



# Leveraging Generative AI in Educational Settings: Case Studies from the Field

---

*Steve Baule*

*Laura Beasley*

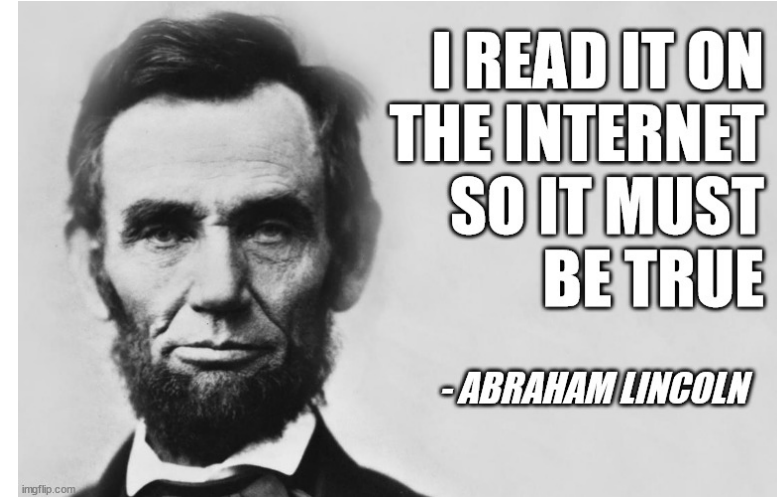
*Shauna Mayer*

*Matt Flugum*

*Patrick Leepport*

# Session Description

This panel discussion will explore the innovative ways instructors are integrating generative AI technologies into preparing and providing instruction at the secondary and university levels. We will delve into various examples demonstrating how educators across different disciplines including education, history, library science, and nursing.



CREATE THE FUTURE



A ChatGPT essay on Frederick Douglass turned out much like this engraving: the outlines were there, but details were missing. *Library of Congress/public domain*

**PERSPECTIVES DAILY**

# STUDENTS CRITIQUE A CHATGPT ESSAY

A Classroom Experiment

*Jonathan S. Jones | Sep 7, 2023*

<https://www.historians.org/research-and-publications/perspectives-on-history/september-2023/students-critique-a-chatgpt-essay-a-classroom-experiment>



**CREATE THE FUTURE**

# Core Questions

1. How do you tailor generative AI technology to support the unique learning objectives and outcomes of your specific discipline?
2. Can you share a specific instance where AI technology has significantly enhanced the learning experience for students at the secondary or university level in your field?
3. What challenges have you faced when integrating generative AI into your curriculum, and how have you addressed these challenges?
4. How do you ensure that the use of generative AI in instruction adheres to ethical standards, particularly with respect to data privacy and academic integrity?
5. In what ways has generative AI influenced the assessment and feedback process for students in your discipline?
6. How do you see generative AI technologies evolving in the next five years, and what impact do you anticipate this will have on your discipline?
7. What advice would you give to educators who are hesitant to incorporate AI technologies into their teaching practice?



