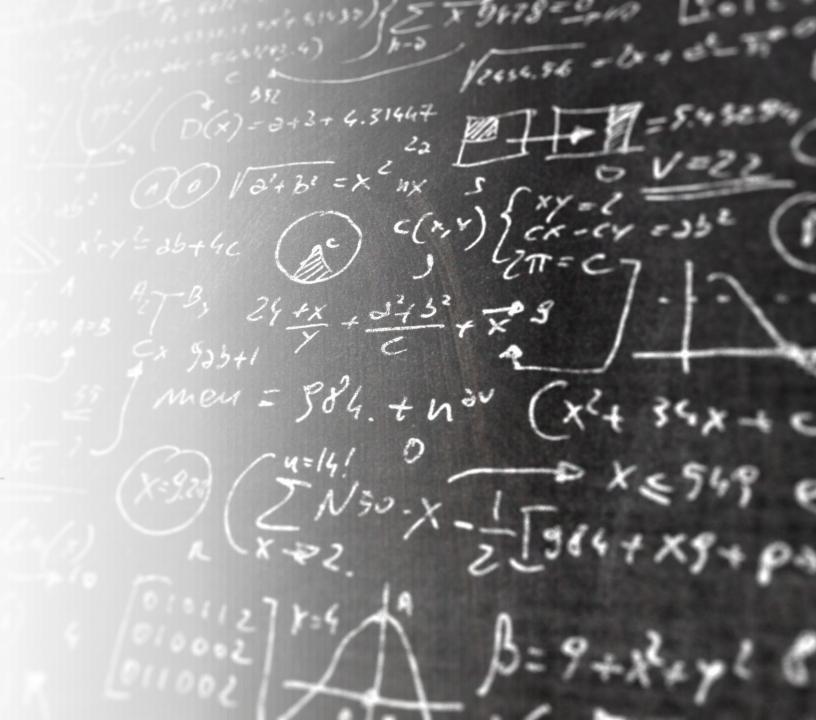
# Planning for Al in Voorhees Township Schools

Al Literacy in Pursuit of Responsible Use



# **The Internet? Bah!**

Hype Alert: Why cyberspace isn't, and will never be, nirvana

BY CLIFFORD STOLL

FTER TWO DECADES ONLINE, I'M PERPLEXED. It's not that I haven't had a gas of a good time on the Internet. I've met great people and even caught a hacker or two. But today I'm uneasy about this most trendy and oversold community. Visionaries see a future of telecommuting workers, interactive libraries and multimedia classrooms. They speak of electronic town meetings and virtual communities. Commerce and business will shift from offices and malls to networks and modems.



pretense of completeness. Lacking editors, reviewers or critics, the Internet has become a wasteland of unfiltered data. You don't know what to ignore and what's worth reading. Logged onto the World Wide Web, I hunt for the date of the Battle of Trafalgar. Hundreds of files show up, and it takes 15 minutes to unravel them-one's a biography written by an eighth grader, the second is a computer game that doesn't work and the third is an image of a London monument. None answers my question, and my search is periodically interrupted by messages like, "Too many connections, try again later."

Won't the Internet be useful in governing? Internet addicts clamor for government reports. But when Andy Spano ran for county executive in Westchester County, N.Y., he put every press release and position paper onto a bulletin board. In that affluent county, with plenty of computer companies, how many voters logged in? Fewer than 30. Not a good omen.

~~~ 27, 1995

entary school teachers picket against use of calculators in grade school

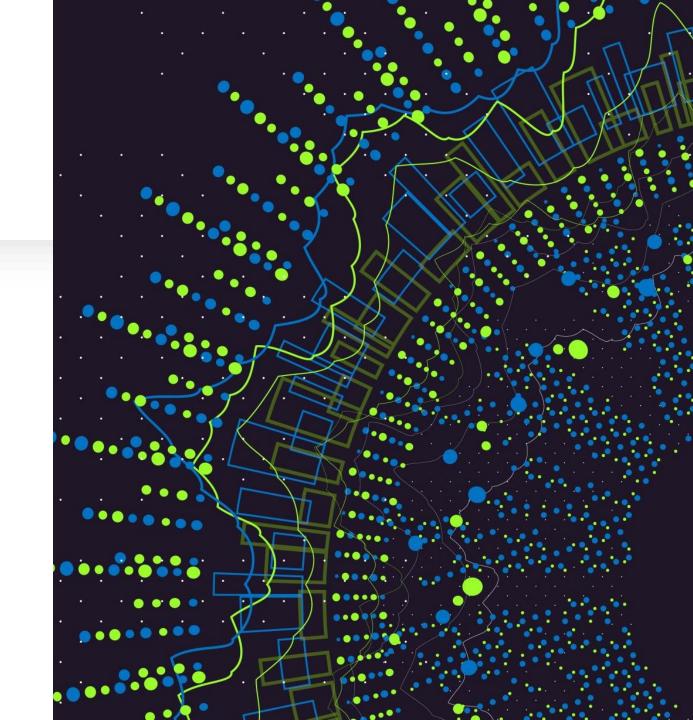
**Evolution of Technology in Education** 

Ban or Embrace?

