



in Educational Technology Leadership

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O Meet Our Content Creators of IEC TechBytes

#### IEC TECH BYTES | ISSUE ONE | AUGUST 2023

## **Happy August Educators**

As we embark on a new school year, I wanted to extend my warmest greetings and heartfelt appreciation for the incredible work YOU do. Your dedication to shaping the minds and hearts of our students is both admirable and inspiring! Through your unwavering commitment, creativity, and compassion, YOU make a profound impact on the lives of countless young learners, empowering them to reach their full potential.

As we navigate the challenges and triumphs that lie ahead for 2023-2024 school year, let us remember the profound influence WE can make in shaping a brighter future for ALL students of ALL abilities. Together, WE will inspire and empower generations to come.

With gratitude,

Naomi Hemesath-Harm CEO of Innovative Educator Consulting <u>Naomi@NaomiHarm.org</u>



#### NAOMIHARM.ORG

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## **ARTIFICAL INTELLIGENCE (AI)**

# AI - What is it?

A simple definition for Artificial Intelligence is when computer systems are able to think and learn in a human-like fashion. Al can mimic human decision-making and problem-solving.



# Ideas to Help Students Use AI Tools Effectively

#### INTRODUCE AI TOOLS

Adopt AI tools that can help students with their language learning: translation software, speech recognition software, or writing tools.

#### PROVIDE SUPPORT

Teach students these tools and offer tips or step-by-step instructions to use them more efficiently. Monitor their work and give feedback.

#### ENCOURAGE CRITICAL THINKING

Encourage students to question the accuracy and fairness of Al-powered writing tools or translation apps, and focus on the context.

#### **KEEP UP-TO-DATE**

Teachers need to have their fingers on the pulse and identify new tools and resources that can benefit their students.



# What Problems Can Al Pose?

#### Lack of personalization

Although Al tools are constantly evolving, they lack the human emotions and common sense that are sometimes necessary for effective teaching and learning. Al will likely not replace teachers in education.

**bias and discrimination** Bias can occur in Al systems because of the data used to train them. Al algorithms may reflect societal biases, prejudices, and stereotypes.

#### Dependance on technology

Both students and teachers may become too dependent on technology, hindering their ability to think critically or solve problems.

#### DATA PRIVACY AND SECURITY

Al-powered tools in general often collect vast amounts of personal data, which might pose a threat to students' privacy and security.

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# **ARTIFICAL INTELLIGENCE (AI)**

# How Can AI be Used by Educators and Students?

#### Natural Language Processing -

- <u>Speechnotes</u> (a powerful speech to text enabled online notepad)
- Data Mining -
  - <u>Google Trends</u> (see what people are searching for in real time) or
  - <u>iReady</u> (provides personalized instruction and support)
- Generative AI Chatbots -
  - <u>ChatGPT</u>, <u>Bard</u> or <u>Quillbot</u> (AI powered paraphrasing tool)
- Generative AI Tools -
  - <u>Curipod</u> (Create interactive lessons)
  - CoPilot (Generate Lesson Plans)
  - <u>Yippity</u> (convert notes or websites into quizzes or flashcards)
  - <u>Ryze</u> (summarize long text, explain complex topics, or quiz your knowledge)

Checkout the collections of Al resources from the following educators - who are modeling Al for educational good.

Holly Clark

**Eric Curts** 

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Dan Fitzpatrick - Al Teacher

# AI Teaching Tools and Resources

You might be wondering which AI tool is best for supporting my lesson and motivating and engaging my students in spite of the plethora of AI teaching tools and applications that have now flooded the teaching and learning market.

Here is a list of the top 20 AI teaching and learning tools that IEC is now using, plus the highlighted AI tools listed on the left, to tailor our learning materials for K12 instructors and students.



- Adobe Firefly
- <u>Canva</u>
- <u>Conker.ai</u>
- Formative AI
- Gradescope
- <u>Hello History</u>
- <u>Khanmigo</u>
- <u>Knowji</u>
- <u>Magic School</u>
- MidJourney

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- Otter.ai
- Parlay Ideas
- PicsArt
- Question Well
- <u>Runwayml.com</u>
- <u>SlidesGBT</u>
- <u>SlidesGo</u>
- Teach Anything
- Teachmateai.com
- Wolfgram Alpha

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## COMMUNITY BUILDING ACTIVITES

# The Importance of Building A Compassionate Community of Learners ALL Year Long

A compassionate learning community fosters a positive and inclusive environment, where students feel valued, supported, and empowered to reach their full potential. Such a community enhances academic achievement, promotes social and emotional development, and instills a lifelong love for learning. Here are 5 essential tips/strategies for you to cultivate a compassionate community of learners with your students.

