



SUPPORTING STUDENT COMPREHENSION WITH AI TOOLS

NORTH
Dakota
Be Legendary.

EduTech

INFORMATION TECHNOLOGY

ABOUT ME:



Katie Larson

Information Technology Specialist
NDIT|EduTech

- 10 years teaching English & Theater grades six through dual credit
- eDynamic National Career Compass Teaching Award finalist
- Love to cook, weightlift, and learn.



Education Strategies

Problem-Based Learning (PBL):

- 21st Century Education Strategy
- Has origins in ancient times: Ancient Greek philosophers learned by questioning and doing.
- 20th century had proponents with John Dewey and Maria Montessori (Boss, 2011).

Virtual Reality & Gamification:

- Bring experiences into the classroom that would otherwise not be available.
 - Programs like CareerViewXR, which brings immersive career exploration to students.
- AI in VR, allows “better user interaction, better user experiences, the possibility to augment human intelligence and human senses, and the ability to drive down the cost of creating an immersive virtual world” (IEE 2022).

How does AI fit in modern Education?

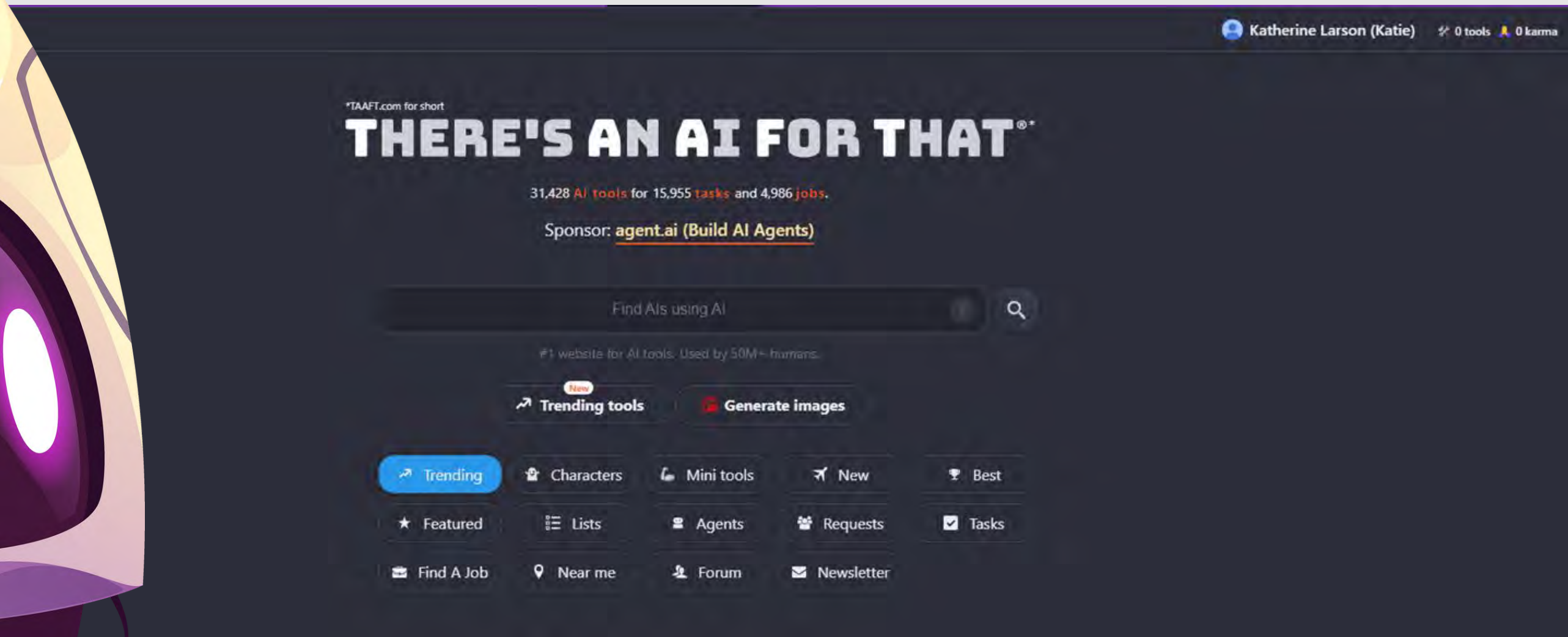
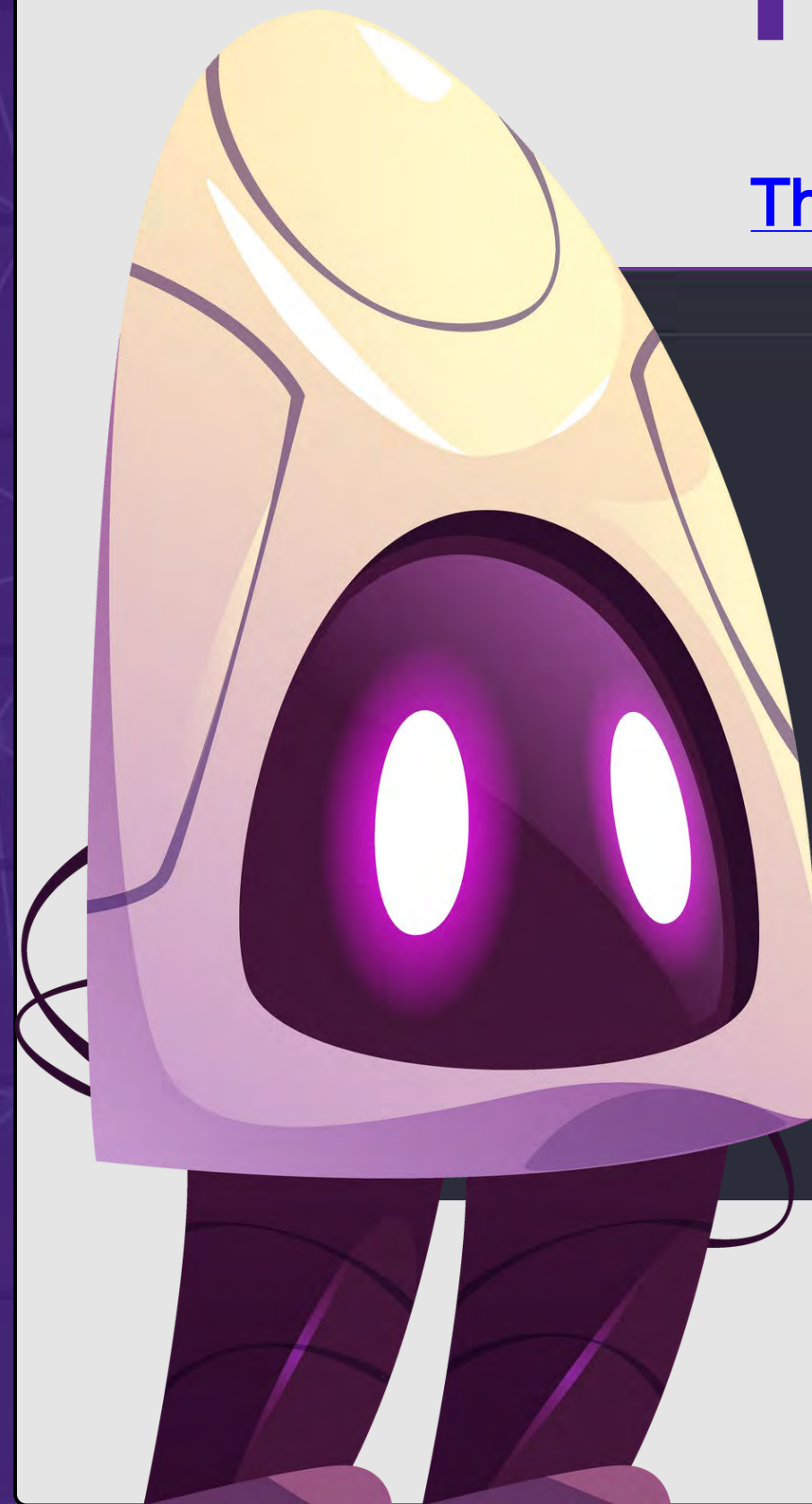
“The acceptance of different technologies takes a longer time for acceptance in education”
(Nguwi, 2023)

