AI in the News

Target Grade: 9-12th STEM or Computer Science

Time Required: 70 minutes

Standards

ISTE Standards for Students

- Innovative Designer: Students use a variety of technologies within a design process to identify and solve problems by creating new, useful, or imaginative solutions.
- Knowledge Constructor: Students critically curate a variety of resources using digital tools to construct knowledge, produce creative artifacts, and make meaningful learning experiences for themselves and others.
- Computational Thinker: Students develop and employ strategies for understanding and solving problems in ways that leverage the power of technological methods to develop and test solutions.

Common Core State Standards (CCSS)

• CCSS.ELA-Literacy.W.6-8.6: Use technology, including the Internet, to produce and publish writing and to interact and collaborate with others.

Lesson Objectives

Students will:

- Create and evaluate a news article using an AI chatbot
- Evaluate sources for credibility and bias
- Discuss the broader implications of AI in journalism

Central Focus

This lesson introduces high school students to the role of Artificial Intelligence (AI) in modern journalism as they explore the benefits and limitations of generative AI. Students will write prompts for an AI chatbot to generate news articles, analyze the accuracy and credibility of the AI-generated content, and reflect on the implications of using AI in writing and journalism. The lesson emphasizes critical thinking, computational strategies, and ethical awareness in evaluating AI-generated content.

Key terms: ethics; machine learning; media; prompt engineering; bias

Materials

- Student devices with internet access and access to an AI chatbot such as Copilot
- Al in the News slideshow
- Al in the News project record sheet
- Scoring Rubric

Instruction

Introduction (10 minutes)

- Instruct students to write answers to the bell ringer questions:
 - Where do you learn about current events? Have you read an article in class or online about a current event?
 - Have you ever read or listened to a news article or video and wondered if it was written by a human or AI? If so, how can you tell the difference?
 - o What are some advantages and disadvantages of using AI to write news articles?
 - Do you think AI can be unbiased when reporting news?
 - o Do you think AI is always accurate when reporting news?
- Building on the bell-ringer questions, begin with a discussion on current events and how students get their news.
- Ask students to share their thoughts on how AI may change the way news is created.

Instruction (20 minutes)

- Use the AI in the News <u>slides</u> to provide students with the background information they need on how AI can be used to generate a news story.
 - Al is changing journalism by allowing people to use complex algorithms and large language models to generate text that sounds like it is written by a human author. Al has been used in areas like sports reporting, financial news, weather updates, and breaking news drafts. There are benefits to using Al including rapid article generation, consistent style, and allowing 24/7 coverage, but there are also limitations to Al usage like encouraging a lack of creativity, potential to exclude cultural context, and the challenge of keeping training data up-to-date.
 - o In November 2023, there was a controversy about AI writing when Sports Illustrated published articles attributed to fake authors with AI-generated headshots, later revealed to be content from a third-party company. The incident led to content removal and the firing of the publisher's CEO, raising ethical questions about AI use in journalism, transparency, and the practice of generating fake author profiles.

Guided Practice (10 minutes)

- Open an AI chatbot such as Microsoft Copilot on a screen visible to all students.
- Show them how to use it to generate a news article.

- Start with a prompt such as any of the ones below:
 - Write a short factual news article about...
 - the discovery of a new species and its habitat.
 - how gene editing could help cure genetic disorders.
 - the role of biodiversity in maintaining ecosystem health.
 - the discovery of a new element on the periodic table.
 - how quantum computing could change the future of technology.
 - the causes and effects of earthquakes.
 - how scientists study volcanic eruptions to predict future activity.
 - the role of robotics in disaster response.
 - how 3D printing is revolutionizing manufacturing in science and medicine.
 - Alternatively, students could pick a current news story they are interested in and the teacher can ask the AI to generate a factual news article about it. This allows students to determine how reliable AI generated content is on up-to-date information.
- Allow students to read the news article generated by Al.
- Ask students to provide feedback on the Al-generated article.
 - Is it interesting?
 - o Is it accurate?
 - o Is it thorough?
 - o Is it grammatically correct?
- Demonstrate asking the chatbot to provide its sources. Use a prompt such as "Cite your sources for this article."
- Ask students to evaluate the sources.
 - o Are the sources credible?
 - o Is there any bias in the sources?
 - O What information is missing or needs further verification?

Independent Practice (20 minutes)

- Assign students to use the AI chatbot to create a news article on a topic of their choice.
 Provide options for topics as needed to support students. The examples given for the guided practice above could be used by students independently.
- Students must provide at least two cited sources.
- Students will complete the record sheet to be graded.
- Students will submit the article along with the record sheet to be graded using the rubric.

Closing (10 minutes)

- Students will complete the written closing reflection questions.
 - o Did using AI change the way you think about writing and journalism?
 - o If so, how?
 - O Would you use AI to assist you in writing again?
 - O Why or why not?

• After providing time for each student to individually reflect, ask some students to share their insights and facilitate a short class discussion.

Differentiation

For Engagement

Provide a range of prompts on different areas of interest. Allow students to choose topics they
are passionate about.

