Joel Miller was a public educator for 14 years before joining FEE. He was awarded the 2020 John Morton Excellence in the Teaching of Economics Award by the Council for Economic Education.

He enjoys being an active instructional leader in the economics teaching community. Joel aims to help young people learn economic reasoning and the timeless principles of liberty through development of FEE's Educational Programs and Teaching Resources.

**Curriculum Development Manager**

**ATLANTA, GA**

Twitter (X?): @mrjoelmiller

jmiller@fee.org
AI Instructional Tool Demos
The most promising uses of AI will not involve computers replacing people, but rather, people and computers working together—as “superminds”—to do both cognitive and physical tasks that could not be done before.

"Technology is neither good nor bad; nor is it neutral. The consequences of any technology depend on how it is used and who uses it."

-Robert Langdon (protagonist, *Origin*)
Is this the end, or the beginning?
Can AI Improve Allocation?
The Educator's Economic Dilemma

Dan Fitzpatrick
@DanFitzTweets

AI is already dramatically reducing teachers' workload.

As a teacher which tasks are most likely to eat into your own personal time?

If it's something else please comment.

- Writing feedback/Marking: 30.8%
- Creating content: 12.8%
- Planning lessons / SOW: 18%
- All of the above: 38.4%

250 votes · Final results
10:48 AM · Jan 7, 2023 · 2,736 Views

and batteries, to be able to give their all to the next class.
<table>
<thead>
<tr>
<th>MODEL</th>
<th>RUNS CODE</th>
<th>SEE IMAGES</th>
<th>READS FILES</th>
<th>INTERNET CONNECTION</th>
<th>PERSONALITY</th>
<th>WHAT IS IT</th>
<th>WHEN TO USE IT</th>
</tr>
</thead>
<tbody>
<tr>
<td>ChatGPT/</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Neutral, bland</td>
<td>This is the free version of ChatGPT that came out in November. It is very fast and pretty solid at writing and coding tasks.</td>
<td>It is fast and cheap and capable, but other models are now better. Also, it is not connected to the internet, so don't use it like a search engine.</td>
</tr>
<tr>
<td>GPT-3.5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ChatGPT/</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td>Helpful, a little preachy</td>
<td>Currently available to paying customers. The most powerful LLM for most purposes. Does a lot.</td>
<td>Better at everything (writing, coding, summarizing) than GPT-3.5 Still not connected to the internet.</td>
</tr>
<tr>
<td>GPT-4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ChatGPT/Code</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Limited</td>
<td>Helpful sometimes witty</td>
<td>Adds new capabilities to ChatGPT. Plugins and web browsing still have rough edges. Code Interpreter lets the AI run Python code &amp; work with files.</td>
<td>Code Interpreter is great for working with data of all sorts, and is the most generally impressive AI implementation so far. Plugins are generally not that useful yet. The web browsing is being updated.</td>
</tr>
<tr>
<td>Interpreter/Plugins</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bing</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>Friendly but also somewhat insane</td>
<td>Connected to the internet. It is GPT-4 with a grab-bag of powerful features. The weirdest model. Creative mode lets you use GPT-4 and is free.</td>
<td>Does a remarkably wide range of stuff, from working as a browser companion to creating art. Is connected to the internet. Has a strong, weird personality.</td>
</tr>
<tr>
<td>(Uses GPT-4 in creative &amp; precise modes)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bard</td>
<td>Yes</td>
<td>Yes</td>
<td>Yes</td>
<td>None</td>
<td>None</td>
<td>Bard is a name for a variety of models used by Google. Current offerings are weak, but improving over time</td>
<td>This should be your last choice of AIs for now, but recent updates show promise. High levels of hallucination.</td>
</tr>
<tr>
<td>Claude 2</td>
<td>Yes</td>
<td>Yes</td>
<td>No</td>
<td>None</td>
<td>Pleasant when not scolding</td>
<td>Almost as powerful at GPT-4, but built to be &quot;safer&quot; and more pleasant to use. Has 100k context window - enough &quot;memory&quot; to hold a book.</td>
<td>Terrific on working with large documents, due to its extended context window and ability to upload content. it is very new so it is unclear how it stacks up.</td>
</tr>
</tbody>
</table>
20 ways to use ChatGPT in the classroom