Educators need to instruct on the basics of AI so students can effectively use it in the future.



Too Many Choices!

[There's An AI For That® - Browse AI Tools For Any Task](#)



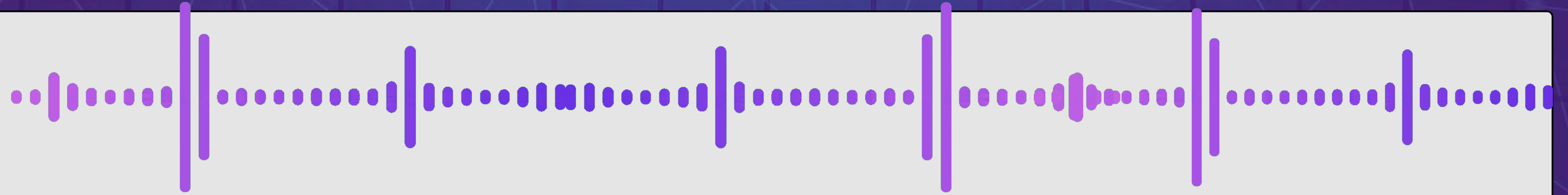
Free, freemium, and paid apps —do your research!

Multi - Modal Differentiation


- Podcasts
- Music
- Chatbots
- Activity Creation
- Formative Assessment Tools
- Learning Accelerators

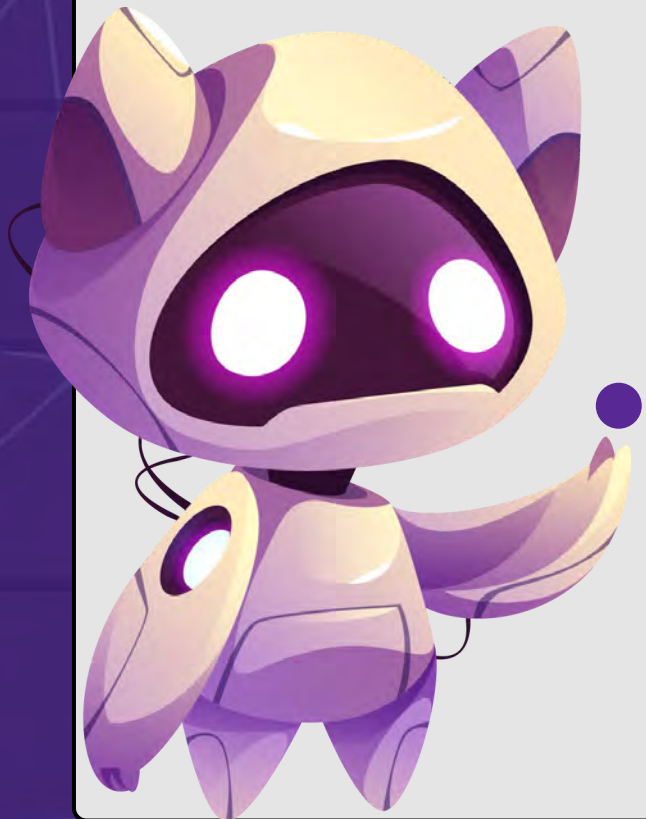
None of these tools are mind-blowingly new...but they've been showcased, now it's time to look at practical applications!





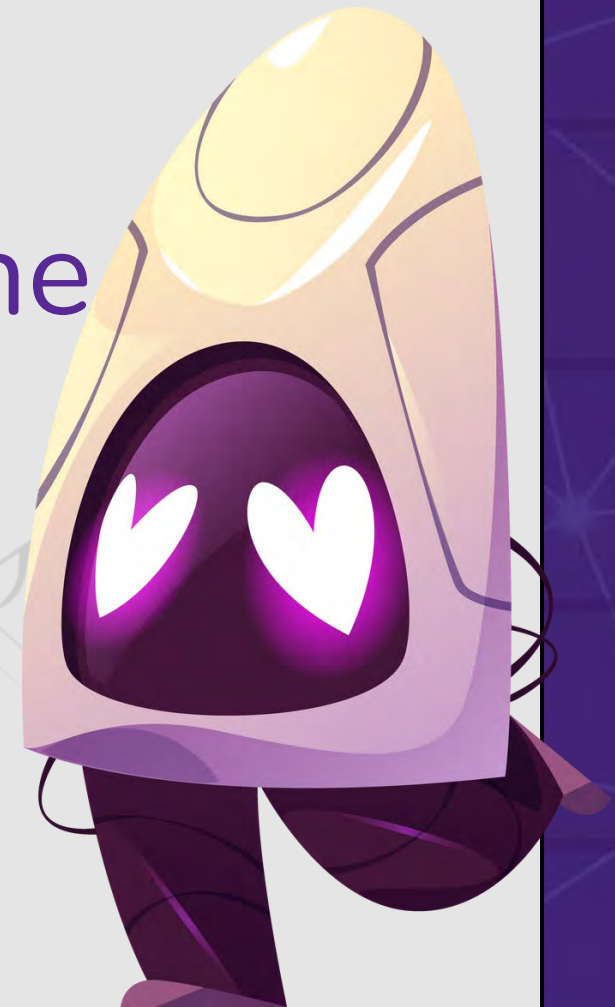
Creating Podcasts

- Google's  NotebookLM
 - Summarize content into audio files
- Adobe [Podcasts](#)
 - Edit & build podcasts



Educational Songs at the Click of a Button!

