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## Al Meets Al: ChatGPT as a Pedagogical Tool to Teach American Indian History

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### **Cover Page Footnote**

The authors would like to thank Steve Hausman, Sarah Muenster-Blakley, Lorraine Spickermann, and Kara Rosenblatt for their help and guidance in the Institutional Review Board (IRB) process and organizing student data and feedback. We would also like to thank the members of the 2023 Bright Institute for reading an early draft of this project and for their insightful comments and encouragement as this project came together. Finally, we would like to thank and acknowledge our students for their hard work and participation that made this project possible.

# AI Meets AI: ChatGPT as a Pedagogical Tool to Teach American Indian History

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#### **Abstract**

Our paper illustrates how we used Artificial Intelligence to teach the tools of ethnohistory and highlight American Indian voices in our classrooms. It overviews our integration of ChatGPT in both survey and upper-level history courses at two different institutions: a small liberal arts college in the Midwest and a regional-comprehensive university in Texas. Though it acknowledges the benefits and pitfalls of using ChatGPT to teach Native American history, this article emphasizes the pedagogical value of large language models (LLMs) for student engagement and analytical thinking through a variety of critical review, peer review, and group annotation assessments; this included analyses of ChatGPT produced book reviews and textbook chapter summaries. Consequently, our findings illustrate that large language model-generated projects encourages students to think critically about the perpetuation of dominant, Eurocentric historical narratives and challenges students to identify and deconstruct the problematic ways that Native Americans and other minority groups in American history are approached in both academic and non-academic settings. Our paper provides a template that instructors can apply to motivate student inquiry in the history of marginalized groups. In so doing, our goal is to teach students and educators in the Humanities how to use this new technology to supplement rather than subvert the learning process.

**Jeff Washburn** is an Assistant Professor of History at the University of Texas Permian Basin. He received his Ph.D. from the University of Mississippi in 2020. Jeff specializes in early American history and ethnohistory and his current research examines the importance of geography and diplomacy as Indigenous Southerners interpreted and transformed economic change and contested boundaries in a changing American South in the late eighteenth and early nineteenth centuries. He is the author of "Directing Their Own Change: Chickasaw Economic Transformation and the Civilization Plan, 1750s-1830s," (*Native South*, 2021) and "'The fate of the Southern States...may principally depend on the present measures of the Union towards the Southern Indians': The Creation of the First Federal

Indian Policy and Its Impact on the American Southeast," (forthcoming in *Georgia Historical Quarterly*) and was the inaugural speaker for the Allen Morris Forum on the Native South in 2020. He is a 2022-2024 Bright Institute Fellow for Knox College. He was the recipient of a pedagogical grant at the University of Mississippi in 2019 for professional development on game-based learning and completed a year-long accreditation course in May 2022 by ACUE on Effective Teaching Practices in the college classroom.

Jennifer Monroe McCutchen is an Assistant Professor of History at the University of St. Thomas in St. Paul, Minnesota. She received her Ph.D. from TCU in 2019. Jennifer specializes in early American history and ethnohistory, with a focus on the themes of gender, power, exchange, and diplomacy. She is the author of "More Advantageous to Be With Spaniards': Gunpowder and Creek-Spanish Encounters in Cuba" (*Terrae Incognitae:* 2020), "Gunpowder and Creek Diplomacy in the Pre-Revolutionary Native South" (*Studies in Eighteenth-Century Culture:* 2023), and "They Will Know in the End that We are Men': Gunpowder and Gendered Discourse in Creek-British Diplomacy" (*Ethnohistory*: in July 2023). Jennifer has professional development experience in a number of pedagogical areas including culturally relevant teaching, game-based learning, and community-engaged learning.

The authors would like to thank Steve Hausmann, Sarah Muenster-Blakley, Lorraine Spickerman, and Kara Rosenblatt for their help and guidance in the Institutional Review Board (IRB) process and organizing student data and feedback. We would also like to thank the members of the 2023 Bright Institute for reading an early draft of this project and for their insightful comments and encouragement as this project came together. Finally, we would like to thank and acknowledge our students for their hard work and participation that made this project possible.

In the short time since ChatGPT first crashed onto the academic scene in December 2022, there has been a litany of responses on its potential impact in the classroom from interest to apathy to dread. Polls have illustrated that a significant majority of students are aware of ChatGPT, with a similar majority viewing the tool as beneficial within the classroom setting. Simply put, our students already know about ChatGPT and other large language models (LLMs) or will learn about it in some way during their collegiate careers. As educators, LLMs can then be viewed as an opportunity to create new

pedagogical practices with a tool that many of our students are aware of, interested in using, and will most likely confront in the job market after school. Given the relative newness of the technology. this gives educators an opportunity to be on the ground floor of how students understand the technology through experiential learning activities, to encourage its use as a supplement to the learning experience, foster critical thinking rather than subvert it, and to establish trust with students as we navigate this new world together rather than as adversaries.4 Considering inherent biases the against

https://www.chronicle.com/article/im-a-student-

<sup>1</sup> Some examples of the responses are Tom Bissonette, "Not Embracing ChatGPT Is an Opportunity Missed for Educators," The Chronicle of Higher Education, February 7, 2023, https://www.chronicle.com/blogs/letters/not-embracing-chatgpt-isan-opportunity-missed-for-educators; Christopher Grobe, "Why I'm Not Scared of ChatGPT: The Limits of Technology are Where Real Writing Begins," The Chronicle of Higher Education, January 18, 2023, https://www.chronicle.com/article/why-im-not-scared-of-chatgpt; Beth McMurtrie, "ChatGPT is Everywhere: Love It Or Hate It, Academics Can't Ignore the Already Pervasive Technology," The Chronicle of Higher Education, March 6, 2023, https://www.chronicle.com/article/chatgpt-is-already-upending-campus-practices-colleges-are-rushing-to-respond; Beckie Supiano, "Will ChatGPT Change How Professors Assess Learning?: It Won't Be Easy Without Their Colleges' Support," The Chronicle of Higher Education, April 5, 2023, https://www.chronicle.com/article/will-chatgptchange-how-professors-assess-learning; Eva Surovell, "ChatGPT Has Everyone Freaking Out About Cheating. It's Not the First Time," The Chronicle of Higher Education, February 8, 2023, https://www.chronicle.com/article/chatgpt-haseveryone-freaking-out-about-cheating-its-not-thefirst-time; and Owen Kichizo Terry, "I'm A Student. You Have No Idea How Much We're Using ChatGPT: No Professor or Software Could Ever Pick Up On It," The Chronicle of Higher Education,

May 12, 2023,

vou-have-no-idea-how-much-were-using-chatgpt. <sup>2</sup> Rebecca Klar, "Teens Use, Hear of ChatGPT More Than Parents: Poll," The Hill, May 10, 2023, https://thehill.com/policy/technology/3998124teens-use-hear-of-chatgpt-more-than-parentspoll/#:~:text=While%2054%20percent%20of%20the,popular%20generative%20AI%20chatbot%20tool. <sup>3</sup> One example that we found in the first six months of Chat AI is the use of Grammarly for students. Already a popular tool for students to check spelling, grammar, and sentence structure, Grammarly introduced a new Chat AI function, GrammarlyGO, that "sits within Grammarly's existing tools," on apps that students use for their classwork, including Gmail, Chrome, and Microsoft Word. Grammarly has used a form of AI for more than a decade, and their integration of this new tool presents new issues concerning plagiarism that instructors must communicate with students. Cecily Mauran, "Grammarly Introduces a ChatGPT-Style AI Tool for Writing and Editing," Mashable, March 9, 2023, https://mashable.com/article/grammarly-chatgpt-style-ai-tool-writing-editing-announcement.