hers protest tor use

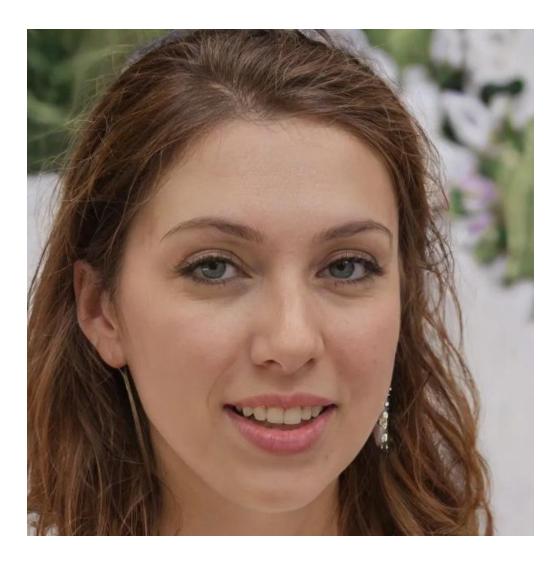
Artificial Intelligence - Software that can perform tasks that would typically require human intelligence

- Traditional AI can analyze data and tell you what it sees
  - Ex: Siri, Alexa, Google Maps/Waze, biometrics (fingerprint or facial recognition)
- **Generative AI (GenAI)** can use that same data to create something entirely new
  - A type of artificial intelligence that can create new content, such as text, images, music, videos, 3D models, code, & more...





# Real!





# Real!





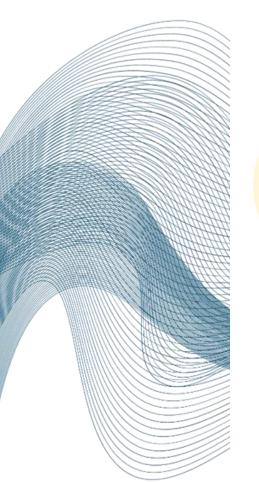
# Both are Al generated!





# **Defining Generative Al**

To understand generative artificial intelligence (GenAI), we first need to understand how the technology builds from each of the AI subcategories listed below.



#### Expert System Al

Programmers teach AI exactly how to solve specific problems by providing precise instructions and steps.

#### **Artificial Intelligence**

The theory and methods to build machines that think and act like humans.

#### **Machine Learning**

The ability for computers to learn from experience or data without human programming.

#### **Deep Learning**

Mimics the human brain using artificial neural networks such as transformers to allow computers to perform complex tasks.

#### **Generative Al**

Generates new text, audio, images, video or code based on content it has been pre-trained on.













# ChatBots: ChatGPT, Gemini, CoPilot, & Claude

Al-powered language models that can generate responses to prompts or questions

Can perform many of the same tasks, but have different strengths

# **ChatGPT**

- →trained on text from the internet
- →restricted to the events through 2021
- →can understand and generate a wide range of text for multiple purposes

# Gemini

- →trained on a specific dataset for conversations
- →better at answering questions with more relevant information
- →can use up-to-date material that is currently available online, including statistics and sources

# **Creating Useful Prompts**

## **Be Clear & Specific**

"write a poem about love" instead of "write a poem"

#### **Provide Context**

"write a poem about love with similar tone to Roses are Red..."

#### **Set Constraints**

"write a poem about love no more than 50 words..."

## **Break Down Complex Tasks**

"summarize the main points of the article" instead of "write a report on the article"

#### **Iterate & Refine**

rephrase, use different descriptors, add context, & try, try, try again...

# Limitations of Al

While AI can generate text based on patterns and structures it has learned from its training data, it does not have the ability to generate new, innovative, creative ideas to solve complex problems.



# Limitations of GenAI:

# **Biases**

GenAl Chatbots have shown evidence of cultural, racial, and algorithmic bias

# **Hallucinations**

GenAl Chatbots have been known to state false information as fact

# Knowledge of Current Events

Demographic data or factual information could be out of date

# Limitations

#### It can be incorrect!

Here, you can see that it got a math question wrong (Answer is -3).

