

Thinking Critically About Technology

In This Module

- What are some major issues surrounding the development and use of different technologies?
- How can we think more critically about the technology we consume and use?

Digital Literacy

Digital literacy is a set of skills and involves the ability to find, critically evaluate, and use different kinds of digital tools and technologies

Digital literacy involves thinking critically about the technologies we use each day

Activity

What are some current issues that you see with the digital tools and technologies that we use every day?

What concerns do you have?

Humans and Technology

- Don't just take technology for granted
- It can be easy for technology to feel neutral or independent
- ... but it is created by humans and reflects our biases, strengths, and weaknesses
- Recognizing that humans create and shape technology is key to thinking critically about technology

Issues in Technology

- Representation issues in the tech sector are a major and ongoing issue
- Most technologies that we use, from smart home devices to apps, are developed by men (and, in most cases, white men)
- The absence of women and people of color in tech environments means that technologies can end up being made for certain groups while excluding others

Activity

What are some potential issues that be caused by the lack of diverse representation in tech?

Issues in Technology

- The lack of diverse representation in many parts of the tech sector can lead to biases
- The people developing the technology tools and resources that we use might develop things to work better for certain groups or that contain biases or stereotypes

Examples of Biases in Technology

- Google image search reflecting stereotypes
- Facial recognition software [is not working as well](#) for people with darker skin tones

Examples of Biases in Technology

- Bots are [actually learning](#) to be racist or sexist
- Applicant screening systems by employers that use AI can end up excluding applicants due to built-in biases

What other examples can you think of?

Activity

Run searches on Google Images for different terms. What, if any, stereotypes emerge?

Suggested searches to get started:

- Scientist
- CEO
- Caregiver

Issues in Technology

- Aside from who is creating tech, we also need to be aware of what it's created for and how it's created
- Advertising is central to the internet, which raises a lot of issues around privacy
- If you aren't paying with cash for a service, you may very well be paying with your personal data and information for a service

Issues in Technology

- Convenience versus security and privacy is an issue as well
- There is ongoing tension between wanting privacy and wanting convenience (as we see with location-based services especially)

Pros and Cons of Technology

- Technology can help us foster connection, creativity, communication
- It can make our lives and work easier and faster
- But it has significant issues — social, political, cultural, physical and mental — that we are just now starting to explore and understand in many ways

Questions to Ask

- Who created this tool or technology?
- Who runs or invests in this site or tool?
- What is their reputation?

Questions to Ask

- What is the purpose of this tool or site?
- How does this site work?

Questions to Ask

- How much data do I need to supply here?
- What are the security practices of this site?

Questions to Ask

- What am I hoping to get out of using this tool or technology?
- Why do I want to use this?
- Do I feel comfortable using this tool?

Activity

Reflect on the technology devices, sites, and tools that you use regularly, then select one tool and work through some of the questions listed on the previous slides.

What do you know about this tool?
How can you learn more?

Takeaways

- It is increasingly vital to think critically about the different tools and technologies we use in our daily lives
- Technology affects how we do our work, communicate, find and consume information, engage with the world around us, and engage with each other

Takeaways

- The technologies we use and rely on have many issues, from inherent biases to security issues
- Asking questions and thinking critically about technology is an increasingly important part of being a user and consumer of technology

Resources

Organizations where you can keep up with technology issues:

- ALA's Privacy Advocacy Site ([link](#))
- Mozilla Foundation ([link](#))
- Electronic Frontier Foundation ([link](#))

Evaluation resources to help you learn more about the tools you are using:

- Common Sense's Privacy Ratings ([link](#))
- San Jose Public Library's Virtual Privacy Lab ([link](#))

Questions?

NYC Digital Safety

Privacy & Security