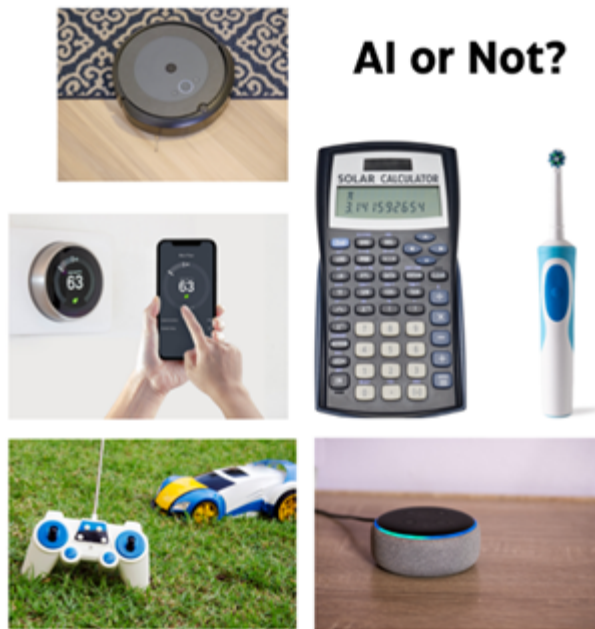In our ever-evolving world, artificial intelligence (AI) is playing an increasingly important role. To equip you and your student(s) for the future, we're excited to announce the launch of the *Lake Braddock AI Series for Caregivers*. Over the next few weeks, the New You Choose will provide you with accessible information about AI, its applications, and its potential activities. We hope through these snippets you will gain some knowledge to navigate this exciting new frontier alongside your child.

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## LB AI Series: Episode 1 - What is Artificial Intelligence?

Artificial intelligence is the term used to describe a special kind of computer program that mimics human behavior and can learn, adapt, and even "think" on its own. There are three main types of AI including machine learning, deep learning, and generative AI. Machine learning includes programs that perform simple tasks like classifying images, conducting spam filtering, and recommending products.

**Try this: Which of the images show items that incorporate artificial intelligence (AI)?**



Answer:
- ***Not AI:*** The calculator, electric toothbrush, and remote-control car are all controlled by the user and they cannot navigate autonomously.

- **AI:** Smart speakers use natural language processing to recognize your voice and interpret your voice commands. They also use machine learning to improve their performance by learning your routines and preferences. Smart vacuums use artificial intelligence to navigate your home more efficiently by mapping your floor plan, plan cleaning paths, avoid obstacles and recognize and react to objects. Smart thermostats, like Nest, learn your preferences by observing how you adjust the temperature over time.

**Interactive ways to explore machine learning:**
- [Train your own machine](#) to recognize images, sounds, or poses.

- [Quick, Draw!](#) See how increasing the data set helps this neural network recognize doodling.

**Conversation starters for your family:**
- Have you ever played a game or used an app that was powered by AI? How could you tell?

- What are some ways you think AI could be used for good in the world? Are there any ways it could be used for bad?

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Alt text for Image #1: A family of bears gathered together in a loving manner looking at a tablet. There is text on the side that says "Lake Braddock AI Series for Caregivers" and a subheading that says "Find out how artificial intelligence works and how you can talk to your students about it"

Alt text for Image #2: The text with these images says "AI or Not?". There is a collage of images that include a robot vacuum, calculator, electric toothbrush, smart thermostat, remote-control racing car, smart speaker.

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# LB AI Caregivers Series: Episode 2 -  Navigating the Filtered World

AI seems to be everywhere -  from your child's favorite game to their recommended videos. Students need to be aware of the positive and negative consequences. Equipping

them to navigate and think critically about the content they are exposed to is essential for differentiating between reality and fantasy.

**Try this: Which face is real?**



***Answer:*** The woman on the left is real.

Social media platforms utilize AI to create personalized algorithms.