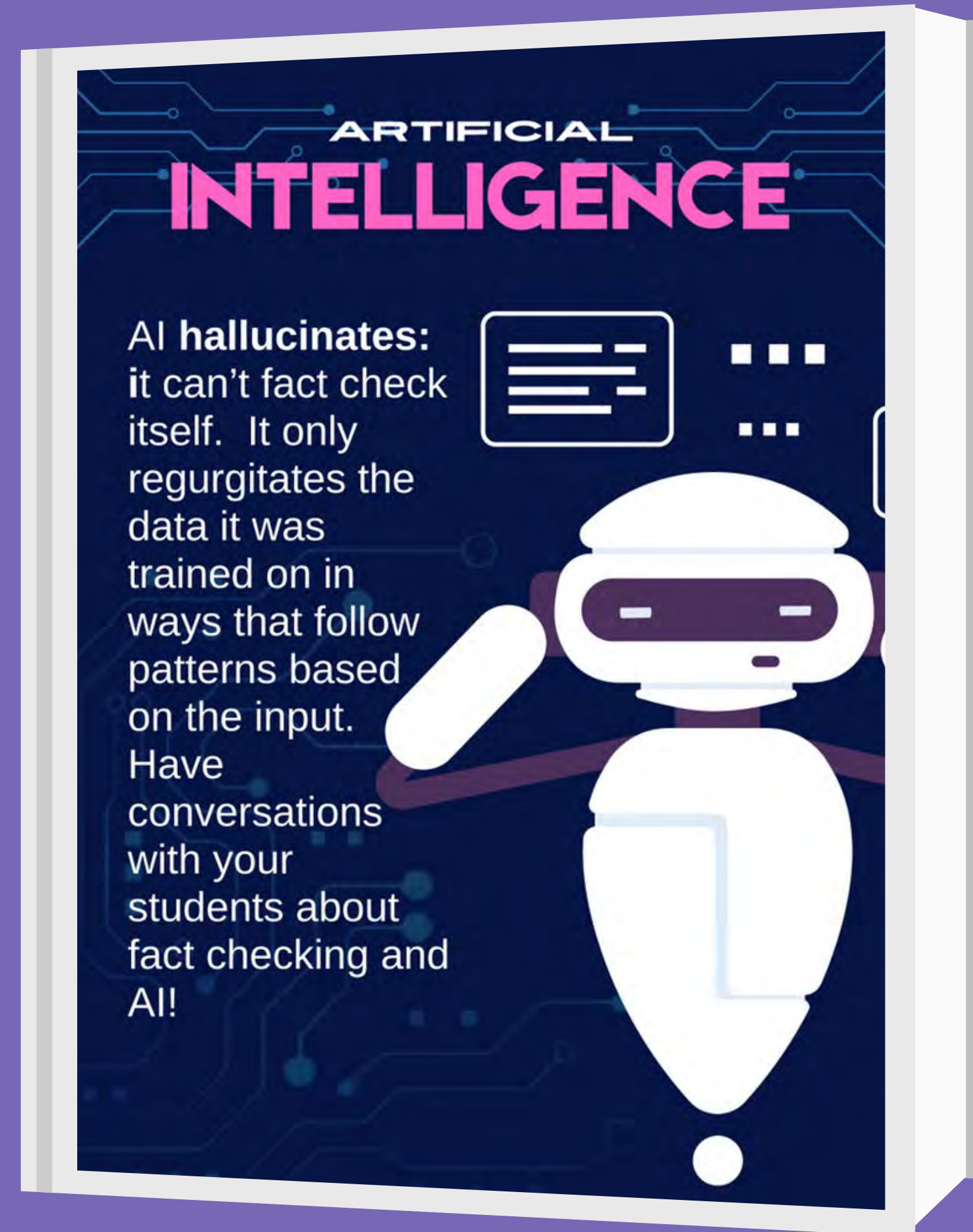
- [Suno](#)
 - [And an example song](#)
 - [Here's a Song about the Scientific Method](#)
- Tie it into a project that uses podcasts, suddenly the students have their own intro and outro songs!



Chatbot Study Aids

- Use a Generative AI tool of choice.
- Prompt the AI to “take on the role” of whatever the students are struggling with while studying.
- Students ask the AI questions about the topic & use it as a quizzing tool.

PREP = (P)ROMPT (R)OLE (E)XPLICIT
(P)ARAMETERS



Chatbot Study

- Use a Generator of choice.
- Prompt the AI to “take on the role” of who the students are working with while using the chatbot.
- Students ask questions & use it as a resource.

PREP = (P)ROMPT (R)OLE (E)XPLICIT
(P)ARAMETERS

Looking for a starting prompt you may build off? Check out AI for Education's Prompt Library



Creating Projects

And Changing Up Lesson Plans

I taught Gothic Literature. Trying to apply the 19th century texts to 21st century life was a struggle for my students. Trying to identify the impact these novels had was a SLOG. Using Copilot, I redesigned my midterm project from a quiz that focused on rote memorization to a modern -day media-analysis project

Real-World Problem -Based Activity: Analyzing Media Representation

Objective: Students will analyze how style, syntax, and word choices in media representations of scientific advancements impact public perception, mood, and tone, drawing parallels to Mary Shelley's "Frankenstein."

Scenario: Imagine you are a team of journalists tasked with reporting on a groundbreaking scientific discovery. Your goal is to write an article that accurately conveys the discovery while considering how your style, syntax, and word choices will influence public perception.

Research Phase (20 minutes):

- Divide students into small groups and assign each group a recent scientific discovery or technological advancement (e.g., CRISPR gene editing, AI developments, renewable energy breakthroughs).
- Provide resources for students to research their assigned topic.

Analysis Phase (30 minutes):

- Each group will analyze a passage from Chapters 5-10 of "Frankenstein," focusing on Shelley's style, syntax, and word choices.
- Groups will then compare Shelley's portrayal of scientific discovery and its consequences with modern media representations.