S

What is -1\*-1\*-1? Think it step by step



When multiplying numbers, we follow the rule that states that two negative numbers multiplied together will result in a positive number. So, to solve -1 \* -1 \* -1 step by step, we can break it down as follows:





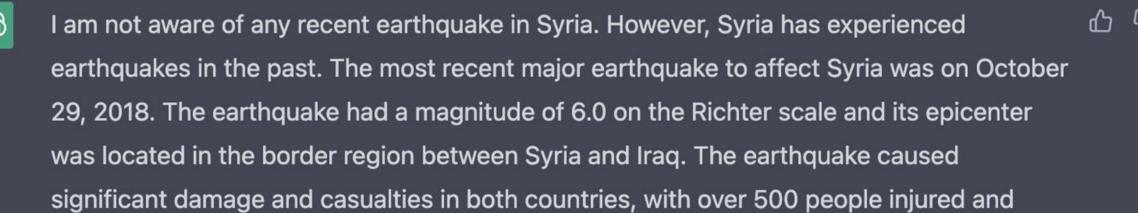
- First, we multiply -1 by -1, which gives us a positive result: -1 \* -1 = 1.
- Then, we take the result of 1 and multiply it by -1: 1 \* -1 = -1.
- Finally, we take the result of -1 and multiply it by -1: -1 \* -1 = 1.

Therefore, the final result of -1 \* -1 \* -1 is 1.

# Limitations of AI

It doesn't always know **recent events** (getting better – crossreferenceing results with Google search).

s what was the scale of the syria earthquake and when did it happen?



Al can't predict the future, but it can speculate

# Limitations of AI

Some responses from AI can reflect algorithmic bias.



Here are 10 of the most prominent scientists in history, along with their genders and nationalities:



- 1. Isaac Newton Male, British
- 2. Albert Einstein Male, German-American
- 3. Marie Curie Female, Polish-French
- 4. Galileo Galilei Male, Italian
- 5. Charles Darwin Male, British
- 6. Nikola Tesla Male, Serbian-American
- 7. Thomas Edison Male, American
- 8. Stephen Hawking Male, British
- 9. James Clerk Maxwell Male, British
- 10. Rosalind Franklin Female, British

These individuals have made significant contributions to the field of science, ranging from developing new theories and equations to making breakthrough discoveries and advancements in scientific knowledge. They have had a profound impact on the practice of science, both in their time and in the years that have followed.

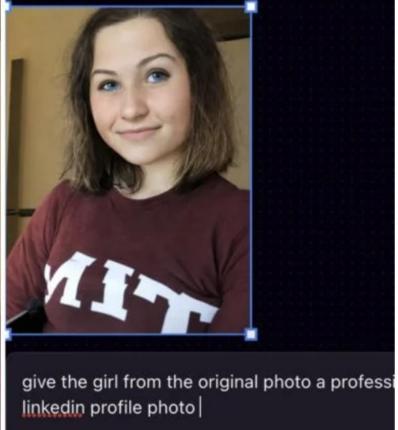
#### **EXAMPLE**:

When asked about prominent scientists in history, the response is scientists that are exclusively from Europe or North America, and primarily men (8 out of 10).

# Limitations of AI

It can be **biased**.



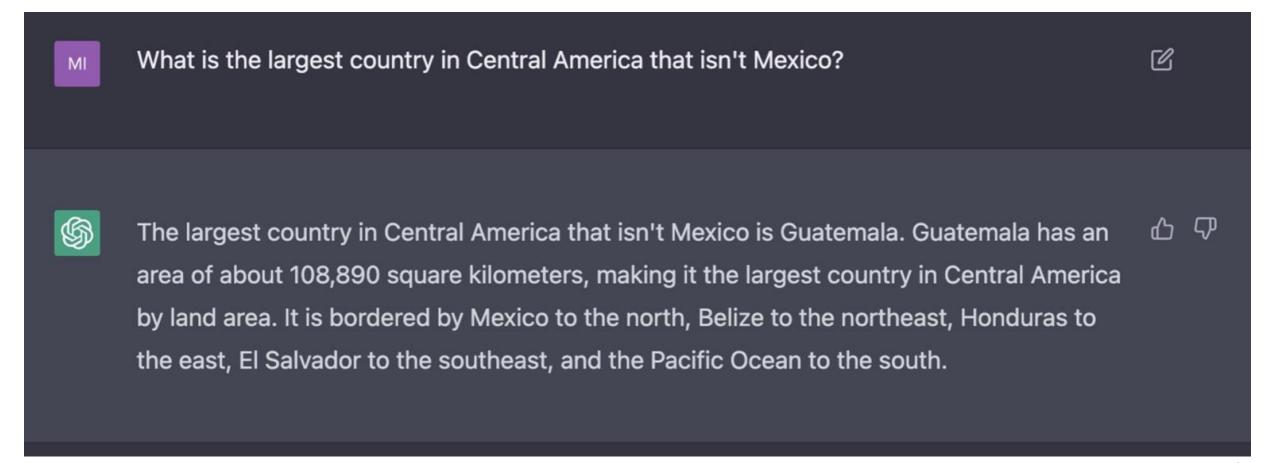


MIT student, Rona Wang, asked an AI image creator app called Playground AI to make a photo of her look "professional."
