Why Learn History (When It’s Already on Your Phone)* (University of Chicago Press, 2018), 145-152.
12. Sam Wineburg, National Civic Learning Week 2023, panel discussion, National Archives Museum (panel begins at 03:43 and ends at 04:26), www.youtube.com/watch?v=tTjxSbHGva8&t=15630s



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