1. Use it as a more complex source of information than Google.
2. Use it to provide students access to lots of good examples.
3. Use it to remix student work.
4. Ask it for definitions (on a variety of levels).
5. Ask it for feedback for student work.
6. Ask it to do some teacher tasks for you.
7. Add it to the "think pair share" thinking routine.
8. Grade the bot.
9. Debate the bot.
10. Ask the bot for advice.
11. Use it to summarize texts.
12. Use it for insight into big, difficult-to-solve problems.
13. Ask ChatGPT to write your lesson plans.
14. Anticipate the response you’d expect from AI.
15. Take several responses and make a better product.
17. Provide tutoring or coaching.
18. Generate prompts and questions to facilitate discussions.
19. Provide information and answer questions.

Get an overview of ChatGPT in the classroom at ditchthattextbook.com/ai.
Infographic by Matt Miller (@jmattmiller / DitchThatTextbook.com)
## 4 Buckets for Teachers

<table>
<thead>
<tr>
<th></th>
<th>Differentiating Content</th>
<th>Resource Creation</th>
<th>Student Assignments</th>
<th>Grading Assistant</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>Simplifying terminology</td>
<td>Test Questions</td>
<td>Students create questions for AI</td>
<td>Creation of answer keys</td>
</tr>
<tr>
<td></td>
<td>Giving cultural examples</td>
<td>Sample Lessons</td>
<td>Evaluate AI answers</td>
<td>Rubric-based grading</td>
</tr>
<tr>
<td></td>
<td>Changing grade levels/reading levels</td>
<td>Strategies for teaching</td>
<td>Create prompts for other students</td>
<td>Feedback to students</td>
</tr>
</tbody>
</table>
Before you ask ChatGPT a question you need to: \textit{PREP} THE MACHINE.

\textbf{P} Introduce the question with a \textit{prompt}.
Write a biography on Edgar Alan Poe.
Write it in first person in the style of Edgar Alan Poe.
Include his birth, death, and notable works. It should be 100-150 words and use alliteration.

\textbf{E} Be \textit{explicit} in your instructions.

\textbf{P} Set the \textit{parameters} of the answer.
Objectives:

- Understand and implement the PREP model for creating engaging assignments
- Develop assignments that align with economics curriculum learning objectives
- Foster a collaborative environment for idea generation and discussion

**P - Prompt**
- Answer an exam question
  - You are a 15-year-old GCSE English student.
  - The question is below. Use your answer on the mark scheme. Write a level 1 answer.
  - **Question:** How can you use language to describe the Hartop family? You could include the writer's choice of words and phrases, language features and techniques, sentence forms, etc.

**R - Role**
- **Explicit**
  - Level 4 (7-8 marks):
    - Shows control and a detailed understanding of language
    - Analyzes the effects of the writer's choice of words
      - Selects a range of phraseological terms
    - Makes use of detailed and accurate use of subject terminology
  - Level 3 (6-7 marks):
    - Shows some understanding of language
      - Explains the effects of the writer's choice of words
        - Selects a range of phraseological terms
        - Makes use of detailed and accurate use of subject terminology
  - Level 2 (5-6 marks):
    - Shows some awareness of language
      - Attempts to comment on the effects of language
        - Selects some appropriate linguistic terms
        - Makes use of detailed and accurate use of subject terminology
  - Level 1 (4-5 marks):
    - Shows some awareness of language
      - Attempts to comment on the effects of language
        - Selects some appropriate linguistic terms
        - Makes use of detailed and accurate use of subject terminology