<sup>4</sup> Flower Darby, "4 Steps to Help You Plan for ChatGPT in Your Classroom," *The Chronicle of Higher Education*, June 27, 2023, <a href="https://www.chronicle.com/article/4-steps-to-help-you-plan-for-chatgpt-in-your-classroom;">https://www.chronicle.com/article/4-steps-to-help-you-plan-for-chatgpt-in-your-classroom;</a> Maggie Hicks, "Scared of AI? Don't Be, Computer-Science Instructors Say," *The Chronicle of Higher* 

traditionally marginalized peoples in academic settings and in emerging online algorithmic tools, it is critically important for educators in Native American history that our goals should not only be innovative in our pedagogical use of LLMs in the classroom, but also serve as examples and illustrate to our students how we can ethically engage with - and confront - these new programs.<sup>5</sup> Our paper illustrates how we used ChatGPT in different classroom settings as a framework to foster group discussion and peer-to-peer review on American Indian and other diverse communities in American history. We incorporated ChatGPT as an experiential learning tool in our classroom for our students to practice newly learned ethnohistorical and Native American and Indigenous Studies (NAIS) methodologies, reflect on Indigenous histories - as well as critically assess the inherent biases within the ChatGPT essays - and to gain confidence by practicing these methodologies in a low stakes environment.<sup>6</sup>

In Why You Can't Teach United States History Without American Indians, Julianna Barr, Jean O'Brien, Susan Sleeper-Smith, Nancy Shoemaker, and Scott Manning Stevens argue that historians have often taught U.S. history, particularly survey courses, as if "Indians did not exist. Or, at best, they marginalized Indian people as unimportant actors in the national drama of revolution and democratic state formation."7 Similar to Barr et. al's argument that their goal is to create a "toolbox" of helpful materials and Indigenous perspectives for historians, our goal is to illustrate best practices - and to address problematic usage - of ChatGPT for teaching Native representation within the American

Education, August 2, 2023, <a href="https://www.chroni-cle.com/article/scared-of-ai-dont-be-computer-science-instructors-say">https://www.chroni-cle.com/article/scared-of-ai-dont-be-computer-science-instructors-say</a>. Examples of scholars in history using ChatGPT within their classroom include Jonathan S. Jones, "Students Critique a ChatGPT Essay: A Classroom Experiment," Perspective on History: The Newsmagazine of the American Historical Association, September 7, 2023, <a href="https://www.historians.org/research-and-publications/perspectives-on-history/september-2023/students-critique-a-chatgpt-essay-a-class-room-experiment#:~:text=In%20their%20reflections%20during%20the,them-</a>

selves%20have%20learned%20to%20write. Historian Lindsey Passenger Wieck illustrated its potential as an editing and revising tool while also outlining the need to confront the ethical implications of this use. Lindsey Passenger Wieck, "Revising Historical Writing Using Generative AI: An Editorial Experiment," Perspective on History: The Newsmagazine of the American Historical Association, August 15, 2023, <a href="https://www.historians.org/research-and-publications/perspectives-">https://www.historians.org/research-and-publications/perspectives-</a>

on-history/summer-2023/revising-historical-writing-using-generative-ai-an-editorial-experiment.

<sup>&</sup>lt;sup>5</sup> For more on biases within new technology and algorithmic tools, see Meredith Broussard, *More Than a Glitch: Confronting Race, Gender, and Ability Bias in Tech*, (Cambridge: The MIT Press, 2023) and Safiya Umoja Noble, *Algorithms of Oppression: How Search Engines Reinforce Racism*, (New York: New York University Press, 2018).

<sup>&</sup>lt;sup>6</sup> For more on the use of experiential learning tools, see Breanne Boppre, "Using Experiential Learning to Humanize Course Content and Connect with Students," in *Picture a Professor: Interrupting Biases About Faculty and Increasing Student Learning*, ed. Jessamyn Neuhaus (Morgantown: West Virginia University Press, 2022), 101-117.

<sup>&</sup>lt;sup>7</sup> Julianna Barr, Jean O'Brien, Nancy Shoemaker, and Scott Manning Stevens. *Why You Can't Teach United States History Without American Indians*, (Chapel Hill: University of North Carolina Press, 2015), 1.

dominant narrative of U.S. history.8 The newness and popularity of new large language models like ChatGPT, Google's Bard AI, WordTune, ChatOn, and a host of others means that there is an inherent urgency for instructors in Native American history to respond. This urgency prompted us to collaborate on this project and incorporate ChatGPT into our classroom the first semester after the LLM was introduced. After first introducing it in our in-person upper-level courses in Spring 2023, we took what we learned and integrated ChatGPT as a learning tool for an online asynchronous survey course on early American history. Here, we broadened the scope for students to assess and critique ChatGPT through histories of multiple marginalized groups through social annotation practices. By confronting new LLMs head-on, our classes gave students opportunities to learn skills of peer analysis and proofreading, created a collaborative environment within the classroom between instructor and students, and provided a baseline on how best to interact with this new technology as a supplement for higher level thinking and learning.

In just two months, ChatGPT reached 100 million active users, setting records for consumer applications on the internet.9 While ChatGPT has stormed onto the scene in recent months, the creation of large language models (LLMs) has been in development for more than eight decades. As mathematician and computer scientist Stephen Wolfram argues, the neural network and decision-making process for ChatGPT is "remarkably simple." 10 For LLMs, their goal is to learn language patterns to fill in gaps through statistical regularities to predict how to respond to different prompts. What makes new LLMs like ChatGPT exceptional is the sheer amount of data and weights used to train the software. For ChatGPT, the nearly 175 billion weights within its neural network govern how it gauges information for "estimating probabilities and constructing a unique response to prompts fed to it."11 This in turn means that ChatGPT creates remarkably well-constructed responses in

<sup>&</sup>lt;sup>8</sup> Barr, et. al, *Why You Can't Teach United States History*, 2.

<sup>&</sup>lt;sup>9</sup> Krystal Hu, "ChatGPT Sets Record for Fastest Growing User Base," *Reuters*, last modified February 2, 2023, <a href="https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/">https://www.reuters.com/technology/chatgpt-sets-record-fastest-growing-user-base-analyst-note-2023-02-01/</a>.

Stephen Wolfram, What is ChatGPT Doing... and Why Does It Work? (Wolfram Media, 2023), 52.
 (Many thanks to Jessica Parr of Northeastern University for bringing this source to our attention.)
 Wolfram, What is ChatGPT Doing, 10. Wolfram is bullish on the use of ChatGPT in ways that will continue to challenge how we view education, assessment, and language, arguing that it "provides us with the best impetus we've had in two

thousand years to understand better just what the fundamental character and principles might be of that central feature of the human condition that is the human language and the processes of thinking behind it." Rather than expose or eliminate higher level thinking in the classroom, Wolfram argues that ChatGPT is an avenue for us to innovate our use of language. Wolfram, What is ChatGPT Doing, 76. For more on the cognitive changes associated with technology and their implications in the classroom, see Michelle Miller, Remembering and Forgetting in the Age of Technology: Teaching, Learning, and the Science of Memory in a Wired World, (Morgantown: West Virginia University Press, 2022), 19-44.

comparison to previous LLMs. From the perspective of someone first encountering them, this prediction of the next word seems as if models like ChatGPT or Bard understands or comprehends the material it has synthesized from millions of datapoints. For those first encountering material produce by these models, it appears eerily similar to what we expect if a student or colleague paraphrases and condenses decades of scholarly work at the beginning of a research paper or thoughtfully responds to an essay prompt or discussion board question. In reality, however, it creates an "illusion" of genuine learning practices, producing what Ted Chiang has referred to as a "blurry JPEG of the web." Because these predictive models are not learning the material and instead are predictive models, this can lead to "hallucinations" where the LLM's interpolation creates new responses that are problematic, inaccurate, or fabricated. 12