Reflection (10 minutes):

- Ask students to write a brief reflection on what they learned about the impact of language in both literature and media.
- Encourage them to consider the responsibilities of writers in shaping public understanding of science.

Assessment:

- Quality of research and analysis
- Effectiveness of the written article in conveying the scientific discovery
- Participation in group activities and class discussions
- Reflection on the lesson's objectives



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Guiding questions:

- i. How does Shelley use language to create a specific mood and tone around Victor Frankenstein's experiments?
- ii. What word choices and syntax does Shelley use to convey the ethical and emotional implications of scientific discovery?
- iii. How do modern media articles use language to shape public perception of scientific advancements?

Writing Phase (30 minutes):

- i. Each group will write a short article about their assigned scientific discovery, paying close attention to their style, syntax, and word choices.
- ii. **Encourage students to consider how their language choices might influence readers' emotions and perceptions.**

Presentation and Discussion (20 minutes):

- i. Groups will present their articles to the class.
- ii. Facilitate a discussion on the similarities and differences between Shelley's portrayal of scientific discovery and the students' articles.
- iii. Discuss how language can shape public perception and the ethical considerations involved in reporting on science.



Cr Projects

PROMPT USED

I taught Gothic Literature. Trying to identify the impact these novels had on memorization to a modern -day

Guiding questions

i. How do

ii. What v

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Writing P

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Present

i. Group

ii. Facilit

iii. Discu

I am teaching Victorian literature to high school seniors. We are working on Frankenstein by Mary Shelley and addressing the standard "11 -12.R.7 Analyze the cumulative impact of specific style, syntax, and word choices on meaning, mood, and tone, including figurative and ambiguous language." I want to create a problem -based education lesson on Chapters 5 -10 for a midterm project. Use real -world problem -based activities."