**CREATE THE FUTURE**

# Nursing Examples

1. How do you tailor generative AI technology to support the unique learning objectives and outcomes of your specific discipline?
  - a. I have not introduced this to my BSN nursing students this year, but I plan to with the new cohort that will be starting in the fall. I have not had time to incorporate these kinds of things yet because I have been too busy creating courses.
    - i. I do think that AI could help nursing students in their writing and with creating scenarios based on health conditions for them to work through. This would help them with their clinical judgment skills.
  - b. I have taken the lead in our nursing department at the University of St. Thomas to teach nursing faculty how they can use AI in creating lessons, case studies, NCLEX style questions and other assignments to help them in their daily lesson planning.
  - c. The integration of AI tools has reduced the daily workload for nursing faculty. For instance, the tedious task of creating a nursing case study, which previously consumed hours of valuable time, now only requires a few seconds by inputting the appropriate prompt into Chat GPT. While Chat GPT swiftly generates the case study, it's common practice for nursing faculty to refine it to align with specific requirements, as the tool may occasionally generate content with improper language.
2. Can you share a specific instance where AI technology has significantly enhanced the learning experience for students at the secondary or university level in your field?
  - a. My doctorate journey: Grammarly helped me with my dissertation. I know Shauna typed this, but I would like to echo what she said. Grammarly was helpful to me because I did not always have the luxury of time to reach out to a writing center for help. I was on the go all the time and was appreciative of its help. Over time, Grammarly fixed many reoccurring issues I had with writing. I relied less and less on it as I worked through the doctoral program at WSU.
  - b. I have created many lessons, one, that I have been told by students, helps them immensely with learning pharmacology. I have created a prompt that will let me create scenarios called "Would you give that med?" Students look forward to that every week and if I had to create those on my own, I would spend hours and hours and would likely not do it because it would take too much time.
3. What challenges have you faced when integrating generative AI into your curriculum, and how have you addressed these challenges?
  - a. One challenge I have had is that I do not let my students copy and paste information from the internet to use as their work; all professors would echo this. That is plagiarizing. However, there is an internal struggle that I have because I do use Chat GPT to generate lessons and ideas throughout the day. I will even have it rewrite emails that I write to ensure that I am not sounding too harsh or angry. It is correct to say that I can use it, but students cannot. How do make that fair in my head?
  - b. I have not learned how to introduce students to it yet. How do I do that without opening up a can of worms? I would like to guide students how to use it appropriately but how? That is something I would like to tackle in the upcoming year because if I do not show them, they will use it on their own without guidance and possibly use it to plagiarize which is never appropriate.



# Nursing Examples II

4. How do you ensure that the use of generative AI in instruction adheres to ethical standards, particularly with respect to data privacy and academic integrity?
  - a. Regarding the data privacy question, I don't have a good response at the moment as it's an area I haven't explored yet. However, concerning academic integrity, I firmly believe it's important to educate students on the appropriate utilization of AI. Teaching them how to harness AI for idea generation while emphasizing the importance of citing it properly has become evident to me during my doctoral studies.
  - b. Additionally, it's imperative for students to grasp the potential inaccuracies inherent in AI systems. Creating a lesson where students rely on AI for research purposes and then cross-referencing their findings outside of AI to identify discrepancies could be a way to show them that AI is not always as accurate as one thinks. Misconceptions about the limitations of AI are common among students, and it's important to address these misconceptions by highlighting its limitations.
5. In what ways has generative AI influenced the assessment and feedback process for students in your discipline?
  - a. Upon receiving feedback from my students at the end of the semester, I use Chat GPT to streamline the process of organizing qualitative data and identifying trends. It's a remarkably efficient tool for synthesizing feedback and gaining valuable insights.
  - b. My utilization of AI spans various educational activities, from creating quizzes and NCLEX style questions to developing case studies and pharmacology math problems. The flexibility and features offered by AI continuously inspire me, as I explore new areas for enhancing learning experiences. Recently, I used Quizizz to gamify a lesson, using its updated features that allow for seamless quiz uploads and transformation into interactive gaming experiences. This new feature significantly reduces the time and effort previously required for such tasks, enabling me to maintain a better, more manageable, work-life balance.
6. How do you see generative AI technologies evolving in the next five years, and what impact do you anticipate this will have on your discipline?
  - a. Learning how to teach students to use AI will be crucial because in healthcare, it is taking over sectors of healthcare that were previously managed by humans. Soon, nurses will be the ones creating AI “things” that will be used by patients in the hospital settings. For example, I heard at Mayo Clinic that AI is going to start triaging patients in the emergency room. If this is the case, nursing needs to start thinking about how to use AI in the classroom and how to incorporate it into courses such as informatics.
  - b. Our current nursing students will most likely be on the cusp of a new revolution in healthcare. The question is: how we prepare them for this new world when we are first experiencing it ourselves.
  - c. I think AI might morph into different areas that can help different disciplines. For example, the nursing profession might have its own platform that can help with teaching and learning.
7. What advice would you give to educators who are hesitant to incorporate AI technologies into their teaching practice?
  - a. Give it a try!
  - b. Talk to others to see what they are doing with it to enhance teaching and learning.
  - c. Teach students how to use it appropriately.
  - d. Do not tell students they cannot use AI because AI is in many other products that students use daily such as Grammarly.
  - e. Attend conferences that discuss the use of AI and how it is transforming education.