It gave her paler skin and blue eyes, and "made me look Caucasian."

- Rona Wang

# Limitations of Al

It can **Hallucinate**, or provide made up/incorrect information (Answer is Nicaragua)



## What does this mean for Schools?

# The Hope

- □ personalized learning
- □ real time feedback
- □ tutoring
- □ auto-grading
- □ realtime data analysis
- □ virtual teaching assistants
- □ and more...

# What to use GenAl for (Right Now)

Written Communication

**Lesson Planning** 

Brainstorming

Refining Text

**Translations** 

Formatting Unstructured Data

# Addressing Al Misuse

Whether AI use constitutes cheating depends entirely on the assignment and intended learning goals set by the teacher.

If the purpose is to demonstrate comprehension, original analysis, or subject mastery, Al-generated responses could undermine academic integrity.

If the goal is effective communication, persuasion, or polished writing, AI can help students efficiently create original, high-quality work.

# Al Detection Tools

These tools are not 100% accurate, so proceed with caution...

- GPTZero: gptzero.me
- GPT-2 Output Detector: openai-openaidetector.hf.space
- Crossplag: crossplag.com/ai-contentdetector

## The Best Tool I Know of:

e **Draftback extension** will play back revision history of a Google Doc: Chrome Web Store link

# Strategies for "Al-Proofing" Assignments

## Rethinking Assessments & Assignments

#### Flip the Classroom

oversee "Al friendly" work in the classroom

#### **Process Over Product**

assess with frequent checkpoints & provide ongoing feedback

#### **Use Multi-Modal Assignments**

assign mixtures of written, oral, visual, and digital elements

#### **Authentic, High-Order Tasks**

where students analyze, evaluate, & create solutions for real world, complex, meaningful problems

#### **Experiential Learning**

activities like conducting interviews, site visits, and presenting ideas in real-time

# Planning for Artificial Intelligence

1

Create a team of relevant educational personnel as AI Policy Task Force

 May include, administrators, teachers, IT professionals, consultants, and/or legal advisors 2

Gather input from relevant stakeholders

3

Review available guidance from state and federal agencies

4

Review relevant legal compliance issues (student age, data privacy laws, etc.)

5

Determine District's goals related to generative AI in:

- Governance
- •Curriculum and Instruction
- Professional Development

## Governance

Adopt Policy 2365
"Acceptable Use of
Generative Artificial
Intelligence (AI)"\*

- Requires development and alignment with district's "Acceptable Use of Generative Artificial Intelligence Plan"
- Pending approval by BOE Policy Committee

Create & adopt "Acceptable Use of Generative Artificial Intelligence Plan"\*

- Reflects criteria established in Al Policy 2365
- Sets parameters for all the ways AI may be used responsibly by district administrators, teachers, staff and students
- Pending approval by BOE Technology Committee

## Governance Al Policy

#### **POLICY DRAFT**

PROGRAM 2365/page 1 of 3 Acceptable Use of Generative Artificial Intelligence (Al) Sept24

#### 2365 ACCEPTABLE USE OF GENERATIVE ARTIFICIAL INTELLIGENCE (AI)

The Board of Education recognizes the use of artificial intelligence (AI) may result in increased and enhanced learning opportunities for students in the school district. The Board adopts this Policy to provide guidelines and expectations for student use of generative AI.

For the purpose of this Policy, "AI" means all types of generative Al technologies that create new content or outputs from a prompt to produce text, images, videos, or music.

For the purpose of this Policy, "AI tools" means software applications and platforms that utilize AI technologies to perform specific tasks and solve problems that typically require human intelligence.

For the purpose of this Policy, "assignment" means any task or work required of a student as part of a student's educational and co-curriculum program in the district.

The Board recognizes the potential of Al tools to enhance and transform a student's educational and co-curricular experience in the district. However, AI tools are not inherently knowledgeable and are trained from large amounts of data collected from various sources. Outputs generated by an AI tool may be inaccurate, inappropriate, or incomplete. Therefore, to ensure the responsible use of Al and to maintain academic integrity, students shall be required to comply with the district's Acceptable Use of Generative Artificial Intelligence Plan (Al Plan) that will include proper citation and/or documentation methods to support the content provided by an AI tool in a student assignment.

The Superintendent or designee may designate an AI Coordinator to oversee the use of all AI tools in the district and may designate additional AI Coordinators and/or committees to monitor the use of all AI tools within the district.

The Superintendent or designee, in consultation with district staff and AI Coordinator(s), shall develop the district's Al Plan.

