

Option C: Media Literacy & Algorithmic Influence Case Analysis

GIANT SQUID FOUND IN ARIZONA DESERT

- ▶ Massive 46-Foot Squid Found Near Phoenix
- ▶ Desert Discovery Baffles Scientists
- ▶ How Did Ocean Creature End Up in Arizona?

BREAKING NEWS

5:23
LIVE

OCEAN MONSTER MYSTERY! IS IT A HOAX?

101° ARIZONA

This activity talks about an AI-generated photo that spread widely and quickly on social media. These photos can be confusing and look very real because of their strong emotional impact and high-quality photos, which make them convincing to the social media audience. In order to check the credibility of the photos, the SIFT model can be used. First, students stop and think if the photo is too dramatic or exaggerated. The image claims to be in Arizona, however, squid can only live in the ocean, making it scientifically unrealistic with an exaggerated side of 46-foot. When students identify unrealistic information through this thinking process then they may conclude that the image is AI generated. Students should then investigate the source to see if the news is based on a reliable source or reported by trusted organizations. In this photo there was no visible news channel or source which makes it untrusted news. And finally, when they

trace the image, they see details as well for example the squid appears unusually clean for a sea creature which makes the image suspicious. Students need to confirm that such photos are AI generated and not real news. It is important here to take responsibility and avoid sharing fake news. Social media algorithms play an important role in spreading such news. Photos that are emotional get more likes and shares, so they appear to more people, even if they are not true. For students this is considered as a major challenge, as it is difficult to distinguish between real and fake content. This can lead to misunderstanding and confusion and affect their beliefs and perception of the world. Addressing this issue requires developing digital literacy and critical analysis skills (Wing, 2006; AI in Education Part 2, 2025). A classroom strategy could include guiding students to use the SIFT model by analyzing similar images, and giving students the chance to reflect on how algorithms would influence what they see on social media.

Option D: Algorithmic Bias Mini Audit (AI Literacy + Ethics)

The activity is based on conducting a small audit on ChatGPT. The audit was conducted using three prompts to test the possibility of biased information, accuracy issues, and ethical concerns. The teacher prepares a set of prompts for three questions and analyzes ChatGPT's responses to ensure that the goal of the activity is achieved. Students will be asked to write a few simple prompts to observe the responses to three questions. The first question is "**Describe what an instructional designer?**", The definition was fair but the examples given were mostly Western where there was little diversity. This may give students the impression that the tool includes stereotypes. The second question was "**Describe a typical doctor?**" Most examples were about males; females' examples were not included which showed a gender bias. AI systems may reflect bias and require critical evaluation (AI in Education Part 2, 2025; Wing, 2006). The third example was "**Explain the concept of illusion?**" the explanation was clear, but

it missed many important details. Teachers should ask critical questions like “**Identify one problem in the answer (bias, missing detail, or stereotype), then rewrite that part in a better way.**” These kinds of activities move students from passive to active learners who are able to correct answers. It also helps students to understand that AI responses are not always perfect.

This observation showed the AI tools can reflect a pattern, including bias, stereotypes, and oversimplifications of concepts. These kinds of patterns affect reliability, fairness and presentation where students can trust AI tools without questioning them. Teachers have an important role in making sure that AI tools are used carefully and not treated as trusted tools they should only work as support tools. Teachers have to guide the students and encourage them to ask questions and use AI in a more responsible and meaningful way. These findings have significant implications for teachers to guide students to critically evaluate AI and not rely on it as a fully trusted tool.

Option E: Critical Incident Reflection on Technology Use in Classrooms:

GRADE 5 SCIENCE ACTIVITY



**WHICH ANSWER WAS
COPIED FROM AI?**



Task: Explain the water cycle in your own words.



A ANSWER A

The water cycle is a continuous natural process that describes **how water** moves through the Earth's system. It consists of several stages including evaporation, condensation, and collection. For example, water from the ocean evaporates, forms clouds, and later falls as rain.

B POINT OF VIEW ANSWER

I think the water cycle is important because it gives us rain that we need for plants and drinking water.

When the sun heats up water, it turns into vapor.

Then this vapor makes clouds, and the clouds give us rain.

✓ USING AI TO HELP IS OK!

AI (like ChatGPT) can assist with ideas and information. Answer B used AI but also included personal thoughts. This is the right way to use it!