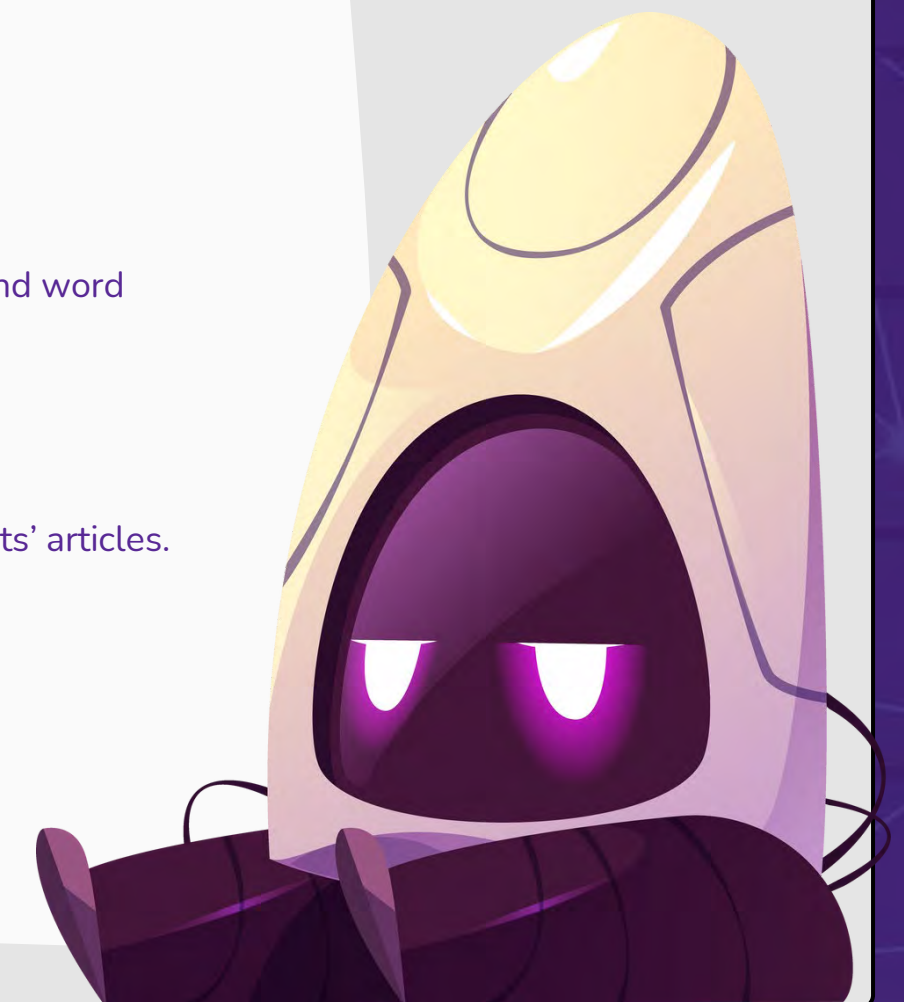
PREP = (P)ROMPT (R)OLE (E)XPLICIT (P)ARAMETERS

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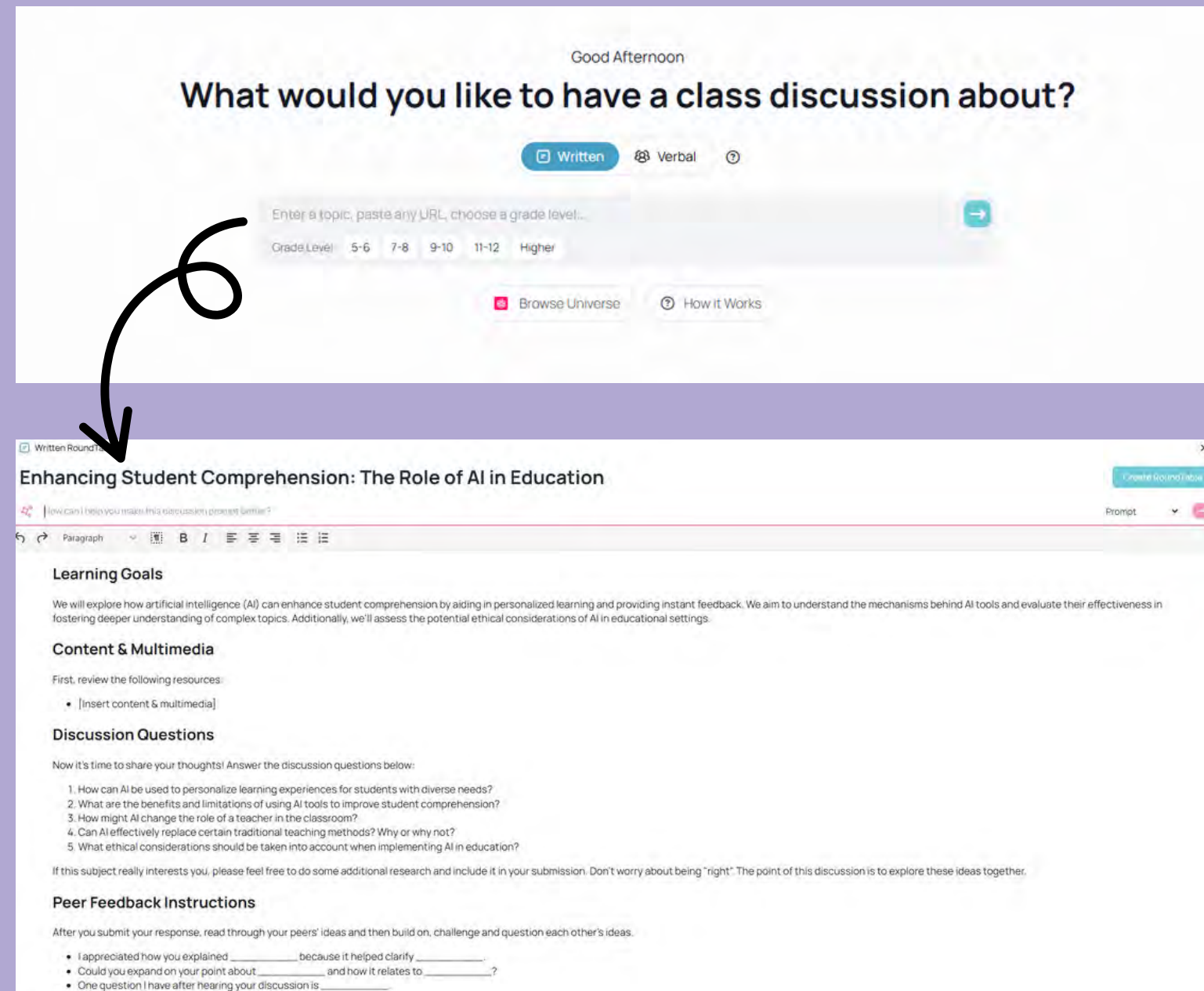
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FORMATIVE ASSESSMENTS

Parlay Genie (and content generators) create in-depth questions for in-class discussions*



Good Afternoon

What would you like to have a class discussion about?

Written Verbal ⓘ

Enter a topic, paste any URL, choose a grade level...

Grade Level: 5-6 7-8 9-10 11-12 Higher

Browse Universe ⓘ How it Works

Enhancing Student Comprehension: The Role of AI in Education

How can I help you make this discussion prompt better?

Paragraph B I [Formatting icons]

Learning Goals

We will explore how artificial intelligence (AI) can enhance student comprehension by aiding in personalized learning and providing instant feedback. We aim to understand the mechanisms behind AI tools and evaluate their effectiveness in fostering deeper understanding of complex topics. Additionally, we'll assess the potential ethical considerations of AI in educational settings.

Content & Multimedia

First, review the following resources:

- [Insert content & multimedia]

Discussion Questions

Now it's time to share your thoughts! Answer the discussion questions below:

1. How can AI be used to personalize learning experiences for students with diverse needs?
2. What are the benefits and limitations of using AI tools to improve student comprehension?
3. How might AI change the role of a teacher in the classroom?
4. Can AI effectively replace certain traditional teaching methods? Why or why not?
5. What ethical considerations should be taken into account when implementing AI in education?

If this subject really interests you, please feel free to do some additional research and include it in your submission. Don't worry about being "right". The point of this discussion is to explore these ideas together.

Peer Feedback Instructions

After you submit your response, read through your peers' ideas and then build on, challenge and question each other's ideas.

- I appreciated how you explained _____ because it helped clarify _____.
- Could you expand on your point about _____, and how it relates to _____?
- One question I have after hearing your discussion is _____.

*Remember the AI augments your skills, vet the materials before using them!

AI Tools You Can Use Today

Wakelet



[bit.ly/ KLAItools](https://bit.ly/KLAItools)



MICROSOFT LEARNING ACCELERATORS

Learning Accelerators assist **students** in engaging, deliberate practice with real-time feedback without the stigma of practicing in front of people.

They also allow **educators** to focus their time and energy where it is most needed in their classrooms, working with the students instead of creating formative assessments



LIVE DRIVE:



Microsoft®

Reading coach
with ai stories

Let's go into Microsoft Teams!



A QUICK GUIDE TO

Created by @miss_aird

Reading coach with ai stories

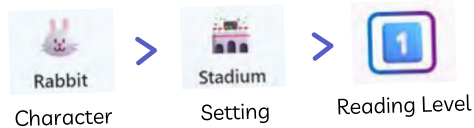
WHAT IS READING COACH WITH AI STORIES?

Reading Coach is a free tool that provides personalized, engaging, consistent and independent reading fluency practice. Reading Coach uses artificial intelligence and built-in fluency detection to personalize reading content with the words learners struggle with, while ensuring a safe and trusted experience.



AI STORIES

The create a story feature puts the story in a reader's hands by giving them the choice of a **character, setting and reading level** to create a unique AI-generated story each time.



As learners progress through the story, they can make selections to create the next chapter of the story. This personalisation allows learners to fully engage with their reading journey.

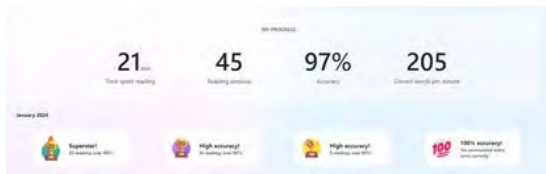


ACHIEVEMENTS

Achievements in Reading Coach play a crucial role in enhancing the reading experience.

Badges - As learners progress through their reading journey, they earn badges for various milestones and accomplishments.

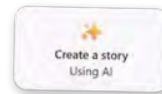
Unlocking Story Elements - Each time a learner spends 20 minutes reading with Reading Coach, they unlock a brand-new character or setting they can to create new AI-powered stories.



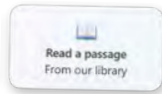
READING MODES

Reading Coach offers three reading modes: Create a story, Read from a library, and Add your own.