**E - Explicit**
- Write this in around 150 words, with a reading age of 5 years.

**P - Parameters**
- The writer uses language to describe the Hartop family by choosing certain words and phrases, using specific language techniques, and sometimes in a particular way. This helps to give us a picture of what the Hartop family is like. For example, the writer might use words that suggest the family is happy and kind, or they might use words that make the family sound cold and distant. They might use some language techniques such as repetition or imagery to create a strong impression. The sentences they use might be short and simple, or long and complex. All these things help the writer to describe the Hartop family and make us interested in more about them.

see handout
Activity: Inquiry with PREP – Developing Effective Assignments for Economics Education

Objective:
- Understand and implement the PREP model for creating engaging assignments using generative AI.
- Develop assignments or assessments that align with the Mississippi high school economics curriculum standards.

Georgia Standards of Excellence:

<table>
<thead>
<tr>
<th>Standard</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>SS8P4.4</td>
<td>a. Compare interest rates on loans and credit cards from different institutions including banks, credit unions, pay-day loan facilities, and title-pawn companies. &lt;br&gt;b. Define annual percentage rate and describe how different interest rates can affect monthly payments on loans. &lt;br&gt;c. Use an online amortization tool to show how payments on a fixed loan like a mortgage are applied to interest and principal. &lt;br&gt;d. Explain the difference between simple and compound interest and the difference between fixed and variable interest. &lt;br&gt;e. Define nominal and real returns and explain how inflation affects interest-earning savings and investment accounts.</td>
</tr>
</tbody>
</table>
Activity: Economic Inquiry with PREP – Developing Effective Assignments for Economics Education

First, PREP the Machine.

1. **P** Prompt
   - Introduce the question with a prompt

2. **R** Role
   - Give it a role or voice

3. **E** Explicit
   - Be explicit in your instructions

4. **P** Parameters
   - Set the parameters of the answer

Social Studies Georgia Standards of Excellence

SSEPF4 Explain how interest rates affect various consumer decisions.

a. Compare interest rates on loans and credit cards from different institutions including banks, credit unions, pay-day loan facilities, and title-pawn companies.

b. Define annual percentage rate and describe how different interest rates can affect monthly payments on loans.

c. Use an online amortization tool to show how payments on a fixed loan like a mortgage are applied to interest and principal.

d. Explain the difference between simple and compound interest and the difference between fixed and variable interest.
<table>
<thead>
<tr>
<th>PREP MODEL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PROMPT</strong> (introduce the question with a prompt)</td>
<td></td>
</tr>
<tr>
<td><strong>ROLE</strong> (Give it a role or voice)</td>
<td></td>
</tr>
<tr>
<td><strong>EXPLICIT</strong> (Be explicit in your instructions)</td>
<td></td>
</tr>
<tr>
<td><strong>PARAMETERS</strong> (Set the parameters of the output)</td>
<td></td>
</tr>
</tbody>
</table>
Create a bulleted list of characteristics for the different types of loans and credit listed below.

You are a personal finance coach giving advice to a young adult about how interest rates vary across different loans and types of credit. You are a professional and have some experience coaching young adults between the ages of 14 and 19 as a financial planner.

Compare interest rates on loans and credit cards from different institutions including banks, credit unions, pay-day loan facilities, and title-pawn companies. Provide a bulleted list of common characteristics and concerns with each of the aforementioned sources of credit, and how the interest rates charged (APR) affect consumer decisions. Generate up to 10 bulleted statements for each type loan or credit source listed in this prompt.
Title-Pawn Companies

- Title-pawn companies provide loans that are secured by the title of your vehicle.
- These loans typically have high interest rates, often exceeding 100% APR.
- If you cannot repay the loan, the lender can take your vehicle.
- These loans are typically for a 30-day term, with the option to renew for an additional fee.
- As with payday loans, lenders do not usually check your credit score.
- The loan amount is based on the value of your vehicle.
- Title loans should be a last resort due to the risk of losing your vehicle and the high cost of borrowing.
- Some states have laws limiting the amount you can borrow or the interest rate that can be charged.
- Consumers should be aware of all terms and conditions before taking out a title loan.
- Repaying the loan early can often reduce the total cost, but some lenders may charge a penalty for early repayment.
- Long-term loans are available, but at similarly high rates.
- Credit unions often offer personal service, which can help borrowers understand the full cost of a loan.
Reflect