As scholars like Meredith Broussard, Safiya Umoja Noble, and Timnit Gebru have illustrated, techno-chauvinism and a lack of digital auditing has perpetuated racist depictions that are imbedded in digital

programs and technology, including large language models like ChatGPT.13 As Wolfram explains, ChatGPT is "pulling out some 'coherent thread of text' from the 'statistics of conventional wisdom' that it's accumulated" from the billions of words available to it via the internet and other forms of neural network training.14 This can include implicit racial bias from the source materials. A lack of proper training data has prevented AI algorithms from recognizing cultural meanings in non-White centered texts and images. ChatGPT and other LLM systems generate data from the internet, which "is not representative of the entire population, and when people are represented, it may not be accurate because of stereotypes and hate speech."15 In other words, because these algorithms are "only as good as the data it is fed," they often perpetuate cultural inaccuracies or racial biases of communities that have long been marginalized. For example, new LLMs in the healthcare profession, like DocsGPT by Doximity, first used race norming, a discredited and racist pseudoscience that disproportionately affect Black and Brown people, when asked for diagnoses for different patients. 16 This is

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times.com/2022/03/22/technology/ai-data-in-digenous-ivow.html.

Dot, June 12, 2023, <a href="https://www.dai-lydot.com/debug/docs-gpt-doximity-ai-healthcare/">https://www.dai-lydot.com/debug/docs-gpt-doximity-ai-healthcare/</a>. Pseudoscientific ideals of race were adopted into the medical profession during the early nineteenth century and has far reaching implications for healthcare to the present-day. Indeed, the concept known as race correction for lung capacity is still described in medical text-books as "scientific fact and standard practice." Linda Villarosa, "Myths About Physical Racial Differences Were Used to Justify Slavery – and are Still Believed by Doctors Today," August 14, 2019, The New York Times.

<sup>&</sup>lt;sup>12</sup> Ted Chiang, "ChatGPT is a Blurry JPEG of the Web," *The New Yorker*, February 9, 2023, <a href="https://www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-ipeg-of-the-web">https://www.newyorker.com/tech/annals-of-technology/chatgpt-is-a-blurry-ipeg-of-the-web</a>.

<sup>&</sup>lt;sup>13</sup> Broussard, More Than a Glitch, 4.

<sup>&</sup>lt;sup>14</sup> Wolfram, What is ChatGPT Doing, 75.

<sup>&</sup>lt;sup>15</sup> Alex V. Cipolle, "How Native Americans are Trying to DeBug A.I.'s Biases," *The New York Times*, March 22, 2022, <a href="https://www.ny-times.com/2022/03/22/technology/ai-data-in-times.com/20

<sup>&</sup>lt;sup>16</sup> Simon Spichak, "How New AI Tools for Doctors Could Worsen Racial Bias in Healthcare," *Daily* 

not a new phenomenon within the medical profession, with race science still used for initial diagnostics as different as skin cancer, kidney problems, and pregnancy-related complications, issues that Broussard argues will continue to persist within AI models unless there is a conscious intention to create these systems with a diverse input and intent to eliminate such biases.<sup>17</sup>

These inherent risks and pitfalls to ChatGPT and other LLMs exacerbate problems in the American education system and its recognition of Indigenous histories, cultural persistence, and futures. High school and college survey textbooks for US and American history courses have often considered Native peoples from an ethnographic present, a static representation of Native Americans that discounts change and persistence that occurred prior to and in the centuries after contact with Europeans. This systemic issue within history textbooks ascribes agency to a "modern" United States who made conscious

improvements and painted Native American communities as "forever ancient" and static.19 Jean O'Brien argues that if Native Americans "did not comply with the expectations that they be persistently ancient," they were often "deemed inauthentic," thus denying Native peoples their own agency and creating an artificial past and present for our students.20 As Gary Padgett argues, history textbook portrayals of American Indians in high school and college survey courses have improved in the past decades, but the "policies of colonization and assimilation are still employed," leading to textbooks valuing the quantity of events that include Native Americans rather than the quality of Native American perspectives and experiences.21 Textbooks often engage in what Christine Stanton refers to as a dysagency of Native American actions, one where creators of curriculum identify Native American peoples and events, but view them in "stereotypical, disempowering, or neutralizing ways."22 In other words, American

<sup>&</sup>lt;sup>17</sup> Broussard, More than a Glitch, 117-133.

<sup>18</sup> James Loewen, Lies My Teacher Told Me: Everything Your American History Textbook Got Wrong, (New York: Touchstone, 2007), 132. This is not only the case with textbooks and other secondary source material, but within the archival collections where scholars of Indigenous histories conduct research. As Christine DeLucia has illustrated, the archiving of sources on Indigenous peoples in collections and museums in early North America often took shape "in tandem with the early expansion of settler colonialism." Christine DeLucia, "Fugitive Collections in New England Indian Country: Indigenous Material Culture and Early American History Making at Ezra Stile's Yale Museum," The William and Mary Quarterly 75:1 (2018), 112. <sup>19</sup> Jean O'Brien, Firsting and Lasting: Writing Indians Out of Existence in New England, (Minneapolis: University of Minnesota Press, 2010), 4.

<sup>&</sup>lt;sup>20</sup> O'Brien, *Firsting and Lasting*, 4; Christine Rogers Stanton, "The Curricular Indian Agent: Discursive Colonization and Indigenous (Dys) Agency in U.S. History Textbooks," *Curriculum Inquiry* 44:5 (2014), 666.

<sup>&</sup>lt;sup>21</sup> Stanton, "The Curricular Indian Agent," 664; Gary Padgett, "A Critical Case Study of Selected US History Textbooks From a Tribal Critical Race Theory Perspective," *The Qualitative Report* 20:3 (2015), 165.

<sup>&</sup>lt;sup>22</sup> Padgett, "A Critical Case Study of Selected US History Textbooks," 164. Stanton argues that the term dysagency "describes curricular agents' uncritical exclusion or passivation of Indigenous agency" and draws upon previous work of other educational theorists and their use of the term dysconcious racism to illustrate "purposeful resistance to social justice work." This term is of particular interest to this study as it encapsulates

Indians are constructed as passive actors in historical events and we as instructors must be cognizant of these biases whether or not we use LLMs in the classroom.<sup>23</sup>

The effects of historical erasure and dysagency ascribed to Native American communities within textbooks also have consequences for ChatGPT. Indigenous scholars and activists have sounded the alarm for similar issues on bias against Native American cultural identities, histories, and traumas for years prior to the proliferation of new LLMs like ChatGPT. In one example, an AI photo recognition app produced blatantly Eurocentric tags for Indigenouscentered images because the algorithm was not trained to prioritize Native-created data, despite a group of Native American technology students creating Indigenous word associations for them.<sup>24</sup> Similarly, a National Institute of Standards and Technology report found that Native American faces "generated the highest rate of errors" for commercial facial recognition systems.<sup>25</sup> This removal of Indigenous language, cultural identities, and perspectives illuminates how AI also functions as a tool of cultural theft or a reinterpretation of colonialism. Scholars across disciplines argue that the impact of AI is "repeating patterns of colonial history," which, while not repeating the violence of the past or exploiting labor through mass-scale enslavement, uses "more insidious means to enrich the wealthy and powerful at the great expense of the poor." We find it essential to highlight these ethical problems, particularly in our Native-focused History courses, and discuss them with students in preparation for their ChatGPT-generated assignments.