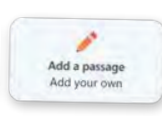
Create a story - using AI technology



Read from a library - Learners can also choose from a curated library of Lexile-leveled, fiction and non-fiction passages from ReadWorks

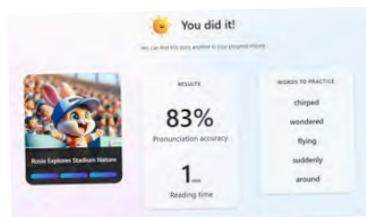


Add your own - learners can paste in their own reading passage or word list and read it out aloud

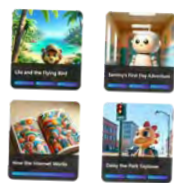


READING ANALYSIS

As learners read a story out aloud, speech-to-text artificial intelligence analyzes their reading fluency, detects words found challenging, and records the reader's accuracy, words per minute, and time spent reading.



HISTORY



The "History" feature in Reading Coach allows learners to review past texts they've read, pick up where they've left off and track the progress made over time.



Scan to access the Reading Coach with AI stories Quick Guide



LIVE DRIVE:

Math
Progress

Let's go into Microsoft Teams!





A QUICK GUIDE TO

Created by [@miss_aird](#)

Math Progress

WHAT IS MATH PROGRESS?

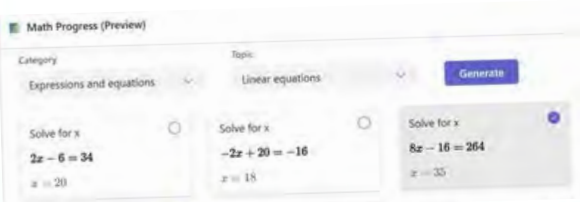
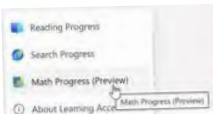


Math Progress in Microsoft Teams supports learners in building foundational math skills with educator-led and assigned activities, dashboards, and insights. In Math Progress, educators can use AI to generate sets of math problems based on a specified topic and they can also create their own problems.



CREATING MATH PROGRESS ASSIGNMENT IN TEAMS

1. Choose a class team and create a new assignment.
2. On Learning Accelerators, choose Math Progress.
3. Choose the Generate tab. 4. Select an option from the Category dropdown. 5. Choose a topic and click generate.
6. Choose which problems you prefer by choosing the checkbox in the top right corner of each card.
7. Your selected problems will appear in the Assignment Questions panel.



CUSTOMISATION

You can edit any problem by choosing the Edit button.

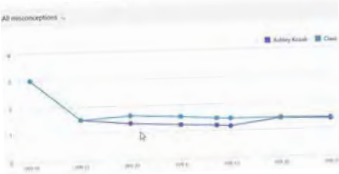
- All answer fields in the problem can be modified.
- Change the question type from Multiple Choice to a Short Answer.

You can customize the assignment to show:

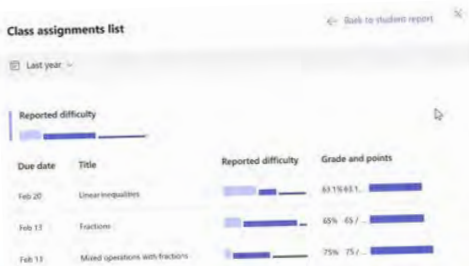
- Show your work lets the learner upload up to 5 images to show their work. Student rating gives the learner the opportunity to rate the difficulty of each problem
- Shuffle question order shuffles the order of the questions for different learners

INSIGHTS AND ANALYTICS

Navigate up to your summary and choose the option to “Compare to Class.” Insights will chart the student’s progress in relation to the class.



Narrow the results down to specific areas of misconceptions for a clearer representation on where this student may be struggling. A class report can also be generated to show data for class performance based on assignments over time.



Scan to access the Math Progress Quick Guide

ACCELERATE LEARNING WITH THE RIGHT TOOLS;
FIND ADDITIONAL QUICK GUIDES TO GET STARTED

LIVE DRIVE:



Speaker

Progress

Let's go into Microsoft Teams!





A QUICK GUIDE TO

Created by @miss_aird

speaker coach

WHAT IS SPEAKER COACH?

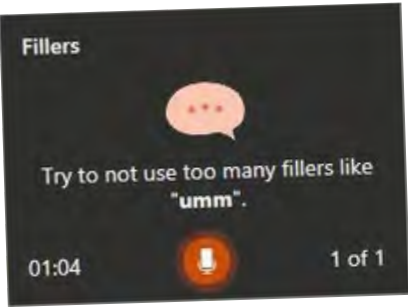
Speaker coach helps you prepare in private to give more effective presentations.

Speaker coach evaluates your pacing, pitch, your use of filler words, informal speech, euphemisms, and culturally sensitive terms, and it detects when you're being overly wordy or are simply reading the text on a slide. After each rehearsal, you get a report that includes statistics and suggestions for improvements.



REAL-TIME FEEDBACK

As you speak, coach gives on-screen guidance (in the lower-right corner of the window) about pacing, inclusive language, use of profanity, filler words, and whether you're reading the slide text.



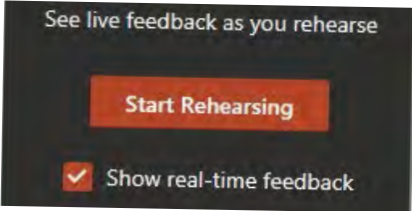
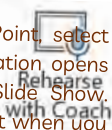
REHEARSAL REPORT

Coach opens a Rehearsal Report that summarizes what it observed and offers recommendations. The report evaluates your pacing, pitch, your use of filler words, informal speech, euphemisms, and culturally sensitive terms, and it detects when you're being overly wordy or are simply reading the text on a slide.



REHEARSE WITH COACH

On the Slide Show tab in PowerPoint, select Rehearse with Coach. The presentation opens in a full-screen view, similar to Slide Show. Select Get Started at the lower right when you are ready to begin rehearsing.



USE SPEAKER COACH IN TEAMS

Speaker Coach provides private, personalized insight into how you spoke during your meeting or presentation, as well as a summary afterwards.

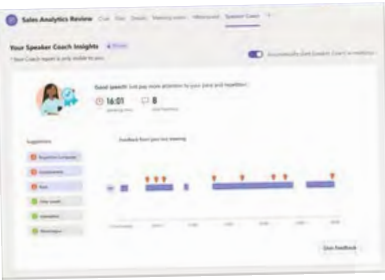
In a meeting:

- To turn on Speaker Coach during a meeting:
- Select More options
- Select Turn on Speaker Coach.

Get an overview of how you spoke during your meeting or

presentation after it ends with

Speaker Coach reports.



