

VOLUME 11 | ISSUE 18

GLOBALVOICES

HOW INTERNET ALGORITHMS ARE DIVIDING US

SECONDARY RESOURCES

Algorithms track Internet searches and browsing to provide targeted information and advertising. Photo source: Bloomberg, Getty Images.

BACKGROUND INFORMATION

- 93 percent of Canadians have access to the Internet; 75 percent of Canadians get at least some of their news online (including from social media) and 48 percent get their news from social media specifically (Reuters Institute Digital News Report)
- Most major social media, search engines, newspapers and information providers online rely on internet personalization (Washington Post)
- Personalization serves you, the consumer, to provide content best suited to your assumed interests but it also serves the corporate interests of the provider (and often advertisers) (Social Media Collective)
- There is a growing indication that algorithms contain their own biases, for example in the ads for police background checks shown accompanying searches with stereotypically sounding African American names (Cornell University) and for built-in gendered assumptions about professions for men and women (Vice)
- In 2014 Facebook's data team used a selective algorithm to manipulate users' feelings without their knowledge, selecting either a disproportionate amount of positive or negative content to display to see how it would impact their own posts (The Atlantic)
- While these personalization algorithms affect everyone who uses the Internet, less than 40% of Facebook users realize they're not seeing a totally accurate representation of everything their friends post (University of Illinois)

NOTE TO EDUCATORS

The following activities are designed to stimulate a current events discussion. Generative in nature, these questions can be a launching point for additional assignments or research projects.

Teachers are encouraged to adapt these activities to meet the contextual needs of their classroom.

In some cases, reading the article with students may be appropriate, coupled with reviewing the information sheet to further explore the concepts and contexts being discussed. From here, teachers can select from the questions provided below. The activity is structured to introduce students to the issues, then allow them to explore and apply their learnings. Students are encouraged to further reflect on the issues.

Core Skill Sets:

These icons identify the most relevant core skills students will develop using this resource. Learn more about the WE Learning Framework at www.WE.org/we-at-school/we-schools/learning-framework/.

KEY TERMS

Algorithm—A set of instructions that help computer programs perform their functions. Internet algorithms create the filter bubble responsible for selecting websites and content suited to searches.

Filter bubble—A personal online universe of information that is unique to each user and is a result of an individual's searches and website visits. The types of information that is promoted, or hidden, based on internet algorithms tries to predict interests and taste.

Echo chamber—The effect of the filter bubble, when opposing views are eliminated and everything we see online reinforces our beliefs.

Fake news—A recent catch-all phrase describing a wide array of incorrect news, including hoaxes and propaganda, which often spreads virally with social media. Fake news is dangerous as it not only conveys incorrect information but makes it more difficult to trust the media in general.

THEMES AND COURSE CONNECTIONS

- **Themes:** Information literacy, values and ethics, global issues, local issues
- **Course Connections:** English, Computer Studies

MATERIALS

- Front board
- Paper and writing utensils
- Computer/tablet with Internet access

SPECIFIC EXPECTATIONS AND LEARNING GOALS

Students will:

- Understand the importance of multiple perspectives
- Examine the effectiveness of Internet based target marketing
- Consider ways to search and browse the Internet more wisely

DISCUSS

1. What is marketing? What are the benefits of marketing? What are the problems with target marketing?
2. How do you access news? Do you trust the news you read, hear and see? Explain your answer. Do you feel like there is information or stories you are not getting? Explain.
3. Do you feel like an informed citizen? Why or why not? How do you know?
4. Before the Internet, how did people stay informed? Would you say they were better or less informed than the average citizen today? Consider both sides of the argument.
5. What is bias? How does bias affect how we consume information? How is bias connected to how the Internet algorithms discussed in the *Global Voices* article offer information?
6. What are the benefits of receiving information and advertising that is targeted based on Internet algorithms?
7. What happens when you only read, hear or see what you want to? What happens when you are exposed to different perspectives? Who's responsibility is it to ensure you have different perspectives?
8. What is an echo chamber? How can it be dangerous? How do you know if you are in an echo chamber? How can you get out of an echo chamber?
9. What might be the connection between current political polarization and the Internet algorithms discussed in the *Global Voices* article? Is this something we should be concerned about? Will it get better in the future or worse? Explain your response.
10. How can you be exposed to more perspectives online and through other mediums of information?

DIVE DEEPER

Have students examine some of the information they may be sharing through Internet searches and website visits. Begin by telling students that, as described in the *Global Voices* article "How Internet algorithms are dividing us," information can be tracked when a person uses the same devices to search and surf the Internet. Tracking is increased through integrated services used by major browsers. For example, if you have a Google, Yahoo or Bing account, you can sign in on multiple devices—laptop, tablet, smart phone—and your preferences are synced. Tracking is used to provide the user with advertising and information personalized to their interests.

Ask students to record on a piece of paper the last 10 to 20 websites and web searches they conducted on any device. These lists will be shared with classmates. Instruct students not to include their names on the pages and to omit any information that may contain their names. Information may be recalled through memory or by checking web history. Remind students, as necessary, to only include class appropriate information. Students may write a description of what they were visiting or searching, for example, listing a bookstore or library website and the genre of book that they were searching for.

Collect the completed lists and redistribute them randomly amongst the class. Have students examine the lists and write a brief description of who might fit the searches. Instruct students to keep descriptions to interests. They will already know demographic details since the list belongs to a classmate. Based on the description, have them select three products, goods or services to sell to them if they were advertising to them.

As a class, discuss some of the similarities and differences that are present in the lists. What are some trends that match the student demographic?

Optional: Try to see if students can match the search list with the original writer.

Debrief the activity with students. Ask students:

- How do you feel about your Internet browsing and searches being used to describe you.
- Was the description accurate?
- Was it the whole story?
- If your search and browser history doesn't depict who you are completely what might you be missing out on?

In partners, have students come up with five ways that they can search and browse the Internet more wisely. For example, signing out of integrated platforms, using Google Incognito or Bing private search, increasing privacy settings on social media.