As ethnohistorians, we viewed ChatGPT and other LLMs' reliance on Eurocentric source material as an opportunity to challenge our students to center Indigenous perspectives and agency in American history through a critical analysis of essays written by ChatGPT and the source material that it used. We also found it important to engage with ChatGPT or other LLMs in the classroom for the first time through responsible teaching practices that set an example for our students. For this study, we generated all LLM content used for class assignments and disseminated it via Canvas.<sup>27</sup> We did not require students to

how Native Americans are often portrayed in academic curriculum, and how this pertains to the biases that ChatGPT weighs when responding to queries on Native American history for our students. Stanton, "The Curricular Indian Agent," 651-654.

### https://www.technologyreview.com/2022/04/19/1049592/artificial-

gyreview.com/2022/04/19/1049592/artificialintelligence-colonialism/.

<sup>27</sup> Our study received Institutional Review Board (IRB) approval for this project. The IRB is an administrative body established to protect the rights and welfare of human research subjects recruited to participate in research activities conducted under the auspices of the institution with which it is affiliated. Our IRB approval was for *Research With Existing Data*. Because *Research With Existing Data* may involve access to private, identifiable information, student names were redacted by a third party before being analyzed and used in this

<sup>&</sup>lt;sup>23</sup> Stanton, "The Curricular Indian Agent," 661.

<sup>&</sup>lt;sup>24</sup> Cipolle, "How Native Americans are Trying to DeBug A.I.'s Biases."

<sup>&</sup>lt;sup>25</sup> Broussard, *More Than a Glitch*, 39.

<sup>&</sup>lt;sup>26</sup> Karen Hao, "Artificial Intelligence is Creating a New Colonial World Order," MIT Technology Review, accessed August 25, 2023,

generate LLM essays on their own due to ethics and privacy concerns. Numerous articles have questioned the ethics of ChatGPT, particularly its function as a tool of theft, as ChatGPT and other LLM tools are trained by collecting data from millions of online users without their knowledge. Because LLM systems lack affirmative consent and meaningful transparency, we sought to protect students' intellectual property while preventing them from being put in a compromising position if any future situations called their academic integrity into question.<sup>28</sup>

In Spring 2023, we introduced ChatGPT in our respective upper-level history courses when we discussed and assessed our students on their assigned readings of

Independence Lost by Kathleen DuVal and Cherokee Women by Theda Perdue.<sup>29</sup> As instructors, we were cognizant of the educational and technological experiences for our students and sought to meet them where they were and not where we wanted them to be prior to the introduction of ChatGPT.30 Thus, we found it important to introduce best practices and methodologies that center the lived experiences of Native Americans and illustrate how we can analyze source materials for Indigenous perspectives prior to their introduction to ChatGPT, scaffolding in new practices for the classroom so that we could engage with them through the context needed to understand the inherent biases within LLMs.31 As ethnohistorian Colin Calloway notes, students must

article. To respect their privacy, all students referenced in this article will remain anonymous. We thank them for speaking critically and comprehensively in their assignments.

complement the study of history and allow students to better visualize past events from an Indigenous perspective. One assignment from our courses paired traditional text-based primary sources with maps and cartographic cartouches, where students analyzed Indigenous-created maps and compared them to European-produced maps of the same areas. The lesson illustrated to our students how culture determines the ways in which individuals perceive, relate to, and explain the world around them. We also asked students to assess the importance of dress and material culture for Native Americans in the Ohio River Valley during the eighteenth century. Students examined color photos of Indigenous clothing and jewelry and debated questions on what dress and material culture can tell us about Native American identity and sense of belonging, how Indigenous women created and influenced this material culture, how Ohio River Valley Native Americans incorporated new goods from Europeans into their lives, and their decisions on what goods were important, and why. Color photos of material wealth in the Ohio River Valley are available in the digital format of the book Indigenous Prosperity and American Conquest that we used for one of our class exercises. Many thanks to Jordan Smith of Widener

<sup>&</sup>lt;sup>28</sup> The Algorithmic Justice League defines Affirmative Consent as "the ability of the user to have choice in how and whether they interact with AI systems"; meaningful transparency is defined as "an understanding of how AI is created and deployed, as well as a meaningful understanding of what AI can and cannot do." Please see "About: The Algorithmic Justice League," ajl.org, accessed August 25, 2023, <a href="https://www.ajl.org/about">https://www.ajl.org/about</a>. <sup>29</sup> Kathleen DuVal, <a href="https://www.ajl.org/about">Independence Lost: Lives on the Edge of the American Revolution (New York: Random House, 2016); Theda Perdue, <a href="https://www.ajl.org/about">Cherokee Women: Gender and Culture Change, 1700-1835</a> (Lincoln: University of Nebraska Press, 1998).

<sup>&</sup>lt;sup>30</sup> Kathleen King, "Voice, Empowerment, and Impact: Using Digital Technologies in the Classroom," in *The Professor's Guide to Taming Technology*, ed. Kathleen King and Thomas Cox. (Charlotte: Information Age Publishing, 2011), 24.

<sup>&</sup>lt;sup>31</sup> The examples used in our courses to foreground Indigenous perspectives included geography, cartography, and material culture. These fields

"consider sources other than the written word, sources they are not accustomed to 'reading'" that challenge them to reconsider their own perspectives on how Indigenous communities influenced early American history.<sup>32</sup> This allowed us to encourage our students to "face east from Indian country" and to reconsider American history from the perspectives of Native American communities.<sup>33</sup>

As ethnohistorians of the Native South, we incorporated cultural, economic, and political constructs of Indigenous Southerners throughout our courses.<sup>34</sup> Our goal in focusing on the North American Southeast was twofold. While this is our area of geographic and cultural expertise, we also wanted to complicate our students' existing understanding of Native history. As stated above, over the past twenty years, many U.S. history survey courses have steadily integrated the actions of Native peoples. Yet, an analysis of U.S. history textbooks at the secondary and college levels reveals little awareness of Indigenous cultural distinctions. Focusing on one specific region - the Native South - allowed us to direct students' attention toward important themes of ethnohistory, such as change and cultural persistence.

From this foundation, students analyzed well-known historical events from new perspectives. In one course, we introduced the roles of matrilineal kinship structures, clan systems, and gendered labor roles for Native peoples in the American Southeast, like the Cherokees, layering in these topics throughout the course. This included group discussions and writing responses where students outlined gendered labor roles of different Native American communities in the Southeast, the importance of play-off politics, and the significance of creation stories and oral histories, like the Cherokee creation story of Corn Mother and Lucky Hunter, in defining their world. Another course began with an overview of North America before European contact. Engagement with these topics deeply enriched later discussions about Native participation in the American Revolution, allowing students to complicate the prevailing theories of Native-British alliance in the American Southeast. In one example, after weeks of engaging with the topics described above, students felt confident analyzing primary sources that detailed Creek

University for bringing this to our attention. Susan Sleeper-Smith, *Indigenous Prosperity and American Conquest: Indian Women of the Ohio River Valley, 1690-1792* (Chapel Hill: University of North Carolina Press, 2018), 162-209.

<sup>&</sup>lt;sup>32</sup> Colin Calloway, *First Peoples: A Documentary Survey of American Indian History*, 6<sup>th</sup> Edition, (Boston: Bedford/St. Martin's, 2019), 6.

<sup>&</sup>lt;sup>33</sup> For more on the concept of "facing east from Indian Country" as a means to reorient the perspectives of students, see Daniel Richter, *Facing East From Indian Country: A Native History of Early America* (Cambridge: Harvard University Press, 2001).