# Education Examples

1. How do you tailor generative AI technology to support the unique learning objectives and outcomes of your specific discipline?
  - a. Allow students class time to explore the different types of AI elementary educators can use in the classroom.
  - b. Allow students to generate a lesson plan using AI
    - i. Discuss what students might have to change/add in the lesson plan
      1. How will students accommodate to 504 plans and IEPs?
    - ii. Discuss what students might have to do if the lesson plan doesn't work as the student is teaching it
  
2. Can you share a specific instance where AI technology has significantly enhanced the learning experience for students at the secondary or university level in your field?
  - a. My doctorate journey: Grammarly helped me with my dissertation
    - i. <https://app.grammarly.com/>
  - b. Allowing students to explore AI tools in small groups during class time. Specifically allowing students to use lesson plan generators and match them with MN State Standards.
    - i. Magic School AI
      1. <https://www.magicschool.ai/>
    - ii. Generation Genius
      1. [https://www.generationgenius.com/trial-d/?g\\_acctid=279-897-8338&g\\_adgroupid=&g\\_adid=&g\\_adtype=none&g\\_campaign=Teachers+-+PMax&g\\_campaignid=17818425069&g\\_keyword=&g\\_keywordid=&g\\_network=x&gad\\_source=1&gclid=CjwKCAjw17qvBhBrEiwA1rU9w1nIXmGCSELB-5NyA8PMm-gQxZVI-j\\_xs-7f6fAcqFPve38yrRrGxoCm5gQAvD\\_BwE](https://www.generationgenius.com/trial-d/?g_acctid=279-897-8338&g_adgroupid=&g_adid=&g_adtype=none&g_campaign=Teachers+-+PMax&g_campaignid=17818425069&g_keyword=&g_keywordid=&g_network=x&gad_source=1&gclid=CjwKCAjw17qvBhBrEiwA1rU9w1nIXmGCSELB-5NyA8PMm-gQxZVI-j_xs-7f6fAcqFPve38yrRrGxoCm5gQAvD_BwE)
    - iii. Write Cream
      1. <https://www.writecream.com/lesson-plan-generator/>
  
3. What challenges have you faced when integrating generative AI into your curriculum, and how have you addressed these challenges?
  - The biggest challenge/worry for me is if I show my students where to find AI resources (lesson plan generators) students will rely on this too much. We as instructors need to make sure students are still able to look at a lesson plan and adjust/modify it on the fly... there will be times where the lesson will not go as planned.



CREATE THE FUTURE



# Education Examples II

4. How do you tailor generative AI technology to support the unique learning objectives and outcomes of your specific discipline?
  - a. Allow students class time to explore the different types of AI elementary educators can use in the classroom.
  - b. Allow students to generate a lesson plan using AI
    - i. Discuss what students might have to change/add in the lesson plan
      1. How will students accommodate to 504 plans and IEPs?
    - ii. Discuss what students might have to do if the lesson plan doesn't work as the student is teaching it
  
5. Can you share a specific instance where AI technology has significantly enhanced the learning experience for students at the secondary or university level in your field?
  - a. My doctorate journey: Grammarly helped me with my dissertation
    - i. <https://app.grammarly.com/>
  - b. Allowing students to explore AI tools in small groups during class time. Specifically allowing students to use lesson plan generators and match them with MN State Standards.
    - i. Magic School AI
      1. <https://www.magicschool.ai/>
    - ii. Generation Genius
      1. [https://www.generationgenius.com/trial-d/?g\\_acctid=279-897-8338&g\\_adgroupid=&g\\_adid=&g\\_adtype=none&g\\_campaign=Teachers+-+PMax&g\\_campaignid=17818425069&g\\_keyword=&g\\_keywordid=&g\\_network=x&gad\\_source=1&gclid=CjwKCAjw17qvBhBrEiwA1rU9w1nIXmGCSELB-5NyA8PMm-gQxZVI-j\\_xs-7f6fAcqFPve38yrRrGxoCm5gQAvD\\_BwE](https://www.generationgenius.com/trial-d/?g_acctid=279-897-8338&g_adgroupid=&g_adid=&g_adtype=none&g_campaign=Teachers+-+PMax&g_campaignid=17818425069&g_keyword=&g_keywordid=&g_network=x&gad_source=1&gclid=CjwKCAjw17qvBhBrEiwA1rU9w1nIXmGCSELB-5NyA8PMm-gQxZVI-j_xs-7f6fAcqFPve38yrRrGxoCm5gQAvD_BwE)
    - iii. Write Cream
      1. <https://www.writecream.com/lesson-plan-generator/>
  