## Governance Al Plan



# Voorhees Township School District Plan for Use of Artificial Intelligence

#### Tools for Generative AI

#### **Table of Contents**

| I. PURPOSE                                                 | 1  |
|------------------------------------------------------------|----|
| II. SCOPE                                                  | 1  |
| III. STATEMENTS                                            | 2  |
| IV. RESPONSIBILITIES                                       | 2  |
| V. ETHICAL CONSIDERATIONS, TRANSPARENCY AND ACCOUNTABILITY | 3  |
| VI. DATA PRIVACY AND SECURITY                              | 4  |
| VII. ACCESS AND EQUITY                                     | 4  |
| VIII. ACCEPTABLE USE                                       | į  |
| IX. ACADEMIC INTEGRITY                                     | 8  |
| X. ASSESSMENT PROCESSES                                    | 8  |
| XI. CITATION AND REFERENCING                               | 9  |
| XII. ACCURACY AND CREDIBILITY                              | 9  |
| XIII. PROFESSIONAL DEVELOPMENT                             | 10 |
| XIV. COMMUNITY ENGAGEMENT                                  | 11 |
| XV. REVIEWING AND UPDATING THE PLAN                        | 12 |

## **Governance** Policies Impacted by AI



Review and modify (if necessary) any existing policies that may address topics where the use of AI is relevant, has already surfaced, or may surface in the future.

#### Examples:

- •3321 ACCEPTABLE USE OF COMPUTER NETWORK(S)/ COMPUTERS AND RESOURCES BY TEACHING STAFF MEMBERS (SUPPORT STAFF; STUDENTS)
- •1550 EQUAL EMPLOYMENT/ANTI-DISCRIMINATION PRACTICES
- •5512 HARASSMENT, INTIMIDATION, OR BULLYING
- •5701 PLAGIARISM
- •7441 ELECTRONIC SURVEILLANCE IN SCHOOL BUILDINGS AND ON SCHOOL GROUNDS



Share new and modified policies with the community



Update policies and guidelines regularly to account for changes in technology

## **Governance Handbooks & Contracts**

- Modify Teacher/Staff Handbook to list goals for appropriate use of AI, with clear expectations and consequences
- Modify Student Technology Use Contract to list goals for appropriate use of AI, with clear expectations and consequences

#### Student Technology Use & Internet Safety Contract 2024-2025

#### (Excerpt)

#### Rules for Using Artificial Intelligence Tools:

- I will use AI tools ethically and responsibly, and I will not use AI in a way that could harm myself or others.
- 2. I will not share personal or confidential information with an AI tool.
- I will only use AI to support my learning and will follow my school's rules and teacher's instructions on when and how to use AI on an assignment.
- 4. I will be honest when I use AI to help with assignments, and I will not turn in work that is fully created by an AI as my own.
- 5. If I use AI, I will review its work for mistakes.
- I will use AI tools in a fair and unbiased way, and by reporting any concerns around bias or unfairness to my teacher.
- 7. I will check with my teacher when unsure about what is acceptable.

**Consequences:** While this list is not intended to be exclusive, if a user is found in violation of the Voorhees Township School District's Acceptable Use Policy, the consequences imposed could be:

- Temporary or permanent taking away of computer access and network privileges
- · School suspension or expulsion
- · Legal action and prosecution by the authorities

# Curriculum & Instruction Al Literacy

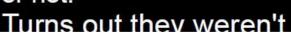
- Modify existing curriculum to include content related to AI, focusing on:
  - the benefits and pitfalls of using Al tools in society
  - the development and enhancement of necessary skills for properly using AI tools
  - evolved concepts featuring AI in existing "Digital Citizenship" and "Digital Learning" programs



Steven Schwartz, Attorney

Schwartz was fined \$5,000 for submitting fake citations in a court filing.

"Unfortunately for the client, Schwartz did his legal research for the case using ChatGPT without fact checking if the cases he cited in his brief . . . were rea or not."