I used to think...
but now I think...
Sorting it Out: Priorities for Your Practice
(Using the PREP Method)
Prompt- Grade this student's work and explain your grade.
Role- You are an economist who specialised in post-World War 2 fiscal policy in the U.S.
Explicit- Familiarise yourself with the question and answer, then link your grade to the rubric provided.
Parameters- Write this in 200 words. Use headings and bullet points.
Paste your exam question:
Paste your rubric:
Paste your student's answer:
2. Provide Formative Feedback

Prompt: You are a teacher who provides outstanding feedback to your students, that helps them to improve.
Role: Provide feedback on the student’s work. Include:

Explicit:
- The most impressive part of their answer
- How they can improve to a level 4

Use short and impactful sentences. Break down complex ideas, so they are clear and easy to understand.
Write a model answer.
You are a Level-4 AP Macroeconomics student who knows the rubric very well and always gets top marks.

Write a level 4 model answer for this exam question based on the rubric. Also, create a 'fill the blanks' task out of this answer. Blank out only key words. Also, write a level 1 answer. Use excellent vocabulary and provide evidence to back up your answers. Make your evaluations thorough and insightful.
Create a how-to guide.
You are an experienced Economics instructor who creates impactful resources for high school students. You write how-to guides that are easily understandable, contain short and punchy sentences and turn complex ideas into simple ones.

Paste your question:
Paste your rubric:
Create a 3 step how-to guide on how to answer this question in a closed exam setting, where you can't research.
Use headings, subheadings and bullet points.
Create a lesson plan.
You are an expert on pedagogy. Create it for a 9th grade economics lesson. This lesson introduces students to scarcity.
Make it an engaging and informative lesson. Write your answers in headings, subheadings and bullet points.
Create a set of questions for students.
You are an expert in learning theory, specialising in retrieval practice. You are also an experienced economics teacher.
Create a series of questions for a class of 12th grade students on the concept of changes in supply and demand which impact an equilibrium price.
Also, include tasks such as:
Plan these out over two weeks. Only Monday to Friday.
Create guided notes.
You are an expert in macroeconomics, who is renowned for your ability to simplify complex macroeconomic indicators like GDP, CPI, and Unemployment into understandable information for 13-year-olds.

Create it for a high school economics class. Include:
- 4 paragraphs of writing
- A multiple-choice hinge question after each paragraph
- Questions at the end based on Bloom’s taxonomy level two or three
Create a report for a student.
You are a teacher who is outstanding at writing students' reports. You synthesise student grades and effort and give a clear picture of how students are progressing. You write in short sentences, that are easily understandable.

Paste student's grades:
Paste the students' effort ratings:
Here are a few bullet points of information about the student:
Write a unit summary.
You are an outstanding personal assistant who can create professional documents. You have the ability to write clear and punchy sentences, that deliver impact.

Create a curriculum intent document for my year 8 music class.

Explain why we teach this content and how it links to careers and growing emotional intelligence.

Base it on the content standards outlined below.

Paste content:
Create notes for a parent and student meeting.
You are an expert at analysing student data and providing clear, insightful notes about a student's progress. Format your answer, using headings, subheadings and bullet points.

Create notes on a student's progress.
Paste the student's grades:
Paste the student's effort ratings:
Here are a few bullet points of information about the student:
AI Instructional Tool Sites

BLOG for Educators
https://aieducator.tools/
“The AI Classroom” Facebook group

ONEUSEFULTHING.org
simplifying educational research (often AI topics)
AI Educator Tools

- Global leader in educational AI tools
- Perhaps not the best way to follow the latest in AI-Ed tools ;)
- What’s something troubling you heard?