6. What challenges have you faced when integrating generative AI into your curriculum, and how have you addressed these challenges?
  - The biggest challenge/worry for me is if I show my students where to find AI resources (lesson plan generators) students will rely on this too much. We as instructors need to make sure students are still able to look at a lesson plan and adjust/modify it on the fly... there will be times where the lesson will not go as planned.



CREATE THE FUTURE



# Education Resources

## AI Resources for Elementary Teachers

- Magic School AI: <https://www.magicschool.ai/>
- Generation Genius: [https://www.generationgenius.com/trial-d/?g\\_acctid=279-897-8338&g\\_adgroupid=&g\\_adid=&g\\_adtype=none&g\\_campaign=Teachers+-+PMax&g\\_campaignid=17818425069&g\\_keyword=&g\\_keywordid=&g\\_network=x&gad\\_source=1&gclid=CjwKCAjw17qvBhBrEiwA1rU9w1nIXmGCSELB-5NyA8PMm-gQxZVI-j\\_xs-7f6fAcqFPve38yrRrGxoCm5gQAvD\\_BwE](https://www.generationgenius.com/trial-d/?g_acctid=279-897-8338&g_adgroupid=&g_adid=&g_adtype=none&g_campaign=Teachers+-+PMax&g_campaignid=17818425069&g_keyword=&g_keywordid=&g_network=x&gad_source=1&gclid=CjwKCAjw17qvBhBrEiwA1rU9w1nIXmGCSELB-5NyA8PMm-gQxZVI-j_xs-7f6fAcqFPve38yrRrGxoCm5gQAvD_BwE)
- Write Cream: <https://www.writecream.com/lesson-plan-generator/>

## AI Articles for Elementary Teachers

- What Students and Teachers Think About STEM, AI, and Jobs of the Future:
  - [https://excelined.org/2023/07/21/what-students-and-teachers-think-about-stem-ai-and-jobs-of-the-future/?gad\\_source=1&gclid=Cj0KQCQjw-r-vBhC-ARIsAGgUO2C6F5esR-JZkeekuj-\\_y3-Em1CvJZg7Qv0iAlkU4ESC3wbsG402HZAaAknkEALw\\_wcB](https://excelined.org/2023/07/21/what-students-and-teachers-think-about-stem-ai-and-jobs-of-the-future/?gad_source=1&gclid=Cj0KQCQjw-r-vBhC-ARIsAGgUO2C6F5esR-JZkeekuj-_y3-Em1CvJZg7Qv0iAlkU4ESC3wbsG402HZAaAknkEALw_wcB)
- Using AI to Help Organize Lesson Plans (This article contains several resources and other AI articles that are interesting):
  - [https://www.edutopia.org/article/ai-lesson-plans?gad\\_source=1&gclid=Cj0KQCQjw-r-vBhC-ARIsAGgUO2CSaLwT-5woKvSNjrLwNstooKiLLtwFWvwGGGj-dKIJHiHot\\_w1Yn0aAiL-EALw\\_wcB](https://www.edutopia.org/article/ai-lesson-plans?gad_source=1&gclid=Cj0KQCQjw-r-vBhC-ARIsAGgUO2CSaLwT-5woKvSNjrLwNstooKiLLtwFWvwGGGj-dKIJHiHot_w1Yn0aAiL-EALw_wcB)
- Here's What Educators Can do as Artificial Intelligence Evolves:
  - <https://www.common sense.org/education/articles/chatgpt-and-beyond-how-to-handle-ai-in-schools>
- The Hechinger Report on AI in K-12 Schools:
  - <https://hechingerreport.org/were-going-to-have-to-be-a-little-more-nimble-how-school-districts-are-responding-to-ai/>