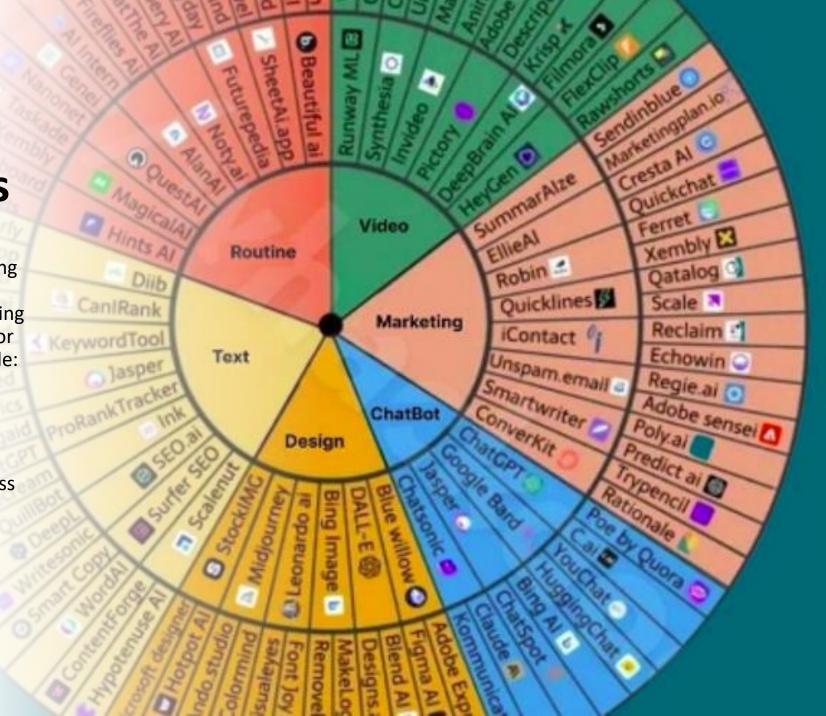
living at the age of old, surrounded by family and natural causes. A librarian from birth, Brenda was an avid collector of dust. She had a sweet heart and married her high school. She loved having hobbies and helping her sons to be



disadvantaged youths. She had no horses but thought she did. The church gave her a choir because she sang like bird and looked like bird and Brenda was a bird. She owed us so many pooms

# Curriculum & Instruction Vetting Resources

- Develop skills in / procedures for vetting curriculum materials and delivery platforms based on the machine learning model implemented by the publisher or service provider, with criteria to include:
  - Data Privacy
  - Bias & Fairness
  - Content Accuracy/Quality/Appropriateness
  - Accessibility
  - Technical Maintenance
  - Feedback Mechanisms



# Professional Development

Create and deliver training to administrators, teachers and staff that addresses:

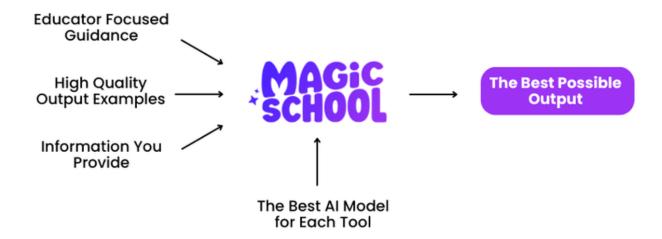
- •Use of generative AI tools to enhance instruction and productivity
- Understanding of AI related **policies**, **procedures**, **and consequences** for any infringement
- Data security the protection of and compliance with relevant data privacy laws, such as FERPA
- **Verification of accuracy and appropriateness** of AI generated content, especially if it is used in educational materials or assessments
- •Recognition and mitigation of bias in AI generated content
- Accessibility guaranteeing that AI generated content and tools are accessible to all students, including those with disabilities
- Understanding of the importance of **transparency and ethics** when implementing AI tools
- Providing and sharing feedback on Al generated content, allowing for continuous improvement

Standardize on single AI platform to streamline staff training and support



**MagicSchool AI:** A platform that takes the power of AI and puts it into educators' and students' hands to help them use it productively and responsibly in their respective work. With over 2 million users, MagicSchool is the most used and <u>loved</u> AI platform built for education in the world.

#### **How does MagicSchool work?**



## How does MagicSchool's AI work? Which AI powers the platform and what Large Language Model(s) (LLMs) do you use?

We ensure that each tool on the platform is accompanied by the best AI model to generate the strongest outputs. The platform can be powered by various models such as OpenAI's GPT 3.5 and GPT 4, Anthropic's Claude models, Google's Gemini, and others (and is currently powered by multiple models). While we have not trained our own model yet, we may do that in the future if we believe that it will result in better outcomes for our users.



My Organization





Output History

Launch to Students





Share the Magic



MagicStudent Intro

Enterprise







Sort by

MagicStudent

Most Popular

#### **All Tools**



Content

Planning

Questions

Intellectual Prep

Student Support

Communication

Community Tools

Admin



Image Generator 🔏 HOT

Generate and edit images with AI from Adobe Express.



Presentation Generator | HOT

Generate exportable slides based on a topic, text, YouTube video, or any uploaded content.



Prompt Assistant | HOT

Input your prompt to have it improved and get feedback on your prompting skills.



Take any text and rewrite it with custom criteria however



#### Lesson Plan

Generate a lesson plan for a topic or objective you're



#### Multiple Choice Quiz / Assessment

Create a multiple choice assessment, quiz, or test based on any topic, standard(s), or criteria!



