4-H STEM LAB

The Messy Meter

CLEAN · MODERATE · MESSY · MEGA MESS

Recommended Grades:
Grades 4-8

Estimated Time:
1 Hour

Subject:
Information Literacy

WHAT YOU'LL NEED

PANTRY STAPLES:

- An internet-connected smartphone, tablet or computer

Fact or Fiction

In this exercise, parents will teach children how to use the internet (via computer, phone or tablet) to research a subject of interest online, and gauge whether the information they find is trustworthy or not.

The suggested topic for this exercise is 'climate change', as there is a lot of information available, including information that may not be presented by credible sources.

This activity assumes a basic level of computer/technology literacy, specifically how to use an internet-connected device, and basic ability to navigate the internet.

This activity is based on materials from the 4-H Tech Changemakers' guidebook. Visit 4-H.org/TechChangemakers to access more free materials that teach youth and adults digital skills.

STEPS

1. Using a mobile device or computer, open a web browser and navigate to your preferred search engine.

2. Search 'What is climate change?'

3. Choose one of the results on the first page of results, and read it (or watch it, if it is a video).

4. Ask yourself the questions in the following steps:

   Purpose: What is the purpose of the site where you read that story? Is it to provide information, sell something or entertain? Does it promote a specific view or belief?

   Source: Who created this content? Who created this website? Does it have a corporate sponsor? A political affiliation? Is it based on scientific research?

   Creator: Does the story have an author? If so, what are their credentials? Is the writing coherent? Does it have grammatical or spelling errors?

   Recency and Relevance: Is the information current? Does it have a published or updated date?

5. Now read two or three other stories and ask yourself the same questions. Compare all the sites you visited. Is the content you read consistent? Having consistent information can help ensure the content is accurate, however you have to be cautious because sometimes incorrect information can be shared on multiple websites.

Bonus Activity:

If you identify a piece of content that contradicts the information in the majority of content on the same topic, dig into this piece. Explore its sources, if they are provided, and research their affiliations and credibility using the steps above.

Questions To Engage Youth:

1. When you compare one piece of content to another, how do they differ?

2. If one piece differs greatly from others, what do you think someone's motivation is in contradicting what appears to be commonly accepted information? Do you think this person is knowingly spreading misinformation, or that they believe they are telling the truth and attempting to provide information that people should know?

3. How do your own preconceptions, beliefs or biases affect the way you analyze new information?

Explanation

About the activity: Years ago, finding information was a laborious process. With the invention of the internet and devices that can easily access this information, finding answers to questions can now take seconds. Over one billion websites exist, so knowing how to search for information effectively is the first step in this process. After accessing a website, it is important to determine the credibility of the content. Anyone can publish on the internet, so not all sites are equally trustworthy. People of all ages have fallen victim to believing false information found on the internet. The risk of believing false internet content can have serious implications.
(Source: 4-H Tech Changemakers Guide)

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