<sup>34</sup> The term "Native South" refers to the Indigenous peoples who have culturally and physically inhabited Southeastern North America both before and after the arrival of Europeans. The Native South encompasses a geographic region that includes the present-day states of North Carolina, South Carolina, Georgia, Florida, Tennessee, Alabama, Mississippi, and Louisiana. Native tribes include, but are not limited to, the Cherokee, Creek, Choctaw, Chickasaw, and Seminole. For more, see *The Native South: New Histories and Enduring Legacies*, ed. Tim Alan Garrison and Greg O'Brien (Lincoln: University of Nebraska Press, 2017).

overseas trips to Spanish Cuba during the Revolutionary period. As a result, they understood Creeks as active diplomats and shrewd negotiators, illuminating Colin Calloway's words that "the American War for Independence was an Indian war for independence as well." By scaffolding foundational knowledge of the Native South into our classrooms, students were comfortable with the material before learning how to discuss it in a new format with ChatGPT. In this manner, the use of new technology was wrapped in a methodological "safety blanket" for both instructors and the students. 36

For our courses, we treated ChatGPT as a new experiential learning tool, one that students have not previously encountered in an educational setting.<sup>37</sup> Our first goal in class was to simply introduce ChatGPT and to lay the foundation for successful implementation in the classroom.<sup>38</sup> While many students have heard of the tool with some using it to supplement their work, most have not been instructed on how best to use it within the classroom. We first shared the benefits as well as the limits of this new technology to our students. One

example was the use of ChatGPT to find articles or source materials for possible research projects. Both of our upper-level courses are research and writing intensive where students are expected to conduct research on a topic relevant to the course, collect primary and secondary source material outside of our assigned readings, and write a thesis-driven research paper as a final product. For research papers, new LLMs represent both possibilities for enhancing student learning and pitfalls if students fully trust LLM citations without checking the sources themselves. As mentioned previously, LLM systems are predictive, but that does not mean that they comprehend the material they cite, use, or synthesize. This means LLM systems can "hallucinate" answers, creating citations or materials that are simply made up.<sup>39</sup> One specific example that we provided, a prompt for ChatGPT to recover ten peerreviewed articles on Chickasaw history from the past twenty years, yielded ten wholly fictional article titles.40 The "articles" ChatGPT generated had real authors and ethnohistorians who have written on Chickasaw history, and the journals were all real academic journals that have

<sup>&</sup>lt;sup>35</sup> Colin Calloway, "The Indians' War of Independence," *The Gilder Lehrman Institute of American History AP US Study Guide.* 

<sup>&</sup>lt;sup>36</sup> Kristeen MacKenzie, "Teaching Jacobitism for the Twenty-First Century," *Teaching History* 46:2 (2021), 22.

<sup>&</sup>lt;sup>37</sup> In her chapter, "Using Experiential Learning to Humanize Course Content and Connect With Students," Breanne Boppre argues that experiential learning, like our use of ChatGPT, "aligns through caring, empathy, and communication" and notes that "First-generation and Hispanic students are better able to learn and connect in courses with experiential learning components in comparison

to traditional lecture-style courses." Boppre, "Using Experiential Learning," 102-104. As one of our universities is a Hispanic Serving Institution (HSI), we believe that it illustrates the importance of our engagement with ChatGPT as an experiential learning tool.

<sup>&</sup>lt;sup>38</sup> King, "Voice, Empowerment, and Impact" in *The Professor's Guide to Taming Technology* ed. Kathleen King and Thomas Cox, 24-29.

<sup>&</sup>lt;sup>39</sup> Chiang, "ChatGPT is a Blurry JPEG of the Web." <sup>40</sup> "Provide a List of Peer-Reviewed Articles from the Past 20 Years on the Chickasaws," OpenAI, March 29, 2023, https://chat.openai.com/chat.

published research on Chickasaw history. Rather than treat this prompt as a scare tactic with our students, we used this as an example of how the new technology can help or hinder student research and their responsibility to verify source materials in this age of technology.<sup>41</sup>

The use of ChatGPT in our Spring 2023 courses revolved around the assigned reading of Theda Perdue's Cherokee Women and Kathleen DuVal's Independence Lost. Perdue's book has been regularly assigned to undergraduate and graduate courses on Native American history for the past two decades. Covering the complimentary yet separate roles of men and women in Cherokee society from contact with Europeans until forced removal in the early nineteenth century, Perdue's book is an excellent introduction to the changes and persistence of Indigenous Southerners over nearly two centuries. It illustrates to students the agency that Cherokee women played in adapting and subverting forces of change wrought by European empires and later the United States and its settlers. A book published nearly twenty-five years ago, it is still in production and in frequent use. Unlike Cherokee Women, DuVal's text was published in 2015 by Penguin Random House,

a large general-interest paperback publisher. *Independence Lost* explores the American Revolution through the perspectives of outsiders to highlight how the Gulf Coast and the actions of its diverse populations deeply impacted the trajectory of the American Revolution on local, regional, and global levels. Students quickly noticed that ChatGPT would have a lot of material to work with for Independence Lost. Beyond the typical academic journal reviews, Independence Lost received a write-up in the New York Times, has almost 450 ratings on Good Reads, and numerous reviews on popular history blogs. The author has also conducted several public-radio and podcast interviews about the book. The proliferation of both texts as well as the surrounding material written on them - meant that ChatGPT had lots to glean from online and provided an excellent avenue to generate essays for peerto-peer review.

Our in-class discussions used a pedagogical framework that many of our students have used in prior classrooms - that of peer-to-peer review. The tools and uses of peer-to-peer review are well established, particularly within writing intensive classrooms.<sup>42</sup> The writing styles of ChatGPT were well-suited to peer review practices

<sup>&</sup>lt;sup>41</sup> Hicks, "Scared of AI? Don't Be, Computer-Science Instructors Say."

<sup>&</sup>lt;sup>42</sup> For more on the use of peer-to-peer evaluation in the classroom, and how it can be used in different learning environments, see Peter Elbow, "Ranking, Evaluating and Liking: Sorting Out Three Forms of Judgment," *College English* 55: 2 (1993), 199-205; Benjamin Keating, "A Good Development Thing': A Longitudinal Analysis of Peer

Review and Authority in Undergraduate Writing" in *Developing Writers in Higher Education: A Longitudinal Study*, ed. Anne Ruggles Gere (Ann Arbor: University of Michigan Press, 2019), 56–80; and Steven J. Corbett, "Bringing the Noise: Peer Power and Authority, On Location" in *On Location: Theory and Practice in Classroom-Based Writing Tutoring*, ed. Candace Spigelman and Laurie

for undergraduate students where ChatGPT was the "peer" they were reviewing. We generated three ChatGPT essays for both courses by the prompt "write 500 words on Theda Perdue's *Cherokee Women*" and "Write a review of Kathleen DuVal's *Independence Lost*" and then broke up our respective classes into three groups and assigned each group one of the essays written by ChatGPT and directed them to consider the following questions:

- Did the essay identify the arguments from *Cherokee Women* or *Independence Lost*?
- What examples/themes are missing from your ChatGPT essay that you think are important from Cherokee Women or Independence Lost?
- What examples/themes were incorrect or need more detail in the ChatGPT essay?
- What did ChatGPT get right, what did it get wrong, what needs improvement, and what would you do differently?

We encouraged our students to consider if the generated responses adequately identified the central argument of these books, what themes they included and excluded, and what examples or themes need more context or contained inaccuracies either by omission of pertinent details or falsifying information.