# K12 Examples

1. *How do you tailor generative AI technology to support the unique learning objectives and outcomes of your specific discipline?*
  - a. Prompting Tips for K-12 student (and educators)- [John Spencer FACTS Cycle](#)
  - b. Use K-12 shortcut prompting tools - Eduaide.ai - MagicSchool.ai
  - c. Considerations of relationship and the need to develop continued support for students, parents, and colleagues while looking for efficiencies. How do we keep connected to our content and our students as we look to use generative AI.
    - i. Probably not a great idea to use AI to create all of our emails, but it might be useful to draft an email when we don't know where to start.
    - ii. AI creates very wooden writings and low level questions, making sure to take the quiz created from a generator from the perspective of our students is important.
2. *Can you share a specific instance where AI technology has significantly enhanced the learning experience for students at the secondary or university level in your field?*
  - a. Allows deeper differentiated Professional Development with pdf/article summary
3. *What challenges have you faced when integrating generative AI into your curriculum, and how have you addressed these challenges?*
  - a. Age restrictions and COPPA (Gemini: 18+, Claude: 18+, OpenAI 13+ only with parent permission)
    - i. Any data put into AI tools cannot include any PII
    - ii. Student use needs to be via tools not requiring AI (e.g. aitutor pro <https://www.aitutorpro.ca>)
  - b. Copyright considerations on inputting for question or experience generation
    - i. Agreement with content provider
    - ii. Ethical considerations of using or accessing copywritten materials
  - c. Student writing considerations
    - i. Handwritten
    - ii. Drafting guidelines (extension - [Draftback](#))
  - d. Clear expectations for use on assignment ([EdWeek Stoplight](#))



CREATE THE FUTURE

# K12 Examples

4. How do you ensure that the use of generative AI in instruction adheres to ethical standards, particularly with respect to data privacy and academic integrity?
  - a. Modeling Principle- If we model clarity in use for students and staff, then they will hopefully see the use and applications as well. There is no formal mechanism to monitor staff use and input
  - b. The district guideline is still to not allow on student network. There are programs we use which has generative AI, but we only allow access when the vendor or plug in ensures that student PII is not passed back or shared with the original Generative tool/company. Data sharing agreements.
5. In what ways has generative AI influenced the assessment and feedback process for students in your discipline?
  - a. It's begun to help support an approach to the importance of the process in learning and grading. We also now have tools to generate additional assessment questions.
  - b. Feedback is quick and better than peer reviews and we've been looking into opportunities for students to engage, but pricing is prohibitive.
6. How do you see generative AI technologies evolving in the next five years, and what impact do you anticipate this will have on your discipline?
  - a. Creation potential is off the charts. Teachers with minimal training can create incredible images to reinforce learning, pathways for differentiation
  - b. Incorporation into different K-12 tools is already advancing - Seesaw has incorporated for reading assessment-
7. What advice would you give to educators who are hesitant to incorporate AI technologies into their teaching practice?
  - a. Think about the tasks or the tools you "wish I had time to" do.
    - i. Drafting partners for students staring at blank screens- feedback for students who wonder if they did it right.
    - ii. The creation of prompts can incorporate deeper thinking about content. You only get out of it what you can prompt, and only knowing what the hoped for output will make a quality product.
  - b. Eternal metacognitive questions about learning will continue to arise. How will we know they understand? How will they know they understand? What is the next question that will help clarify understanding?



# Library Examples

1. How do you tailor generative AI technology to support the unique learning objectives and outcomes of your specific discipline?
  - a. ACRL Framework for Info Literacy: Information Creation as a Process  
“articulate capabilities and constraints of information developed through various creation processes.”
  - b. Research as Inquiry  
“formulate questions for research based on information gaps or on reexamination of existing, possibly conflicting, information” (conflicting is the tricky part for generative AI... nuance isn’t a strength)
  - c. Searching as Strategic Exploration  
“design and refine needs and search strategies as necessary, based on search results”
  
2. Can you share a specific instance where AI technology has significantly enhanced the learning experience for students at the secondary or university level in your field?
  - a. Identifying/narrowing the scope of inquiry... “What should I write my paper about?” “I want to write a paper about (insert broad topic)”
  - b. What database should I use when learning about (insert topic)?
  - c. Keywords... “It seems like there has to be a term experts use when adoptions don’t work out...”
  - d. Tools like Semantic Scholar that aid in discovery/access. Paper digest which can do an okay job of the very early work of scanning literature.
  - e. General library information chatbots could be helpful.
  