> Establish a Welcoming Classroom Culture: Teachers may foster a caring learning community by building a welcoming classroom. Smiles, personalized welcome words, and encouraging signs or artwork can help students feel welcome. Teachers may display a "Welcome Wall" with pictures and amusing details about each student to encourage peer interaction. Here are <u>23 Ways</u> <u>to Build/Sustain Classroom Relationships from</u> Edutopia

> **Encourage Collaborative Learning:** Promote teamwork over competition. Group projects, pair work, and peer teaching help kids learn, celebrate, and develop empathy. The "Buddy System" pairs students from different grades or classrooms to work on tasks and activities. Naomi's <u>"Building a Compassionate Community of Learners All</u> <u>Year Long" slide deck</u>.

**Practicing Active Listening and Empathy:** Teachers can model these skills in class by encouraging kids to speak freely and listen politely. Empathy-building roleplaying can also help pupils appreciate diverse perspectives. Teachers might hold a "Circle of Empathy" where students share personal stories and listen without judgment. <u>Have you tried Red Nose</u> Day in your school or classroom?

#### Celebrate Diversity and

Inclusivity: Celebrate each student's uniqueness in an inclusive environment. Recognize different cultures, languages, and traditions in class. Teachers might host "Culture Days" where kids share their culture's food, dances, and music to teach respect and appreciation. Literature resource of Naomi's <u>"The Unique Individual</u> <u>You</u>" a K-6 children's STEM/SEL picture book to celebrate diversity and inclusivity in your classroom.

#### Implement Mindfulness and Emotional Support: Practice

mindfulness and emotional support daily. Start each lesson with a brief mindfulness activity to help students focus and relax. Create "Feelings Corners" or "Emotion Journals" where kids can express their emotions and receive support from teachers and classmates.

<u>Checkout GiveThX.org</u> a free digital program that strengthens student wellbeing and social-emotional skills through gratitude. <u>Apply for</u> <u>GiveThx's Educator Wellbeing</u> Program Grant by Aug 15 for your

**Program Grant** by Aug 15 for your school or district. Fully grant-funded, CASEL-validated & joyful.



## **5 MINUTE GRAB-N-GO CLASSROOM ENERGIZERS**

# How Do We Get the Wiggles and Giggles Out To Support Our Creative Thinking?

Getting the wiggles out and incorporating movement into the learning process can indeed support more creative thinking and overall cognitive development for students of all ages, even us as adults! Here are three "Grab-N-Go classroom movement energizers to start your year off right.



#### Brain Breaks and Movement

Integrate short, scheduled breaks throughout the day where students can engage in physical and playful learning activities.

These brain breaks can include stretching, dancing, yoga, or simple exercises.

Incorporate movement into your lessons, such as roleplaying, acting out historical events, or using hand gestures during storytelling to keep students engaged and physically active.

Checkout this "<u>Digital Brain</u> <u>Break Menu</u>" created by <u>jlbell@ncsu.edu</u> and "<u>The</u> <u>Genius of Play</u>" resources.

#### Flexible Seating Arrangements



Provide your classroom with flexible

seating options that allow students to move and change their positions during lessons.

This can include standing desks, stability balls, floor cushions, or even taking lessons outside when weather permits.

The ability to shift positions can help students release energy and increase focus during learning activities. Want more inspiration? Here are 25 of the best f lexible seating options for today's classroom - <u>thanks</u> <u>to "We Are Teachers.org</u> supportive website.

#### **Kinesthetic Learning**

**Opportunities:** Integrate kinesthetic learning activities into your curriculum.

#### During science lessons,

students could conduct experiments that involve hands-on activities.



**In math**, students might use their bodies to understand geometric shapes or patterns in their world.



For language arts, acting out scenes from literature or a movie they have watchedcan help students comprehend and internalize the storyline, characters and plot so much better.

#### <u>Here are more kinesthetic</u> <u>experiences and examples</u>

- that can enhance memory
- retention and make learning more enjoyable for ALL!!!



## **STEM- CODING - ROBOTICS - OH MY!!!!**

# **In-Home Robotics**

We've known for sometime that in-home robotics was going to be reshaping how we live, interact with each other, and how we care for our elders in their golden years, yet this new #AI kitty cat is more than the cats meow ~ <u>Meet Maicat: The Smart Home AI</u> <u>Robot Cat and Learning Platform</u>.



# **STEAM Boxes**

As students arrive in the morning, have them work independently on a STEAM challenge. These boxes offer students an opportunity warm up their brain and be ready for learning! Fill them with puzzles, building manipulatives, or <u>simple coloring squares</u>. Have students start with their classroom number. The next day, have them add 5 to their number and choose that box. After each student has completed each box, refill them with new challenges. A great system to ensure a positive start to each day! **Growth Mindset** 

#### **Goal Setting:**

The beginning of the year is always a great time to set goals with students! Give students a task such as building a tower with popsicle sticks and Unifix cubes. Then talk about how in life we need to be flexible and flexible in our thinking as sometimes life presents us challenges.

Change up the task by having students build their tower on top of a small box or a cup. Relate to goals in the classroom and then have students create different goals they have for the year. Discuss a possible plan for these goals and how they may achieve them. <u>Checkout</u> <u>this bonus STEM and Vision</u> <u>Board Goal Setting Lesson</u>.