In our class discussions, we found that students felt confident using ChatGPT essays as a starting point to introduce more

nuanced material they uncovered from their readings, complementing their analvsis of the essays with their knowledge from class on Indigenous histories and perspectives. Students clearly saw that ChatGPT failed to adequately articulate Independence Lost's primary arguments: that the American Revolution should be understood as both a global war and as a conflict that deeply influenced politics, communities, and relationships on local and regional levels, and that the American Revolution was shaped by the actions and decisions of diverse individuals, from Native Americans, to immigrants, to enslaved people. In their evaluations, students noted that ChatGPT failed to delineate specific Indian tribes in *Independence Lost*, mentioning them only as "Native Americans," though DuVal identifies and spends considerable time discussing many Southern Indigenous communities - particularly the Chickasaws, Cherokees, Creeks, and Choctaws - the centrality of towns to Native politics, and the use of playoff politics to balance Indigenous and European allies by Native leaders like Chickasaw Payamataha and Creek Alexander McGillivray. They also analyzed ChatGPT's failure to mention the role of slavery in Independence Lost, a central tenet of DuVal's narrative and argument. In ChatGPT's essays on Cherokee Women, students exposed the lack of agency ascribed to Cherokee women in the eighteenth and early nineteenth century. Students applied previous discussions of Eurocentrism to their

Grobman (Logan: Utah State University Press, 2005),101–11.

analysis, dissecting ChatGPT's overreliance of Eurocentric views in early America to understand Cherokee gender roles, particularly that of women controlling agricultural production for centuries. In one essay, ChatGPT noted the differences in Cherokee gender roles, but relegated Cherokee women to "domestic tasks such as cooking, weaving, and child-rearing," without once mentioning agricultural practices or their roles within matrilineal kinship structures.43 Students were also quick to point out that ChatGPT mentioned creation stories and oral histories from Cherokee Women, but that these essays failed to illustrate the significance of them for Cherokee society, how they informed their roles, or how these roles persisted or changed with the introduction of the United States in the late eighteenth century.

At the conclusion of these discussions, we held debriefs with our students on the uses of LLMs as a peer review and research tool for American Indian history. We demonstrated the limits of ChatGPT as a research, writing, and teaching tool and how we can best use it to benefit our own learning inside and outside of the classroom. In our final assessments, we directed our students to take one of the ChatGPT essays and turn their analysis into a written review of the assigned reading and what ChatGPT wrote. Built off our small group and class discussions on the ChatGPT essays, students would choose

one of the three essay prompts and write a critique and assess the essay's analysis of the assigned book. Within their analysis, students were instructed to elaborate on the validity and accuracy of the essay, and then provide specific examples from their own reading of *Cherokee Women* or *Independence Lost* that illustrated their knowledge of the subject.

Our students universally determined that ChatGPT's essays lacked nuance and provided a generally Eurocentric interpretation of the American Revolution antithetical to the argument in *Independence Lost* and to the change and persistence discussed in Cherokee Women. Some students focused upon ChatGPT's failure to capture how Independence Lost offered a unique view of the American Revolution through simultaneous local and global lenses. Others analyzed how ChatGPT did not acknowledge slavery or name any of the historical figures who were central to the narrative, like Payamataha or Petit Jean. They were also struck by ChatGPT's failure to mention how the actions of DuVal's diverse cast of historical figures influenced complex and often tenuous relationships with imperial powers in the Americas. One student even highlighted ChatGPT's omission of Native diplomacy during the Revolution, recognizing how Payamataha, a Chickasaw chief and one of the book's central figures, made certain decisions because he was tasked with the enormous responsibility of not only having to protect

<sup>&</sup>lt;sup>43</sup> "Write a 500 Word Essay on Theda Perdue's *Cherokee Women*," OpenAI, March 14, 2023, https://chat.openai.com/chat.

but also acted as a spiritual leader and diplomat for his people. This student, along with others, more broadly identified ChatGPT's shortcomings as failing to recognize that Native peoples had differing needs, desires, and motivations for choosing alliances during the American Revolution. In effect, the inherent issues within ChatGPT's essays prompted critical assessment and encouraged students to illustrate the agency of Indigenous Southerners in shaping early American history, allowing students to achieve many of our courses' designated learning objectives. Learning objectives for upper-level history courses at our universities - a small liberal arts college in the Midwest and a regionalcomprehensive university in Texas - emphasize broad chronologies, global connections, and both human and social diversity. They also encourage - and require students to develop the analytical capacities to investigate them on their own terms. The ability to critically analyze a variety of sources and draw connections between ideas is a tangible skill that is best honed through historical inquiry. Though most students at our universities pursue degrees in non-humanities related fields, pairing historical analysis with ChatGPT assignments allows them to learn about the ethical implications of using algorithmic models in whatever career they find themselves after graduation. LLMs and generative AI will persist and evolve, and our roles as teachers of history give us a unique opportunity to teach students how to use these systems in ways that prioritize critical analysis and ethical practices

Native political and territorial sovereignty,

in a global world that foreground the lived experiences of diverse peoples. Many historians at both the college and secondary levels have come to value similar student learning outcomes, reframing goals and objectives to teach history in ways that prepare students to thrive in an increasingly global and interconnected society. Our learning objectives in the courses surveyed collectively asked students to:

- Demonstrate an understanding of broad significant concepts in the social, political, cultural, and economic history of the early United States.
- Critically examine primary sources and secondary sources within the field.
- Cultivate empathy and understanding of cultural differences through a historical examination of how they evolved.
- Identify, analyze, and explain the ways in which Native peoples, individuals of African descent, and women contributed to the development of early American society.

Our students' findings encouraged us to continue testing the use of LLM systems as a tool to supplement our pedagogical practices. As our book review assessment illustrated, students demonstrated mastery of essential facts and exhibited important methodological skills, including "the ability to locate, weigh, and evaluate evidence; appreciate opposing points of view; and construct logical, compelling, evidence-based arguments" that aligned

with our course objectives. 44 Our next opportunity to apply ChatGPT to a course was in an online asynchronous early American History survey in Summer 2023. Since the course was presented in an online-asynchronous format, this limited opportunities for real-time student dialogue and discussion. Consequently, we crafted an assignment that allowed us to facilitate student discussion and interaction about ChatGPT's effectiveness in an environment structured to encourage selfpaced (and largely isolated) student learning for a general student audience encountering historical methodologies for the first time.

To integrate ChatGPT-generated responses into an online asynchronous survey course, we turned to the use of annotation of assigned readings. As Remi Kalir and Antero Garcia have argued, annotation of assigned materials can encourage a dialogic relationship between students, their assigned readings, and their classmates, transforming their assigned readings into a social activity that can "produce new meaning, and in some instances, spark and sustain conversation" and is one that is particularly well-suited to contextualize new technologies like LLMs.45 We both previously used Perusall, an online social annotation platform, to facilitate student discussion in graduate, upper-level undergraduate, and survey classes. Perusall allows instructors to upload readings and link them to their learning management system. Students can log onto the Perusall platform to highlight and annotate the assigned text, make comments, ask questions, and start threads where they can engage in an ongoing dialogue with one another. Students connect different themes about the readings outside of class, then discuss their comments and questions with one another (and with the instructor) on the platform or in a traditional classroom setting. As we have seen through our own experiences, the relationship between annotation learning in the classroom can be "complex, contextual, and sometimes unpredictable," but it can also be a rewarding endeavor that provides new opportunities for different levels and types of learners to express acquired knowledge, consider higher-level thinking practices, and establish new notetaking tools that they can then incorporate into their study practices.46

Using the book review assignments as inspiration, we prompted ChatGPT to write an overview of the individual chapters of *American Yawp*, the textbook we both use in our survey-level American History courses. We then posted the ChatGPT summaries on Canvas for students in the online asynchronous summer class to review before reading the assigned *American Yawp* chapters on Perusall, instructing students to make 5 "interactions" (a question, comment, or response to another

<sup>&</sup>lt;sup>44</sup> Steven Mintz, "Reimagining the U.S. History Course," *Inside Higher Ed*, May 9, 2021, <a href="https://www.insidehighered.com/blogs/highered-gamma/reimagining-us-history-course">https://www.insidehighered.com/blogs/highered-gamma/reimagining-us-history-course</a>.

<sup>&</sup>lt;sup>45</sup> Remi Kalir and Antero Garcia, *Annotation*, (Cambridge: The MIT Press, 2021), 90 and 149.