#### Worksheet Generator

Generate a worksheet based on any topic or text.



#### Report Card Comments

Generate report card comments with a student's strengths and areas for growth.



Take any text and adapt it for any grade level to fit a student's reading level / skills.



#### **Academic Content**

Generate original academic content customized to the criteria of your choice.



#### Informational Texts

Generate original informational texts for your class, customized to the topic of your choice.



#### **Professional Email**

Generate a professional e-mail communication to colleagues and other professionals.



#### YouTube Video Questions

Generate guiding questions aligned to a YouTube video.



#### Rubric Generator

Have AI write a rubric for an assignment you are creating for your class in a table format.



#### Text Summarizer

Take any text and summarize it in whatever length you



#### **Text Proofreader**

IEP Generator

Take any text and have it proofread, correcting grammar, spelling, punctuation and adding clarity.

Generate a draft of an individualized education program (IEP)



#### **Text Dependent Questions**

objectives, and length of unit.

Unit Plan Generator

Generate text-dependent questions for students based on any text that you input.

Generate a draft of a unit plan based on topic, standards and



#### **Text Translator**

Take any text and translate it into any language instantly.











#### E-mail Responder

customized to a students' needs.

Generate a customized professional e-mail communication in response to an email that you received.



#### E-mail Family

Generate a professional e-mail communication to families and translate into multiple languages.



#### Writing Feedback

Based on a custom criteria, have AI give areas of strength & areas for growth on student work.



#### Song Generator

Write a custom song about any topic to the tune of the song of your choice!



My Organization

Magic Tools

Raina (Chatbot)

Output History

Launch to Students

C Love

Training

Share the Magic

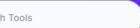
MagicStudent Intro

Enterprise













Sort by Most Popular

**All Tools** 

Chatbots

Content Creative

Ideas

Studying

Supports

STEM

Writing

Create an Al chatbot as a resou informed by your instructions!

Create an Al chatbot as a resource for students to use

Prompt Assistant & HOT

Input your prompt to have it improved and get feedback to improve your prompting skills.

Image Generator 🔓 HOT

Ask questions or get ideas through prompting Raina, the AI chatbot for students.

Generate and edit images with AI from Adobe Express.



**Custom Chatbot** 

Al Resource Bot HOT

Build a chatbot from scratch to interact with!



Writing Feedback

Get feedback on your writing.



Language Learning Tutor

Interact with a language tutor who can help you learn a new



Research Assistant

Find information and sources for a research project.



Song Generator

Write a custom song about any topic to the tune of the song of your choice!



Translate It!

Take any text and translate it into any language instantly.



**Character Chatbot** 

Chat with any historic figure, author, or recognizable character from a story.



Create a Skit!

Create a skit for class or for fun!



Tutor Me with Al

Get tutored by Raina on any topic or subject you are learning.



College & Career Counselor

Ask any questions about college or careers to this helpful



Step by Step

Get step by step directions on any topic or task.



Get AI to ask 5 questions to push your creativity and deepen your thinking on a topic!



Create a rap battle between famous figures in history.



 $\stackrel{\wedge}{\Box}$ 

Idea Generator

Idea Generator

Get help coming up with ideas on any topic.



**Book Suggestions** 

Discover books that match your interests.



Take any text and rewrite it with custom criteria however



Take any text and summarize it in whatever length you



Expand on My Idea

Use AI to expand on your ideas to help you be creative!