For Support

- Provide step-by-step handout guides for using the AI chatbot, including screenshots.
- Offer sentence starters or templates for students who need help writing prompts.

For Enrichment

- Early finishers can research real-world examples of Al-generated news.
- Early finishers can also copy their Al-generated article into a plagiarism checker and evaluate the results.
- Advanced learners can compare Al-generated article with human-written ones and analyze differences.

Assessment

Formative assessment:

Bell Ringer Responses: Students' answers to the bell-ringer questions will provide insight into their prior knowledge and perspectives on AI-generated news articles. Teachers can use student responses to guide the initial class discussion.

Class Discussion Participation: Monitor students' contributions during the discussion about current events and Al's role in journalism. Assess their ability to articulate thoughts, ask questions, and engage with peers.

Feedback on AI-Generated News Article: Evaluate students' ability to analyze the AI-generated article during guided practice. Look for thoughtful responses regarding accuracy, grammatical correctness, thoroughness, and interesting content.

Evaluation of AI Sources: Observe how students assess the credibility and bias of sources provided by the AI chatbot. Provide support if students struggle with identifying reliable sources or understanding bias.

Teacher Observation During Independent Practice: Monitor students as they use the AI chatbot to create their own news articles. Provide guidance to students who may need help with generating prompts or analyzing sources.

Summative assessment:

Al-Generated News Article: Students will submit their independently created news articles to be graded.

Closing Reflection Responses: Students will complete written reflections addressing the questions about accuracy, reliability, challenges, and their perspectives on using AI for writing. Assess the depth of their responses and their ability to critically reflect on their learning experience.

Background Information

Teacher background information:

Teachers should know that Artificial Intelligence (AI) is transforming industries, including journalism, by enabling machines to generate, analyse, and process human language. To understand how AI creates news articles, teachers should be familiar with key technologies like Large Language Models (LLMs) and neural networks, as well as the benefits and limitations of AI in modern journalism.

Student background information:

Students should be comfortable using computers or tablets, including basic navigation, typing, and using web browsers. This includes understanding how to safely and effectively search for information online, as these skills are essential for interacting with the Copilot platform and conducting any necessary research during the project.

Students should understand how to fact-check information and evaluate the reliability of sources.

A basic understanding of what AI is and some common applications in daily life (such as voice assistants, recommendation systems, etc.) will be beneficial. Students do not need in-depth technical knowledge but should grasp that AI involves machines or programs performing tasks that typically require human intelligence. It would be beneficial, but not necessary, for students to have background in prompt writing from previous lessons on AI.

An understanding of digital citizenship, including the ethical use of technology and internet safety, is crucial. Students should be aware of the importance of respecting copyright, privacy, and the responsible use of AI tools like Copilot. Students should not enter personal information into an AI chatbot.

Copilot is an AI language model developed by Microsoft that can generate text based on prompts it receives. It can be used for various purposes, including creating stories, essays, poems, and more. Understanding how to effectively use and edit AI-generated content is a valuable skill in the digital age. Teachers and students will not need an account to be able to use Copilot, but having an account will allow them to save their past conversations. If Copilot is not accessible at your school, alternative AI language models such as MagicSchool AI, Gemini, ChatGPT, or Azure can also be used.

Name:	Date:	Score:	

Rubric for AI in the News AI-Generated Article

Criteria	Beginning (1)	Developing (2)	Proficient (3)	Exemplary (4)
Prompt	The prompt is unclear,	The prompt is somewhat	The prompt is clear and	The prompt is exceptionally
Writing	vague, or irrelevant to the	clear but lacks focus or	focused, producing a relevant	clear, specific, and well-
	topic. It does not guide	specificity, resulting in an	article with minor areas for	designed to generate a highly
	the AI effectively.	incomplete or off-topic article.	improvement.	relevant and thorough article.
Analysis of	Student provides little to	Student provides a basic	Student provides a thoughtful	Student provides a thorough
Article	no analysis of the article's	analysis, identifying some	analysis, addressing key	and insightful analysis of the
Content	accuracy, thoroughness,	strengths or weaknesses	aspects like accuracy,	article, critically evaluating its
	or relevance.	but lacking depth or	thoroughness, and relevance,	accuracy, thoroughness, and
		specificity.	with minor gaps in detail.	relevance to the topic.
Evaluation	Student does not evaluate	Student provides a basic	Student evaluates sources	Student provides a thorough
of Sources	the sources or fails to	evaluation of sources,	thoughtfully, identifying	and insightful evaluation of
	identify credibility or bias.	identifying credibility or	credibility, bias, and relevance,	sources, critically analyzing
		bias but lacking depth or	with minor gaps in detail.	their credibility, bias, and
		specificity.		relevance to the topic.
Reflection	Student provides little to	Student provides a basic	Student provides a thoughtful	Student provides a thorough
on Al Use	no reflection on the	reflection, identifying	reflection, addressing	and insightful reflection,
	challenges or benefits of	some challenges or	challenges, benefits, and their	critically analyzing the
	using AI to generate	benefits but lacking depth	perspective on Al's role in	challenges, benefits, and
	content.	or critical thought.	journalism.	implications of using AI in
				journalism.