<sup>&</sup>lt;sup>46</sup> Kalir and Garcia, *Annotation*, 139-141.

post) on each *Yawp* chapter with one requirement: at least one needed to address the corresponding ChatGPT overview of the chapter. While leaving the parameters open, we encouraged students to consider the following questions:

- What important themes and details from the American Yawp chapter are missing from the essay or not discussed in detail? If so, how would you improve on them after reading the American Yawp chapter and your other assigned readings this week?
- Are there inaccuracies in the essay on materials from the *American Yawp* chapter? If so, what?
- What does ChatGPT miss? Whose perspective does ChatGPT prioritize? How does that shape our understanding of "dominant" historical narratives in U.S. History? For example:
  - Does the ChatGPT essay discuss Native peoples?
     Women? African Americans? If so, how?
  - If not, what would you encourage Chat GPT to include?

Social annotation of assigned chapter readings in conjunction with essays generated by ChatGPT challenged students to

engage in knowledge construction practices and consensus building with their classmates to make connections to larger historical themes.<sup>47</sup> Through these practices, this activity fulfilled important course learning objectives that centered the experiences of a diverse early American history through critical analysis of the textbook chapter and corresponding essay. Students frequently noted that ChatGPT's essays of the chapters were generally vague and failed to include pertinent information about the events to which Yawp devoted significant attention. For example, one student noticed that ChatGPT's survey of *Yawp's* chapter on "The Market Revolution," provided a generally accurate description in the ways in which "the increase in beneficial modes of transportation and in economic trade helped inspire significant economic growth in America, [but] ChatGPT does not mention the many struggles that occurred with corresponding economic growth."48 This included economic depressions, the rise in counterfeit money, and increasing socioeconomic disparity.<sup>49</sup> This student noted how "failing to accurately highlight these struggles incorrectly portrays America as an easily prosperous new nation from which all citizens benefitted.

<sup>&</sup>lt;sup>47</sup> Kalir and Garcia, *Annotation*, 151.

<sup>&</sup>lt;sup>48</sup>Student Comment 1. Unpublished, Department of History, Small Liberal Arts University in the Midwest, June 2023. Kelly Arehart et al., "Market Revolution," Jane Fiegen Green, ed., in *The American Yawp*, eds. Joseph Locke and Ben Wright (Stanford, CA: Stanford University Press, 2018).

<sup>&</sup>lt;sup>49</sup> For more on the economic transformation in the Antebellum United States, see Daniel Walker. Howe, *What Hath God Wrought: The Transformation of America, 1815-1848* (New York: Oxford University Press, 2007), 525-570.

Obviously, this narrative was far from the truth."50

Students also noted that ChatGPT overviews of textbook chapters often failed to include crucially important details that identified diverse peoples as conscious historical actors.<sup>51</sup> In multiple chapters, students noted that the ChatGPT essays failed to illustrate the agency of Black Americans in their fight for abolition, equality, and voting rights. Instead, one student noted that the essays tended to focus on the "narratives of white Americans both for and against slavery" and excluded Black abolitionary leaders.<sup>52</sup> Students noticed that this Eurocentric perspective provided by ChatGPT was also prevalent with settler expansion onto Native lands. While ChatGPT summarized historic events like the Louisiana Purchase and Manifest Destiny, and even the ideologies and purposes from a settler perspective, students argued that it lacked context on the invasion of Indigenous homelands nor did it "help make sense of what happened to the Native Americans."53

Students demonstrated higher-level thinking skills that identified the agency of Native peoples in resisting, subverting, and challenging settler invasion, identifying a vast early American history that ChatGPT did not. As historians of the Native South, we encouraged our students to consider the trauma of forced removal and the steps that Native peoples - like the Choctaws, Chickasaws, Cherokees, Creeks, and Seminoles - took to retain their land and sovereignty. The connections between forced Indian removal, the growth of the South's cotton economy and, in turn, the expansion of African American slavery in the 19th century United States, is a relatively new field of historical analysis. But works like Tiya Miles' The House on Diamond Hill and Ties That Bind, along with Watson W. Jennison's Cultivating Race, Samantha Seely's Race, Removal, and the Right to Remain, and Claudio Saunt's Unworthy Republic have encouraged us to use these connections as a foundation for both teaching antebellum United States history and for framing the causes of the Civil War.<sup>54</sup> As we scaffolded these connections

<sup>&</sup>lt;sup>50</sup> Student Comment 1. Unpublished, Department of History, Small Liberal Arts University in the Midwest, June 2023.

<sup>&</sup>lt;sup>51</sup> As Padgett notes, the "overt racism of times past has improved, but the cultural genocide that has become institutionalized is still alive and well." Padgett, "A Critical Case Study of Selected US History Textbooks," 163.

<sup>&</sup>lt;sup>52</sup> Student Comment 2. Unpublished, Department of History, Small Liberal Arts University in the Midwest, June 2023.

<sup>53</sup> Student Comment 3. Unpublished, Department of History, Small Liberal Arts University in the Midwest, July 2023. Even when students positively reviewed ChatGPT's analysis of Manifest Destiny and its effect on Indigenous lands, they

critiqued it for its failure to mention its impact on other diverse communities. One student mentioned the impact of Manifest Destiny and settler expansion on Chinese immigrants and Hispanic communities in the American Southwest. Student Comment 4. Unpublished, Department of History, Small Liberal Arts University in the Midwest, June 2023.

<sup>&</sup>lt;sup>54</sup> Tiya Miles, *The House on Diamond Hill: A Cherokee Plantation Story* (Chapel Hill: University of North Carolina Press, 2010); Tiya Miles, *Ties that Bind: The Story of an Afro-Cherokee Family in Slavery and Freedom* (Oakland: University of California Press, 2005); Watson W. Jennison, *Cultivating Race: The Expansion of Slavery in Georgia, 1750 - 1860* (Lexington: University Press of Kentucky,

into our curriculum, students were shocked to see that ChatGPT did not mention forced Indian removal or the Trail of Tears in its review of the *American Yawp's* chapter on "The Cotton Revolution." 55 This is particularly significant, as ChatGPT's failure to include these events prompted students in their analysis to draw important conclusions between Native American dispossession, the rise of the "Cotton Kingdom" in the Southeast, and the ways in which Native Southerners fought to assert their sovereignty. In one example, a student noted that "Native groups such as the Cherokee were successful in creating their own school systems and worked hard to maintain political sovereignty" and that it is important to illustrate that Native peoples "were dedicated to keeping their culture alive" to contextualize the reality of a tri-racial American South in the early nineteenth century.<sup>56</sup>

Annotation of assigned readings paired with ChatGPT essays challenged our students to critically assess what is taught in the greater narrative of American history and invited them to not only include but prioritize the lived experiences of Black Americans and Indigenous peoples.<sup>57</sup> Essays by ChatGPT for the *American Yawp* 

chapters placed inherent biases into plain view that students could then annotate, critique, and debate in a low-stakes environment about a more inclusive and ethically viable history in the classroom. As one student noted in their analysis, essays written by current forms of ChatGPT "can provide a decent basic overview, [but] in no way should ChatGPT be used as a reliable source of information, considering that ChatGPT not only fails to thoroughly cover important historical concepts and events but also perpetuates decidedly white narratives without accurately covering the voices of other groups including Native Americans. African Americans. women."58

Ethical problems created by LLMs in terms of prioritizing Eurocentric narratives of American history were clearly visible to students and created an opportunity for them to cultivate empathy and understanding of cultural differences and to identify, analyze, and explain the ways in which Native peoples, individuals of African descent, and women contributed to the development of early American society as outlined by our student learning objectives. As an exercise for peer-to-peer review and critical analysis of secondary

<sup>2012);</sup> Samantha Seeley, Race, Removal, and the Right to Remain: Migration and the Making of the United States (Chapel Hill: University of North Carolina Press, 2021); Claudio Saunt, Unworthy Republic: The Dispossession of Native Americans and the Road to Indian Territory (New York: Norton, 2020).