**Literary Devices** Get examples of literary devices based on any topic to enhance writing.



**Coding Assistant** 

An assistant to help you with coding languages in computer







My Organization









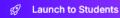




Raina (Chatbot)



Output History







Training



Share the Magic



Student Al Literacy

Enterprise





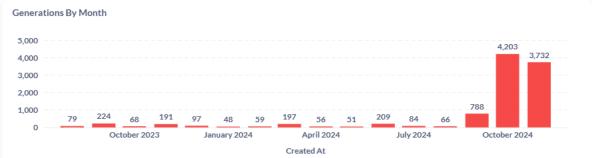


#### Organization reporting dashboard - Voorhees Township School District

#### **Data Analytics**

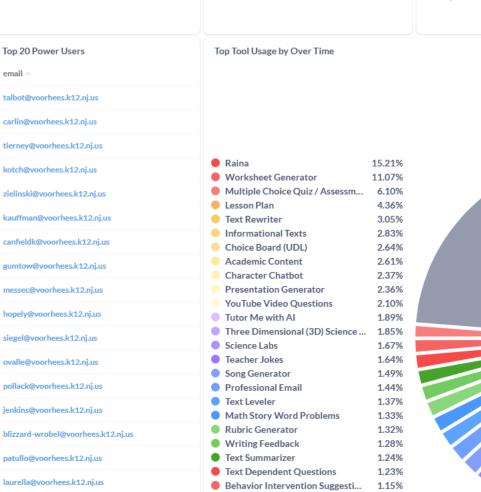
266 Count of Users in Org

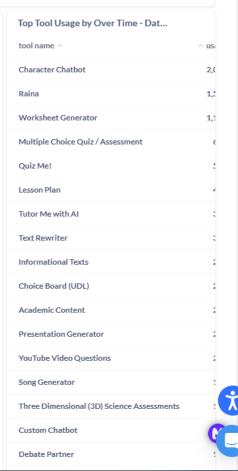
10,152 Total Teacher Generations By Org



10,152

TOTAL





#### Best Practices & Safety While Using MagicSchool:

#### What are best practices for using MagicSchool appropriately?

MagicSchool is proactive with sharing best practices for ethical and responsible usage of AI. We display these upon login for teachers and students as best practices to use AI safely:

#### **Educators:**

**Check for Bias and Accuracy:** Al might occasionally produce biased or incorrect content. Always double-check before sharing with students.

**The 80-20 Approach:** Use AI for initial work, but make sure to add your final touch, review for bias and accuracy, and contextualize appropriately for the last 20%.

**Your Judgment Matters:** See Al-generated content as a starting point, not a final solution. Always adhere to your school's guidelines.

**Know the Limits:** Our AI is not connected with retrieval from the internet yet and training ends at a certain date, so be aware when dealing with recent topics.

**Protect Privacy:** Don't include personal student details like names or addresses. We strive to promptly remove any accidentally submitted information.

#### Students:

**Your Teacher Can See Your Activity in MagicSchool:** Please make sure to follow your school and classroom guidelines when interacting with the AI.

**Math Answers Not Reliable:** Large Language Models can help you with step by step processes, but can not calculate math solutions accurately. Do not rely on AI for math solutions.

**Interacting With An AI Takes Practice:** Be clear and specific about what you need, so the AI can give you a better answer. Try again if the first try isn't what you hoped for!

Al is a Tool - Not a Replacement for Your Thinking: See Al-generated content as something that can help assist you, but not the final solution.

**Monitor for Bias and Accuracy:** Al might occasionally produce biased or incorrect content. Always double-check important information.

**Protect Privacy:** Don't include personal details like names or addresses. We strive to promptly remove any accidentally submitted information.

#### Best Practices & Safety While Using MagicSchool:

#### How does MagicSchool moderate content, especially for students?

We direct the AI models to moderate content so as to decline certain requests based on age, a school based setting, and inappropriate content as layers on top of the base models we use that have their own safeguards in place as well.

## "MagicSchool did this thing it shouldn't have done!" or "One of my students got MagicSchool to do something it wasn't designed for"

As a teacher, school, or district bringing on AI systems to prepare for the future, it's important to also understand that there is randomness associated with the technology that is inherent to being generative. Students will find creative ways to get around the safeguards at times despite our best efforts – we're aware of this and yet, still think it's important that students have access to AI.

#### Where are your terms and conditions? How do you protect privacy?

We built MagicSchool from the ground up for the privacy and security needs of schools and districts. We do not sell your data, do not use PII to train models, and have world class security and privacy standards. You can find up to date and comprehensive policy documentation on our privacy page here: <a href="www.magicschool.ai/privacy">www.magicschool.ai/privacy</a>

## What is the age limit for using MagicSchool for Students? How can your platform allow younger students if ChatGPT's policy is 13 years or older?

**Students:** We do not restrict ages for usage for the student platform (as assigned and monitored by an educator from their dashboard).

In our case, we've designed the app to be suitable for students under 13, in compliance with relevant laws like COPPA, ensuring the content is appropriate and children's privacy is protected. So, while direct use of ChatGPT is for those 13 or older, our app responsibly extends the benefits of this technology to younger students, adhering to legal and safety standards.

## Summary

01

What is Generative

02

Benefits of Al in

03

Risks of Al in

04

District Planning Process

05

Sovernance

- •Policy 2365 "Al Acceptable Use" (Pending)
- •Al Acceptable Use Plan (Pending)

06

Al Literacy & Responsible Use

- •Curriculum &
- •Staff Professional
  Development

07

MagicSchool AI -Selected AI Platform for Standardization

# Questions?