Teacher’s Guide

Algorithms & You

Time Needed: 1 class period

Materials:
- Student handouts

Handouts:
- Reading (1 page; class set)
- Activity (1 page; class set)

Objectives: Students will be able to...
- Explain the basic function of an algorithm
- Identify factors that influence how social media algorithms work
- Describe intentional and unintentional effects of social media algorithms on social media users

Fillable PDF handouts are available as an alternative to paper. Find them on the web page for this lesson.

Step by Step

☐ Anticipate by leading students to think about different ways social media platforms succeed in encouraging users to use, spend time on, and return to their sites. Ask students to estimate the average amount of time people spend on social media. Then ask students to share why they think social media platforms succeed at getting people to stay and return to their site.

☐ Tell students that today they will be introduced to a tool that social media companies use to keep users engaged.

☐ Distribute the student reading to the class.

☐ Read with the class, pausing to discuss. Alternatively, have students read in groups or independently. Ask students to consider what other products besides social media platforms use algorithms to deliver content. Answers may include music or video streaming services, online stores, web browsers, etc.

☐ Distribute the activity page to the class.

☐ Review the instructions with the class and allow students time to complete each activity.

☐ Discuss students’ answers for a deeper analysis of the material as time allows.

☐ Close by asking students if knowing that social media companies use algorithms is valuable knowledge? Why or why not? Ask students to share how, or if, knowing this information impacts them.
If you’re not thinking about the digital content you’re consuming each day, don’t worry. Someone—and, really, something—else is. Every post you like, every ad you click, and every page you visit is being noted. It’s all part of an algorithm to bring you more of the type of content that interests you most.

**Algorithm: What’s That?**

In a nutshell, an algorithm is a set of rules or steps used to solve a problem or accomplish a specific goal. We use algorithms for lots of things. Anytime you’re traveling or lost, the GPS in your phone or car uses an algorithm to guide you to your destination quickly and safely. That algorithm takes a bunch of information (like traffic patterns, accidents, and road blocks), makes sense out of it by following a programmed set of steps and rules, and produces an outcome or goal (in this case, accurate directions).

**Social Media, Algorithms, and Me... Oh My!**

The rules social media algorithms follow usually involve learning your preferences and taking into account what other people think is relevant in the moment. Imagine allowing your best friend to pick out your first day of school outfit at the mall. The mall offers endless clothing options. But your best friend knows you, your style, your comfort level, your favorite colors, and what the dress code rules are at your school. Your best friend also has a good idea of what the weather will be and what other classmates will think is trendy or cute or cool. He or she uses all those factors to sift through the many outfits the mall offers and makes a prediction about the outfit you’d probably like to wear.

Social media algorithms do something quite similar, except they aren’t picking out your clothes. (But they might make suggestions.) They use your history—what you’ve liked in the past, who you follow, topics you’ve searched, stories you’ve shared—combine it with a preprogrammed set of rules and factors, and sift through all the billions of pieces of recently shared information to predict which content is most likely to grab your attention. The outcome looks like tweets you’ll end up liking or retweeting, news stories you’re interested in reading, videos you’ll find entertaining, and products you’ll consider buying. (Cue those clothing suggestions!) How the algorithm is programmed determines how this “personalized” content is arranged in your feed.

**Did We Burst Your Bubble?**

An algorithm isn’t perfect. At the end of the day, it can only make a guess about what you’d prefer to see. But you should be aware that algorithms are working and that their main goal is to make sure you stay entertained, or at least satisfied. Social media platforms want to keep your attention. (They are businesses, after all.) The longer you stay, the better the chances you’ll see and click on one of the advertisements other businesses pay social media platforms to host on their site. And there’s another thing to consider. Social media algorithms are designed to learn exactly what type of information you like seeing and bring you even more of it. Basically, they enclose you in a bubble of the type of content that appeals to you. Guess what’s not inside that bubble? Things you find boring, ideas you don’t agree with, and interests you don’t have. While it may sound like algorithms save you time and effort having to sort through all that “junk” yourself (and BTW, they do), it also means that there are millions of other stories, pieces of information, ideas, events, and causes that you’re not exposed to. Now think: How might that also affect you?
**A. Algorithmic Big Ideas.** Social media algorithms change frequently, but most are influenced in some way by three big ideas. What social media factors do you think influence each big idea? (In other words, what information might an algorithm prioritize?) Write each factor from the list in the big idea column or columns that it is most likely to influence.

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<tr>
<th>Followers</th>
<th>Likes</th>
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<th>Time content is posted</th>
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**Big Idea 1: Engagement**
Content is distributed and discussed by users.

**Big Idea 2: Relevance**
Content is timely and matches users’ preferences and history.

**Big Idea 3: Timeliness**
Content is recently posted.

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**B. Click Bait.** Businesses study social media algorithms to help better promote their products. Based on the factors you explored in the last activity, why would this post have a high chance of appearing in your feed?

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**C. Application.** Think about the different people and groups below and their social media goals. How might understanding how a social media platform’s algorithm works benefit them? Choose one person or group and explain below.

- A start-up vintage clothing company trying to increase sales?
- A person just starting out on social media looking to stay up-to-date on current events.
- A teen singer who wants his latest music video to go viral?
- Someone hoping to profit from spreading fake news?

Person or Group: ________________________

Benefit: ____________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
A. Algorithmic Big Ideas. Social media algorithms change frequently, but most are influenced in some way by three big ideas. What social media factors do you think influence each big idea? (In other words, what information might an algorithm prioritize?) Write each factor from the list in the big idea column or columns that it is most likely to influence.

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B. Click Bait. Businesses study social media algorithms to help better promote their products. Based on the factors you explored in the last activity, why would this post have a high chance of appearing in your feed?

The post asks a question, which means users will be more likely to comment or react. A video will likely attract clicks and views. Because other users have spent time engaging with the content, it’s more likely to appear in your feed.

C. Application. Think about the different people and groups below and their social media goals. How might understanding how a social media platform’s algorithm works benefit them? Choose one person or group and explain below.

Answers will vary. Possible responses include:

- A start-up vintage clothing company trying to increase sales? The company will be able to craft more visible posts and drive traffic to their site.
- A person just starting out on social media looking to stay up-to-date on current events. The person will understand that the content they see is selectively generated and that there may be content to which they’re not being exposed.
- A teen singer who wants his latest music video to go viral? The singer will be able to craft engaging and timely posts in order to get the views and shares his video needs to go viral.
- Someone hoping to profit from spreading fake news? The person will understand how to craft content that users are likely to engage with and then share.