Scan to access the Speaker Coach Quick Guide

ACCELERATE LEARNING WITH THE RIGHT TOOLS:
FIND ADDITIONAL QUICK GUIDES TO GET STARTED



Microsoft®

LIVE DRIVE: Search
Coach

Let's go into Microsoft Teams!



Microsoft®

VIDEO



A QUICK GUIDE TO

Created by @miss_aird

search coach

WHAT IS SEARCH COACH?

Search Coach is a free tool that helps develop information literacy skills. Students receive real-time search query coaching, reliability ratings, and interactive filtering support that helps them learn to discern fact from fiction on the web.



SAFE SEARCH

Search Coach comes with Microsoft Bing SafeSearch, set "Strict" by default, blocking out most unwanted or potentially harmful content. The simple and intuitive interface, free from adverts, makes it easy for you to focus on the task at hand.

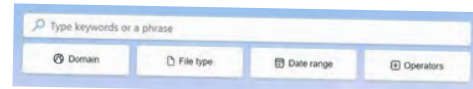


DOMAIN SEARCH

Domains indicate the type of website you are on. In Search Coach, you can filter searches by common domains including:

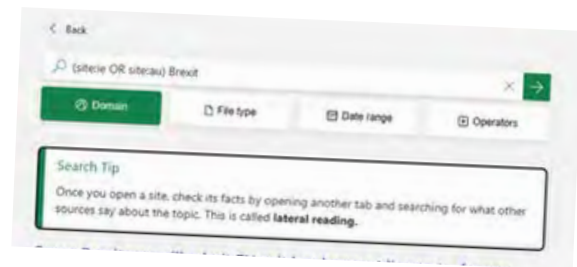
- .com (commercial)
- .org (organizations, mostly non-profits)
- .edu (higher education)
- .gov (government)

You can use country and regional domains, allowing you to focus searches on sites from a particular geographic area.



COACHING TIPS

Search Coach returns a coaching tip above the results to improve your information literacy with each query. Tips are sometimes triggered by a specific behaviour (for example, using biased language in their search) and sometimes provide more general guidance.



READING PREFERENCES

File type Learners use the File type filter to find certain types of files in a search, such as PDFs, PowerPoint presentations, or Word documents.



Date range This tool filters results by how recently a page was discovered by Bing, helping you narrow down sources discovered in the past 24 hours, week, month, year, or within a custom set date range.



OPERATORS

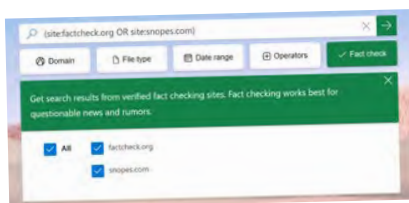
Operators help make a search more specific. Use the commands in bold. **OR** broadens a search to include additional information. **NOT** narrows searches by excluding terms that aren't needed. **AND** narrows searches by ensuring all keywords are present in the results. **Quotation marks (" ")** return results containing an exact match of a phrase.



Scan to access the Search Coach Quick Guide

FACT CHECK

Under the fifth filter button, a set of objective fact check sites appear. This allows you to verify the truth/accuracy of the information you are reading.



ACCELERATE LEARNING WITH THE RIGHT TOOLS;
FIND ADDITIONAL QUICK GUIDES TO GET STARTED

A QUICK GUIDE TO

Created by [@miss_aird](#)

Reading Progress

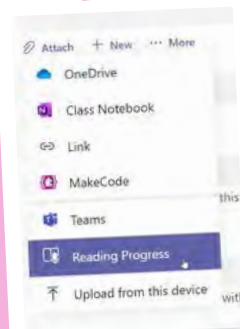
WHAT IS READING PROGRESS?



Reading Progress is a free tool built into Microsoft Teams designed to support and track reading fluency in your class. Students record their reading on camera and submit it to you.

As you mark and return their work, data is automatically collected and organized in Insights, helping you spend more time with students and less time analyzing data.

CREATE ASSIGNMENT



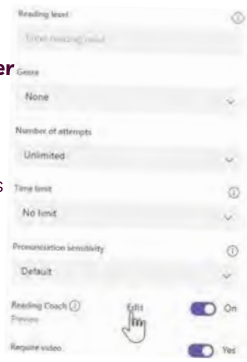
Select Attach. Then select Reading Progress from the dropdown menu. To select a passage for your students choose Upload Word or PDF or browse sample [library](#) to use passages provided by [ReadWorks](#). Complete the additional fields to

create more data opportunities when reviewing work.

SETTINGS

Complete the additional fields to create more data sorting opportunities when reviewing student work.

- **Reading level**
- **Genre**: Select Fiction or Non-fiction
- **Number of Attempts**
- **Pronunciation sensitivity** - Specify Auto-detect strictness when listening and estimating errors.
- **Require video** - give students the choice to submit audio only.
- **Reading Coach**



PAIR WITH READING COACH

Reading Coach identifies the five most challenging words for each student from the passage and gives them a supported opportunity to practice the words again.

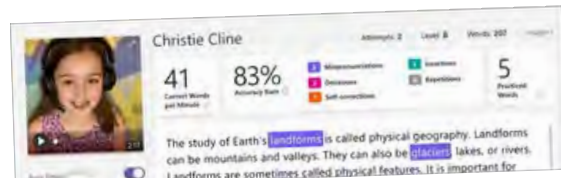
Use the tools to get more comfortable with the word.

- Select **Hear** the word to listen to the word read to you.
- Select **Stretch** the word to break the word into syllables.
- Select **See** a picture to open an illustration of your word.

REVIEW WORK

Reading Progress will collect and tabulate the errors in the Accuracy rate and Correct words per minute cards at the top of the review panel.

Auto-detect evaluates student recordings to identify likely mispronunciations and other reading errors for educators. Educators can always adjust the errors to reflect student performance.

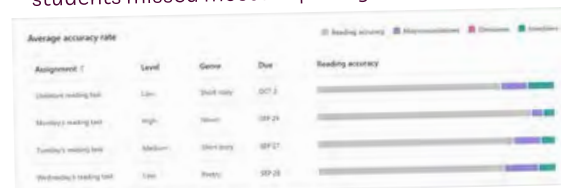


INSIGHTS

Check on your students with at-a-glance views for accuracy rate, most challenging words, and words per minute data.

By default, your report reflects all students, all assignments, the last 28 days. Select to view all options in each filter.