**Literacy: Connections:** Picture books are always a great way to introduce a new topic such as coding or a new STEAM concept. Check out this <u>link</u> for some wonderful books to add to your classroom.

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## **STEM- CODING - ROBOTICS - OH MY!!!!**

# **Summer Fun STEM Activities**

Naomi's grandkids Maddy and Nolan have been filling their summer fun days with a variety of STEM activities to beat the Wisconsin heat and humidity.



#### Maddy's "Easy Peasy Slime Recipe"

- 8 ounces of Elmer glue (white, clear or glitter)
- 11/2-2 Tablespoon contact saline solution, add more as needed (or known as "slime activator")
- 1 Tablespoon baking soda
- Food coloring (optional)
- Clay charms (optional) adds playable texture to the slime
- Mix until slime forms into a non-sticky ball

DIY Hack: Did you know a new trash bag works excellent for an instant paint smock. Cut a slit on bottom of bag, then cut a slit on each side of the bag and it transforms the bag into an instant wear and disposable paint smock.

Total cost 15-.20 cents each

# Make & Code

Don't all aspiring programmers want to see their *magical coding skills* work in real time?

Well, Microsoft offers two free options to learn coding on their site called Make and Code. Both Arcade and Micro:bit use block coding or javascript to guide users through tutorials. The best feature of both, users see their progress in real time via the simulator. This encourages users to continue through failure as they see where they have made mistakes. Arcade walks users through tutorials to create retro looking arcade type games! As they grow and master the skills, they can create their own games. Micro:bit\_ allows users to create output and games on it's 25 LED lights and other interactive features. The bonus is that no hardware is needed! There is a simulator on the page that updates in real time as the coder creates amazing games!





## VIDEO CONTENT TO ENGAGE GEN Z AND GEN ALPHA STUDENTS

## The Why and Need for Video Content to Enhance Instruction and Engage Gen Z and Gen Alpha Students

Today's kids love movies and videos because they prefer visual stimulation, fascinating stories, and relatable characters. The moving visuals engage and stimulate their developing minds, and the social interactions of the characters often impact the child's behavior and social skill abilities.

Educational movies and live video streams can make difficult subjects easier and much more interesting to understand, and ultimately improve a child's learning. Educational videos can also supplement traditional teaching techniques and methods, and accommodate to varied learning styles and to reach more students with differing abilities. <u>(Checkout</u> <u>these additional educational</u> <u>YouTube channels for kids).</u>





After watching an educational film segments, educators can guide and facilitate more meaningful instructional questions, to support deeper interactive conversations and critical thinking tasks with their students. However, it's import-ant to strike a balance and use videos and movies wisely to ensure they meet the curriculum's aims and ethical standards to boost children's learning potential. <u>(Questions</u> to ask students after watching a video).

## Raptor Resource Project & Live Stream https://www.raptorresource.org

I recently had the opportunity to meet John Howe, the Raptor Resource Project's executive director, and to learn all about this incredible live streamed nature birding project.

This organization is a nonprofit that strives to maintain the health and vitality of bird of prey populations. They create and maintain nesting sites, offer instructional classes and have created a "NestFlix" innovative live stream 24/7 bird cams of video viewing portal of nest site management. This incredible global project has brought K–12 classrooms and their students closer to nature.

Although resources are freely available to K12 classrooms for this fascinating and inspiring cause, **donations are greatly appreciated** to maintain this valiant endeavor and to extend the development of future nature and teaching programs.



- Bird Cams
- History of The Project
  - Project Teachables

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## WISCONSIN IEC SPOTLIGHTS

# Wisconsin Launches Tool To Find Affordable Internet

A new website titled "Internet Discount Finder" has been launched to assist Wisconsin citizens in locating and obtaining affordable Internet service. The Internet Discount Finder website, which was launched last week by the Wisconsin Public access Commission and the Wisconsin Department of Public Instruction in collaboration with Gov. Tony Evers, will assist ease the process of obtaining affordable and free Internet access.

The new tool will instantly connect customers to low-cost home Internet access and discount programs for which they qualify. Users merely enter their address and define their eligibility criteria to gain access to this information. The tool will then display the available plans and explain how to enroll in the Affordable Connectivity Program (ACP).

Although funding for the ACP is limited, stakeholders are advocating for its continuation. The ACP allows qualifying households to get a \$30-\$75 monthly savings.



# STEVENS POINT AREA PUBLIC SCHOOLS DISTRICT

The Stevens Point Area Public School District is taking great strides of investing in their educators with piloting their first AI (Artificial Intelligence) project. This AI tool is created by the educational company of Khan Academy and known as Khanmigo. It is a one-on-one tutoring application — to provide deep understanding, build learning confidence, clarity, and empowerment— for all students. It is also a virtual assistant for teachers to aid in the unique personalized lesson and assessment design to engage and reach more learners of all abilities.

Interested in knowing more about Khanmigo? Visit the website at <u>https://www.khanacademy.org/khan-labs</u> for further information on the app and to access the teaching guide, to unlock its full potential.



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