AI Classroom Book

ChatGPT Survival kit for teachers
# One Useful Thing: Roles for AI in learning

<table>
<thead>
<tr>
<th>AI USE</th>
<th>ROLE</th>
<th>PEDAGOGICAL BENEFIT</th>
<th>PEDAGOGICAL RISK</th>
</tr>
</thead>
<tbody>
<tr>
<td>MENTOR</td>
<td>Providing feedback</td>
<td>Frequent feedback improves learning outcomes, even if all advice is not taken.</td>
<td>Not critically examining feedback, which may contain errors.</td>
</tr>
<tr>
<td></td>
<td>Direct instruction</td>
<td>Personalized direct instruction is very effective.</td>
<td>Uneven knowledge base of AI. Serious confabulation risks.</td>
</tr>
<tr>
<td>TUTOR</td>
<td>Prompt metacognition</td>
<td>Opportunities for reflection and regulation, which improve learning outcomes.</td>
<td>Tone or style of coaching may not match student. Risks of incorrect advice.</td>
</tr>
<tr>
<td>TEAMMATE</td>
<td>Increase team</td>
<td>Provide alternate viewpoints, help learning teams function better.</td>
<td>Confabulation and errors. “Personality” conflicts with other team members.</td>
</tr>
<tr>
<td></td>
<td>performance</td>
<td></td>
<td></td>
</tr>
<tr>
<td>STUDENT</td>
<td>Receive explanations</td>
<td>Teaching others is a powerful learning technique.</td>
<td>Confabulation and argumentation may derail the benefits of teaching.</td>
</tr>
<tr>
<td></td>
<td>Deliberate practice</td>
<td>Practicing and applying knowledge aids transfer.</td>
<td>Inappropriate fidelity.</td>
</tr>
<tr>
<td>SIMULATOR</td>
<td>Accomplish tasks</td>
<td>Helps students accomplish more within the same time frame.</td>
<td>Outsourcing thinking, rather than work.</td>
</tr>
</tbody>
</table>

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**Ethan Mollick**

I am a professor at the Wharton School of the University of Pennsylvania. I study entrepreneurship & innovation, as well as how we can better learn and teach.
AI Instructional Tool Sites

100 Prompts for Teachers
ChatGPT
alicekeeler.com
focuses on developing prompt development skills

DITCH THAT TEXTBOOK
Matt Miller- Educator & Author
of “AI for Educators”
https://ditchthattextbook.com/

Writing school AI policies? Use these 10+ resources
41. Respond to [paste student free response here]
   Follow up with “rewrite in a friendly tone”
42. Provide this student with tips on how to improve their writing [paste student response here]
43. Give personal feedback to student [paste student comment here]
44. Write 50 different feedback comments that are similar to “good job”
45. Can you suggest some specific areas where students have demonstrated strengths and areas for improvement in their work?
46. Can you provide some examples of feedback that effectively encourages students to reflect on their work and make revisions?
47. What are some strategies we can use to make sure that feedback is actionable and helps students set goals for their ongoing learning?
AI Instructional Tools

- **Wisdolia**: Study tool for students/teachers
- **edpuzzle**: Video edits, voiceovers, and “generated” questions
- **Canva**: Educator tools
- **Curipod**: Presentation generator
- **Conker**: Quiz Creator > Google Form
- **YouTube Chat GPT Integration**
1. Despite recent economic crises, there is reason to be optimistic as global output is significantly higher now than before the pandemic, and the average person is twice as economically prosperous as they were a generation ago.

2. While the world as a single economy is looking better than ever, an emerging trend of more and more individual economies experiencing isolated breakdowns is still threatening the well-being of hundreds of millions of people, mostly in developing economies.

3. Advanced economies have a lot of advantages over developing economies, including reliable sources of foreign income, high standards of living, and the ability to borrow money at lower interest rates.

4. Good infrastructure spending is crucial to any economy, and advanced economies have an advantage in this regard as a lot of their infrastructure is already built.