- View:
- **Average accuracy rate** - Hover over any student's bar graph for a detailed breakdown of errors.
 - **Average words per minute** - View how students' performance changes over time.
 - **Challenging words** - See which words students missed most often in a word cloud.
 - **Phonics rules** - Identify which phonics rules your students missed most frequently



Scan to access the Reading Progress Quick Guide

Microsoft

A QUICK GUIDE TO

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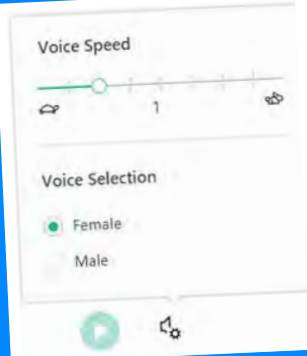
immersive reader

WHAT IS IMMERSIVE READER?



Immersive Reader can improve reading skills and comprehension through the use of the Read Aloud function and grammar options to adjustable reading and text preferences.
Immersive Reader has 3 main menus - **Text Options** / **Grammar Options** / **Reading Preferences**
It also has a **voice settings** feature to allow you to hear the text.

VOICE OPTIONS



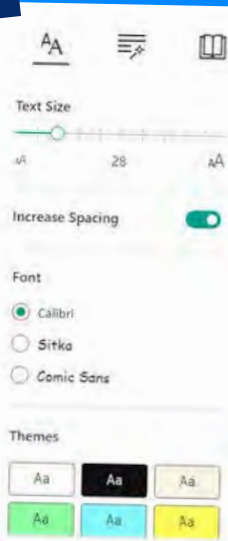
Select **Play** at the bottom of the window to hear your document read aloud and to see the text highlighted. Select **Pause** to stop narration. Select Voice Options on the top right of the document to change the **speed** of narration.

TEXT OPTIONS

You can increase or decrease **text size**.

You can increase the amount of **spacing between letters and words**.

You can change the **font** of the whole document. The Theme colour you select becomes the **background colour** of the document.



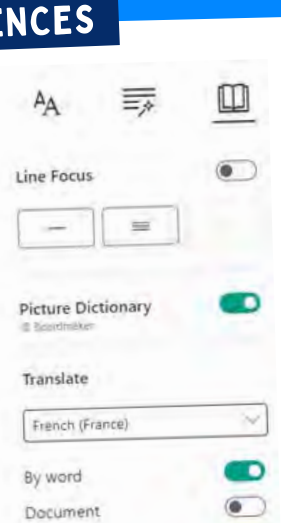
GRAMMAR PREFERENCES

You can select one or more of the following options to show:
Syllables to break words into syllables. **Nouns** to highlight nouns in your document in purple. **Verbs** to highlight verbs in your document in red. **Adjectives** to highlight adjectives in your document in green. **Adverbs** to highlight adjectives in your document in gold.



READING PREFERENCES

Line Focus enables you to narrow the focus by highlighting sets of one, three, or five lines. **Picture Dictionary** gives you the ability to click on any single word and have it read aloud. **Translate** gives you the option to change the language of the text.



Scan to access the Reading Progress Quick Guide

WHERE CAN I
USE IMMERSIVE
READER?





Microsoft Copilot

A QUICK GUIDE TO

Created by [@miss_aird](#)

WHAT IS COPILOT?

Copilot is available at copilot.microsoft.com and is built into the Microsoft Edge sidebar where you can ask complex questions, find comprehensive answers, get summarized information, find inspiration to build upon while remaining in the same tab. Copilot integrates with Bing's search engine and provides a paragraph summary in response to your queries. You can continue asking follow-up questions to refine the result.

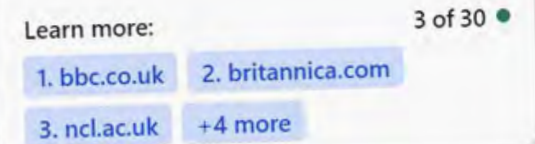


CITE SOURCES

When you get a reply to a prompt, Copilot also lists any sources and links below the message bubble.

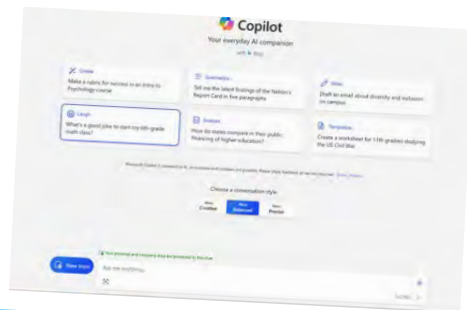
Including sources enables users to fact-check the information provided by Copilot.

You can also explore additional details and dive deeper into a topic of interest as well as being able to access the original articles, studies, or reports to gain a more comprehensive understanding.



CREATE

Copilot can save you time and help you make rubrics, personalize content for students, and create educational materials such as quizzes and lesson plans. There are suggested prompts to give you ideas and help you get started, but you can always write your own prompt as well.



LEARN MORE ON THE [MICROSOFT LEARN COURSE](#) [HERE](#)

IMAGE CREATOR FROM DESIGNER

Ask Copilot to create a brand new image for you, using only your words. Write 'create me an image of' or 'draw me an image of' and finish off with exactly what you're looking for. Image Creator works best when you're more descriptive, so add details like adjectives, locations, or even artistic styles.

For example, 'create an image of a unicorn

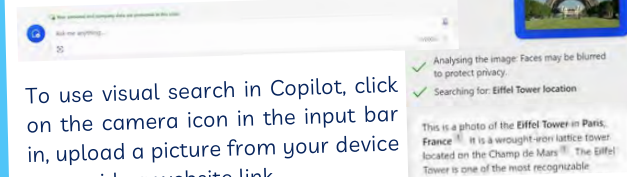
sunbathing on the beach with a rainbow'



VISUAL SEARCHES

Visual search allows you to input images to Copilot and ask questions about them. You can ask questions

about images that are difficult to describe, for example; get a recipe for a dish you don't know the name of, identify a building you don't recognize, and much more.



To use visual search in Copilot, click on the camera icon in the input bar, upload a picture from your device or provide a website link.

PDF FEATURE

When you have a PDF open you can ask the Copilot sidebar questions about the document. You may want to ask:

- Summarise the document/page
- Create 5 questions about the document
- Who is the author of the document? When was it published?

BONUS QUICK GUIDE (NOT A LEARNING ACCELERATOR)



Scan to access the Copilot Quick Guide

ACCELERATE LEARNING WITH THE RIGHT TOOLS:
FIND ADDITIONAL QUICK GUIDES TO GET STARTED

Questions?





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