*Some benefits of AI in social media:*
- Personalization - showing users content that they like

- Content moderation -  removing harmful content like hate speech or graphic violence

- Accessibility - Features like image recognition and text-to-speech translation aid users with disabilities

*Some risks of AI in social media:*
- Filter bubbles - AI powered image and video filters can distort body image and create unrealistic beauty standards

- Targeted advertising - Ads are given based on personal data, raising privacy concerns and potentially manipulating choices

- Echo chambers - Algorithmic personalization an create insular "bubbles" where users only see content confirming their existing beliefs

Support your student in navigating social media by having conversations about algorithms, personalization, and curated content. It is important for all of us to assess information critically and fact-check information encountered online.

**Interactive Activity:**

- [Which face is real?](#)

**Conversation starters for your family:**

- Do you think it's important to be aware of how AI might be influencing your online experience? Why or why not?
- Have you encountered any misinformation or fake news online? How can you tell if something is true?

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# AI Series: Episode 3 - Hot Topics - Bias, Plagiarism, and Cheating

Many popular AI tools like ChatGPT and Google Gemini generate text and images, which kids might want to use for schoolwork. Using AI tools verbatim without the expressed consent of the teacher and/or without proper citation, may result in serious academic offense. In addition, students who rely on AI to complete their academic assignments may find that it hinders their ability to apply these skills on their own without the use of AI.

## Key Concepts:

*Bias* - Algorithms learn from data, and data can be biased. This can lead to unfairness in areas like grading, personalized learning, or even resource allocation.

*Plagiarism* - Text generators and translation tools are tempting, but remember, originality matters! Discuss with your student the importance of understanding concepts and creating their own work. Help them navigate tools responsibly and cite sources correctly.

*Cheating* - AI assistants might seem like shortcuts, but true learning comes from hard work and critical thinking. Explain the consequences of cheating, not just for grades, but for their learning and development. Open communication and trust are key.

🗣️Conversation starters for your family:

- Would you trust an AI to write your entire essay? Why or why not? What are some potential problems with that?
    - Talking Point #1: Essays are a means to develop your critical thinking and writing skills. AI can't replace the process of forming your own arguments, analyzing evidence, and expressing your ideas clearly.
    - Talking Point #2: AI citation generation is a relatively new technology, and it might not always be able to accurately distinguish between credible and

non-credible sources. It could pull up irrelevant or outdated information, or even fabricate citations entirely.
- Talking Point #3: Sometimes, AI citations are completely fabricated. You will have to do your own due diligence and verify the legitimacy of the sources yourself.

- If you use a translation app for homework, could the translation ever be biased? Why or why not?
  - Talking Point #1: Translation apps learn from massive amounts of existing translations. If this data contains **biases**, like always translating "doctor" to a masculine word, the app will inherit that bias. When translating from a gender-neutral language to a gendered one, the app might have to guess the gender, potentially reinforcing stereotypes (e.g., "policeman" instead of "police officer").
  - Talking Point #2: Translation apps often struggle with cultural references or humor, which can lead to misunderstandings or biased translations.

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# AI Series: Episode 4 - Skills for Careers of the Future

Did you know that according to LinkedIn, AI will create approximately 97 million new jobs? Artificial Intelligence technologies are impacting careers in many ways. Many simple tasks can be done with AI, but that doesn't mean that humans aren't needed.

Preparing for a career in AI requires many of the skills we practice every day. Students should work on problem solving and computational thinking to prepare to build the next generations of AI programs. It's also important to strengthen creativity and digital art skills to help build the user experience. As with all careers, collaboration is essential to success. While offering opportunities to build engineering knowledge is helpful, remember that your family game nights and escape rooms also help give your student skills they will need for a future job in AI.

**Try this!**
- Explore job listings on Indeed that involve AI. You might see listings for an "automation ethicist," "interactive chatbot designer," "generative AI expert," or "machine learning builder."

- Or consider taking a look at Indeed's list of 18 Artificial Intelligence Jobs and Outlook

together.

Conversation starters for your family:
- What do you think are the skills you'll need in the future, regardless of whether or not AI takes over some jobs?
    - *Talking Points*: Collaboration, Creativity, Critical Thinking and Problem Solving

- If you could invent a type of AI to help the world, what problem would it solve?

- Imagine you're a doctor. You now have an AI assistant that helps diagnose patients. How might that change the way you work?
    - *Talking Points*: Faster diagnoses, reduced errors,

- Imagine a world where AI can do almost any task. What do you think people would spend their time doing?