<sup>&</sup>lt;sup>55</sup> Ian Beamish et al., "The Cotton Revolution," Andrew Wegmann, ed., in *The American Yawp*, eds. Joseph Locke and Ben Wright (Stanford, CA: Stanford University Press, 2018).

<sup>&</sup>lt;sup>56</sup> Student Comment 5. Unpublished, Department of History, Small Liberal Arts University in the Midwest, July 2023.

<sup>&</sup>lt;sup>57</sup> For an explanation on how to privilege Indigenous narratives in early American history, see Lisa Brooks, *The Common Pot: The Recovery of Native Space in the Northeast*, (Minneapolis: University of Minnesota Press, 2008), xxvi-xxxix.

<sup>&</sup>lt;sup>58</sup> Student Comment 7. Unpublished, Department of History, Small Liberal Arts University in the Midwest, June 2023.

source material, the essays generated by ChatGPT provided our students with an opportunity to learn important tools of the historical profession in new and interactive ways. Students gained confidence in critically assessing stereotypes of Native peoples normally found in textbooks once they were filtered through the lens of ChatGPT. Critical analysis of the essay prompts illustrated to students the knowledge they had acquired on ethnohistorical methodologies and gave them confidence to step out of their comfort zone by analyzing materials written by a third party rather than fellow students or academics with years of experience.<sup>59</sup> Furthermore, our students engaged in a critical analysis of inherently racist and ethnic biases within technology. Rather than simply believe what a LLM wrote as factual, our students assessed the ethical underpinnings of how the essays were written, what sources they used, and what is missing. From a pedagogical perspective, we found the ChatGPT assignments extremely effective for enhancing historical literacy. The assignments moved students toward higher-level thinking practices that, according to historian Steven Mintz, means:60

- Recognizing that everything every concept, activity, institution, and social role - has a history.
- Recognizing that we "can't escape history" - that our lives are caught up in long-term historical

- processes and that many of society's most pressing problems are rooted in past decisions and actions.
- Recognizing that "nothing is inevitable until it happens," that history is contingent and key events are the consequence of chance, personality, mind-sets, individual and collective choices, and circumstances.
- Recognizing that "history is problem solving," understanding the confluence of factors and conjuncture of forces that contribute to historical change.

This paper demonstrates the opportunities in the classroom that can come from using LLMs to enhance learning opportunities for students in the humanities and related fields and teaching students how to engage with them in an ethical manner. Encouraging students to reorient their perspectives on American history and center lived experiences of Native peoples is crucially important, and ChatGPT can be used almost as a punching bag, a tool to practice their newfound knowledge of NAIS and ethnohistorical methodologies. After our initial use of LLM in the classroom, we believe that it will be necessary to devote more time to structured discussion and use of ChatGPT as an experiential learning tool in the classroom moving forward, whether the course is offered in a face-to-face or asynchronous modality.61

<sup>&</sup>lt;sup>59</sup> Hicks, "Scared of AI? Don't Be, Computer-Science Instructors Say."

<sup>60</sup> Mintz, "Reimagining the U.S. History Course."

<sup>&</sup>lt;sup>61</sup> Like any other new practice in the classroom, instructors should be deliberate and conscientious of what might trip up students and how we can best provide them tools for success. For examples

As educators, we are also presented with an opportunity to demonstrate how to interact with this new technology in an ethical and responsible fashion - and to confront its problematic biases - for the next generation of teachers that will inevitably encounter its use in their classrooms. In one of our courses, 30% of the students enrolled were Social Studies Education majors; in their course evaluation survey, one of these students remarked that the ChatGPT assignment was "really creative," and they hoped to implement something similar while student teaching next year.<sup>62</sup> Another stated that if the instructor "continues to use one project from this course, the ChatGPT review should be it."63 Kathleen P. King has noted that instructors "need to keep utilizing new formats of engagement in order to maximize learning opportunities," particularly for material that is relevant and interesting for students in their own world rather than the world where we were first educated.<sup>64</sup> As lifelong learners ourselves, this new technology provides us with new opportunities to introduce to our students the critical thinking, research, and analytical skills that are hallmarks of our profession – but only if we seriously and thoughtfully address their ethical and pedagogical implications in our classrooms.<sup>65</sup>

This paper also serves as a call to arms to trust our students. In the wake of new technology, fears and suspicion of the "end of education as we know it" lead to reactionary practices to stem or ignore the new technology. 66 The biggest challenge and issue we will face with ChatGPT is if we allow it to erode the trust of our students and to see them as adversaries, creating a toxic learning environment rife with opportunities for abuse by faculty, administration, and other individuals in places of power throughout academia. 67 Often issues occur because of what

on this, see Kevin Gannon, "Should You Add an AI Policy to Your Syllabus?" *The Chronicle of Higher Education*, July 31, 2023, <a href="https://www.chronicle.com/article/should-you-add-an-ai-policy-to-your-syllabus">https://www.chronicle.com/article/should-you-add-an-ai-policy-to-your-syllabus</a>.

<sup>&</sup>lt;sup>62</sup> Student Evaluation 1. Unpublished, Department of History, Small Liberal Arts University in the Midwest, May 2023.

<sup>&</sup>lt;sup>63</sup> Student Evaluation 2. Unpublished, Department of History, Small Liberal Arts University in the Midwest, May 2023.

<sup>&</sup>lt;sup>64</sup> King, "Voice, Empowerment, and Impact" in *The Professor's Guide to Taming Technology*, ed. Kathleen King and Thomas Cox, 17, 19.

<sup>&</sup>lt;sup>65</sup> Keith Sisson and Kathleen King, "A Guide to Using Technology in the History Classroom," in *The Professor's Guide to Taming Technology*, ed. Kathleen King and Thomas Cox, 239-257.

<sup>&</sup>lt;sup>66</sup> Surovell, "ChatGPT Has Everyone Freaking Out About Cheating. It's Not the First Time."

<sup>&</sup>lt;sup>67</sup> For example, in February 2023, the Office of Equity, Diversity, and Inclusion at Vanderbilt sent out a letter consoling students and offering assistance in the wake of a recent mass shooting at Michigan State. This email sent to the entire student body used ChatGPT-generated texts with the approval of two administrators. Sam Levine, "Vanderbilt Apologizes for Using ChatGPT in Email on Michigan Shooting." The Guardian, February 22, 2023, https://www.theguardian.com/usnews/2023/feb/22/vanderbilt-chatgpt-ai-michigan-shooting-email. In Spring 2023, a Texas A&M University- Commerce professor gained national attention when they accused students of using ChatGPT to write their final essays after the professor incorrectly used ChatGPT as a detection tool, an action the AI is not designed to do. Susan D'Agostino, "Professor to Students: ChatGPT Told Me to Fail You," Inside Higher Ed, May 19, 2023, https://www.insidehighered.com/news/quick-

students understand of this new form of plagiarism that illustrates more guidance rather than punitive action is needed. As Kevin Gannon argues, professors will "not win an arms race with AI tools, and attempting to do so is both unrealistic and unsustainable."68 With this in mind, we encourage instructors to be deliberate and transparent in their policies with LLMs and demonstrate responsible practices that students can then emulate. No matter the longevity of LLMs like ChatGPT, it is still a tool that students will use, both in the higher-education classroom and in whatever careers they find themselves after they graduate. Our goal should be to teach them how to ethically and responsibly understand its capabilities to supplement rather than subvert the learning process.

takes/2023/05/19/professor-students-chatgpt-told-me-fail-you. As Michelle Miller notes, fears of technology often lead to an approach that is

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