5. Economic collapses can be caused by a variety of factors, including bad economic decisions, shocks to supply and demand, and unexpected events. Economic failures can be prevented by negotiating debt and seeking assistance from international financial institutions.
Wisdolia is a free AI tool that helps you create flashcards from any YouTube video, article, or PDF in any language. It uses AI to generate question and answer flashcards to help you actively remember what you learned.

similar to: Quizlet but generative and dynamic
Inflation Eased to 3% in June, Slowest Pace in More Than Two Years

Fed officials are still likely to raise interest rates when they meet later this month

By Gwynn Guilford and Nick Timiraos

Updated July 12, 2023 4:09 pm ET

What factors contributed to the decline in inflation?

Factors such as lower prices for used cars and airline fares, as well as slower rent increases, contributed to the decline in inflation.
And we do import a lot of things from China but in terms of both imports, and
curipod

Generate an interactive slideshow based on your lesson focus and learning objectives.

similar to: Peardeck & Nearpod (but generative)
curipod

Edit existing presentations or generate new presentations using specific content input/prompts.

Great for new teachers & fresh ideas
E.3
Examine how voluntary exchanges and trade are reflections of positive and negative incentives.

4. Explain why many nations for national defense, protection of key industries and protection of workers.

5. Explain why import restrictions result in higher prices and decreased job opportunities and profits.

6. Define labor productivity.

7. Evaluate how international economic interdependence causes economic conditions and policies in one nation to be affected by economic conditions and policies in
What is the topic of your next lesson?

Topic for the lesson: Explain how interest rates affect various consumer actions.

Grade: 12th Grade

Learning objective and standards:

a. Compare interest rates on loans and credit cards from different institutions including banks, credit unions, pay-day loan facilities, and title-pawn companies.
b. Define annual percentage rate and describe how different interest rates can impact consumer choices.

Do magic

Skip and start from a blank slide
What is the topic of the lesson?

Topic for the lesson:

- Explain how interest rates affect consumer decisions.

Learning objective and standards:

- a. Compare interest rates on various institutions, including banks and title-pawn companies.
- b. Define annual percentage rate (APR).

Higher interest rates make consumers:
- more cautious and they tend to save more
- lower interest rates make consumers:
  - more willing to take risks and they tend to spend more
  - interest rates have no effect on consumer decisions

Interest rates are high, people are more likely to save because they can earn more money on their savings and investments.
What will you design today?

Text-to-Image: Translate text, Magic presentation generator
Welcome to Canva for Education
Car Loan Interest Explained (The Easy Way)

Why add these?
Create questions to see which students understood the lesson, and add notes to give more information or get students' attention with a quick audio note!
<table>
<thead>
<tr>
<th>Standard</th>
<th>Objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1. Define relative price, market clearing/equilibrium price, shortage, and surplus.</td>
</tr>
<tr>
<td></td>
<td>2. Investigate the relationship between market clearing price and supply and demand.</td>
</tr>
<tr>
<td></td>
<td>3. Explain that market outcomes depend on available resources and government policies.</td>
</tr>
<tr>
<td></td>
<td>4. Relate shortages and surpluses to changes in price.</td>
</tr>
<tr>
<td></td>
<td>5. Discuss the concept of market price and exchange rates.</td>
</tr>
<tr>
<td></td>
<td>6. Examine how changes in supply or demand cause relative prices to change.</td>
</tr>
<tr>
<td></td>
<td>7. Relate government enforced price ceilings and floors to persistent shortages or surpluses.</td>
</tr>
</tbody>
</table>

**What do you think about these items?**

1. What is the definition of price in the context of a market?

   - The amount of money a seller is willing to accept for a product
   - The cost of production for a product
   - The value of a product as determined by supply and demand
   - The amount of money a buyer is willing to pay for a product

   Select the correct answer: The value of a product as determined by supply and demand

4. How does price affect the behavior of sellers?

   - Higher prices lead to increased production
   - Higher prices lead to decreased production
   - Lower prices lead to increased production
   - Lower prices lead to decreased production