3. What challenges have you faced when integrating generative AI into your curriculum, and how have you addressed these challenges?
  - a. The biggest challenge with ChatGPT is the hallucinations... ChatGPT doesn’t give accurate citations. This can lead to time spent tracking citations that don’t exist.
  - b. Tools like Semantic Scholar and Paper Digest feel like they are comprehensive, but they aren’t. They can introduce students to a topic, but the TLDR summaries and “Literature Reviews” are lacking necessary depth.



# Library Examples II

4. How do you ensure that the use of generative AI in instruction adheres to ethical standards, particularly with respect to data privacy and academic integrity?
  - a. Bias and discrimination that exists in the “training data” or wherever these tools learn from is still present in the AI.
  
5. In what ways has generative AI influenced the assessment and feedback process for students in your discipline?

n/a
  
6. How do you see generative AI technologies evolving in the next five years, and what impact do you anticipate this will have on your discipline?
  - a. I would bet on the next “Discovery Layer” that ExLibris/ProQuest/Clarivate rolls out will incorporate more AI.
  - b. I am both excited and nervous about the ability AI will have to conduct rigorous evidence synthesis like systematic reviews, meta-analysis, etc.
  - c. More products/services tailored towards different levels of expertise... The CQ Researcher equivalent vs. PubMed equivalent
  
7. What advice would you give to educators who are hesitant to incorporate AI technologies into their teaching practice?
  - a. Echo what Shauna said. Ignoring it would be a huge missed opportunity; we should learn about how it can help rather than dismiss it.



**CREATE THE FUTURE**

# AI Resources that are related to LIS

- Salem State has a quality library guide:  
<https://libguides.salemstate.edu/GenerativeAIInformationLiteracy>
- Not specifically LIS, but here is an AI Product Tracker compiled by Ithaka S+R. It also provides some annotation about each source:  
[https://docs.google.com/document/d/1yg7KJmMl7d\\_xZAGgHiXc-9iSNT5vmmp1iyK5zYcS2IE/edit](https://docs.google.com/document/d/1yg7KJmMl7d_xZAGgHiXc-9iSNT5vmmp1iyK5zYcS2IE/edit)
- Paperdigest.org  
<https://www.semanticscholar.org/>
- Saeidnia, H. R. (2023). Ethical artificial intelligence (AI): confronting bias and discrimination in the library and information industry. *Library Hi Tech News*.
- Artificial-intelligence search engines wrangle academic literature  
<https://www.nature.com/articles/d41586-023-01907-z>
- Texas A&M Library Guide with example prompts and uses of different AI tools:  
<https://tamu.libguides.com/c.php?g=1289555>



# Basic Instructional Uses

- Ask ChatGPT for article ideas
- Generate introductory or concluding paragraph drafts
- Generate rubrics for student assignments
- Provide scenarios and/or examples for class
- Summarize articles (70% shorter than the abstract)
- Generate graphics
- Generate questions from articles





# Things to Consider

- Should instructors identify when they use AI?



CREATE THE FUTURE

# For More Information

- [Ditch That Textbook's Frankenbot Template](#)
- [Artificial Intelligence in Higher Education: Benefits and Ethics | Fierce Education](#)
- [Artificial intelligence and authorship | COPE: Committee on Publication Ethics](#)
- [AI Will Transform Teaching and Learning. Let's Get it Right. \(stanford.edu\)](#)
- [8 Ways to Create AI-Proof Writing Prompts | Tech & Learning \(techlearning.com\)](#)
- [AIToolsReport](#) (AI tool search)



CREATE THE FUTURE

# Questions & Contacts

**Steve Baule**  
[sbaule@winona.edu](mailto:sbaule@winona.edu)

**Laura Beasley**  
[laura.beasley@go.winona.edu](mailto:laura.beasley@go.winona.edu)

**Matt Flugum**  
[matt.flugum@go.winona.edu](mailto:matt.flugum@go.winona.edu)

**Patrick Leepport**  
[patrick.leepport@bemidjistate.edu](mailto:patrick.leepport@bemidjistate.edu)

**Shauna Mayer**  
[shauna.mayer@winona.edu](mailto:shauna.mayer@winona.edu)



CREATE THE FUTURE