**Does one answer sound copied?
Which answer shows original thinking and personal voice?**

An effective intervention includes setting clear rules in order to use AI, create tasks and activities that require critical thinking, and help students to evaluate ChatGPT response. This activity is about the misuse of ChatGPT, so when the teacher notice that students were just copying the answers generated by ChatGPT without demonstrating any understanding. Teachers can show students in class the difference between AI answers and their own answers. Teachers would explain that the purpose of this comparison is to think independently but if they only use AI they shift the goal to just finishing the task and explaining the consequences on their thinking process.

This attitude towards AI creates a challenge in using it in the classroom and raises concerns about students' thinking which may reduce critical thinking and create an illusion of understanding (AI in Education Part 2, 2025; Wing, 2006). This may also reduce their motivation to think critically. AI tools, especially generative tools, can work as helpful assistants but they can also lead to over-reliance on them. From a digital literacy perspective, this reflects a weak and limited use of technology. AI can create a false feeling of understanding the lesson by only getting the right answers, this shows the importance of guidance from teachers not only about how to use AI tools but also about how to evaluate and question them. To address this issue, a balanced approach is important. Students can benefit from the AI potential in improving learning without replacing the human thinking skills and creativity. Teachers need to teach students about the ethical use of AI tools and create assignments that require higher-order thinking and tasks that engage active thinking by, for example, checking AI answers and analyze and improve them by giving reasons so learning stays reflective. Teachers can model and guide the use of AI tools by, for example, learning how to ask deeper questions and analyze if there is any incomplete information. Because of this, educational institutions should include digital

citizenship in the curriculum taking into consideration that students are using it responsibly without affecting the essential skills such as critical thinking, problem solving and creativity. Overall, this experience shows that AI is not the problem itself it depends on how it is used. The teacher has a central role in guiding students towards meaningful learning.

Option F: Designing a No-Tech Digital Citizenship Learning Experience

THE HEART ENEMY IS ICE WATER

Do you know that heart problems can be caused by cold water?

After reading this, you might be shocked.

Drinking a glass of cold or iced water after eating may feel comfortable, but it can **freeze** the food that was just eaten. This can slow down digestion.

When the food becomes hard (like freezing), it reacts with stomach acids and breaks down slowly. Then it passes into the intestines more slowly.

If this continues every day, it can cause **serious health** problems such as fat buildup and even cancer.

Cold water is not good for you!!!

Cold water can close veins and may lead to **heart attacks**.

It can also create problems in the liver because it keeps fat trapped.

Many people are now victims of drinking cold water after meals.

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Many people are now victims of drinking cold water after meals.

This activity was designed to help students in grade 6 understand the misinformation and develop critical thinking skills. It is based on an unplugged approach where students engage in learning without the use of technology. Students are given a printed story for a viral post; this story includes false and misleading information. The teacher can divide students into small groups and ask students to identify the main idea of the post, emotional language used, the sources with the supporting information and details. The teacher will ask students to break the text into parts to focus on each part of the story and analyze it separately. Dividing the text into small parts helps simplify complex information and support higher-level thinking (Wing, 2006; Lesson Plan: Break It Down, n.d.). Students will evaluate each part before making a final judgment about the whole story. This activity is effective because it allows students to focus on the critical thinking process without the distraction of technology. Students will discuss in groups and analyze the content and hear different opinions from classmates which helps them improve their reasoning skills. At the end of the activity the teacher can share this link https://verafiles.org/articles/vera-files-fact-check-five-myths-about-drinking-cold-and-war?utm_source=chatgpt.comteacher to validate students' conclusions and model how to verify them. On the other hand, students may face different challenges by assuming that the information is real or they may focus on titles without thinking deeply. One of the biggest challenges for students is to differentiate between facts and opinions especially when the text uses emotional language that may affect students' perspectives. To assess understanding students in groups can explain how they evaluated information, how they decided that the information is reliable or not. Students can reflect on how breaking the text into parts helped them understand the text better and think deeper. The teacher can ask guiding questions to help students see the news from different perspectives and think critically about sources and content. For example, what makes the news trustworthy? Did you notice any emotional or

exaggerated language? This activity shows that digital citizenship can be taught without technology because it is based on human thinking abilities rather than technical skills. By focusing on analysis students develop the ability to judge critically and build correct concepts, and think critically about information in their daily lives.

References:

Wing, J. M. (2006). Computational thinking. *Communications of the ACM*, 49(3), 33–35.

AI in Education Part 2. (2025). Lecture slides.

Lesson Plan: Break It Down. (n.d.).