   Select the correct answer: Higher prices lead to increased production
Reflect

I used to think...
but now I think...
20 add-ons and extensions for Google Slides

<table>
<thead>
<tr>
<th>Add-ons for Google Slides</th>
<th>Extensions for Google Slides</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. PearDeck</td>
<td>10. Clipboard History Pro</td>
</tr>
<tr>
<td>2. Noun Project</td>
<td>11. EquatI0</td>
</tr>
<tr>
<td>4. Insert Icons for Slides</td>
<td>13. Color Pick Eye Dropper</td>
</tr>
<tr>
<td>5. Slide Randomizer</td>
<td>14. Bitmoji</td>
</tr>
<tr>
<td>6. Animated GIFs</td>
<td>15. Pear Deck Power-Up</td>
</tr>
<tr>
<td></td>
<td>17. Screencastify</td>
</tr>
<tr>
<td></td>
<td>18. Remote for Slides</td>
</tr>
<tr>
<td></td>
<td>19. Tab Carousel</td>
</tr>
<tr>
<td></td>
<td>20. Poll Everywhere</td>
</tr>
</tbody>
</table>

Are you looking for quality, meaningful professional learning that both equips and inspires teachers?
20 ways to use ChatGPT in the classroom

1. Use it as a more complex source of information than Google.
2. Use it to provide students access to lots of good examples.
3. Use it to remix student work.
4. Ask it for definitions (on a variety of levels).
5. Ask it for feedback for student work.
6. Ask it to do some teacher tasks for you.
7. Add it to the “think pair share” thinking routine.
8. Grade the bot.
9. Debate the bot.
10. Ask the bot for advice.
11. Use it to summarize texts.
12. Use it for insight into big, difficult-to-solve problems.
13. Ask ChatGPT to write your lesson plans.
14. Anticipate the response you'd expect from AI.
15. Take several responses and make a better product.
17. Provide tutoring or coaching.
18. Generate prompts and questions to facilitate discussions.
19. Provide information and answer questions.

Get an overview of ChatGPT in the classroom at ditchthattextbook.com/ai.
Infographic by Matt Miller (@jmattmiller / DitchThatTextbook.com)
CHATGPT TEACHING TIME-SAVERS

1. **Passage Questions**
   ChatGPT can create questions for any text and provide an answer key. It also can create homework writing prompts. (Source: Paul DeSignore)

2. **Discussion Prompts**
   Use ChatGPT to write engaging & open-ended prompts for whole class discussions on any topic.

3. **IEP Goals**
   "Input information about the student's abilities and ChatGPT will generate specific, measurable goals for the student to work towards." (Source: Erinintegration)

4. **Quizzes**
   Align all your quiz questions on a topic or reading with the Common Core State Standards.

5. **Template It**
   Use the A.I. to create templates for annual reports and for common emails.

6. **Vocabulary Building**
   "Teachers can ask ChatGPT to generate sentences using a particular word, and then have students guess the meaning of the word based on the context of the sentence." (Source: Shana Ramin)

7. **Essay Analyzer**
   Students can submit their writing to ChatGPT and get suggestions for improvement.

8. **Permission Sheets**
   Ask ChatGPT to create permission sheets for guardians to sign for field trips or other activities.

9. **Essay Feedback**
   When kids make a grammar error, teachers can direct ChatGPT to define/describe the error with examples.

10. **Rubric Creator**
    Create rubrics aligned to specific standards.

11. **Lesson Plans**
    Teachers can ask ChatGPT to write the first draft of a lesson plan. It will even create a PBL lesson.

12. **Slide Shows**
    ChatGPT can outline a slide show for a text or topic. Then you supply the visuals.

13. **Differentiation**
    ChatGPT can create chapter summaries for kids that need it. It can also act as a text compactor.

14. **Pre-Reading**
    ChatGPT can extract keywords from a chapter and define those words.