

# Algorithms and Bias: How Software Shapes Our Worldview

COMPREHENSION • VOCABULARY • DISCUSSION

## INTERACTIVE ONLINE TEST

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<https://www.esl-tests.com/reading/b2/algorithms-bias-software-shapes-worldview>



## Reading Passage

Read the passage carefully. Each paragraph is labelled with a letter for easy reference.

- A** In today's digital age, algorithms play a critical role in shaping our perceptions and choices. From social media feeds to online shopping recommendations, these algorithms analyze vast amounts of data to predict what we might like or need. However, there is growing concern that these algorithms can perpetuate biases. For instance, if an algorithm is trained on data that reflects historical inequalities, it can reinforce stereotypes, leading to skewed representations of certain groups. This is particularly evident in areas like hiring practices, where biased algorithms may disadvantage qualified candidates based on race or gender. As technology continues to evolve, understanding the implications of these biases becomes essential for creating a more equitable digital landscape.
- B** Moreover, the impact of biased algorithms extends beyond individual choices. When millions of users interact with biased systems, the effects can ripple throughout society. For example, when search engines prioritize certain types of content, this can shape public opinion and influence political discourse. In 2020, a study revealed that algorithmic bias affected the visibility of news articles, often downplaying critical issues affecting marginalized communities. As consumers, it is vital to remain aware of how these algorithms function and advocate for transparency in their design. By doing so, we can push for changes that ensure fairness and inclusivity in the technologies that increasingly govern our lives.
- C** Additionally, it is important to recognize that the algorithms we encounter daily are not neutral; they are designed with specific objectives that can either benefit or harm different groups. This understanding is crucial as we navigate a world where technology is deeply integrated into our daily routines. By fostering a critical perspective on these systems, we can better advocate for responsible practices in algorithm development, ensuring that technology serves to uplift rather than marginalize.

## Vocabulary Glossary

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Key words and phrases from the passage. Study them before attempting the exercise below.

WORD / PHRASE	DEFINITION	EXAMPLE SENTENCE
<b>perceptions</b>	the way you think about or understand something	<i>Our perceptions of a place can change after visiting it.</i>
<b>inequalities</b>	situations where some people have more or less than others	<i>Inequalities in education can affect future job opportunities.</i>
<b>reinforce</b>	to make a feeling or idea stronger	<i>Teachers can reinforce good behavior by giving praise.</i>
<b>stereotypes</b>	fixed ideas about what people from a group are like	<i>Stereotypes can lead to misunderstandings between cultures.</i>
<b>equitable</b>	fair to all people	<i>An equitable system treats everyone the same way.</i>
<b>ripples</b>	to spread or influence many people or things	<i>Her decision caused ripples throughout the company.</i>
<b>discourse</b>	written or spoken communication or debate	<i>The teacher encouraged open discourse in the classroom.</i>
<b>transparency</b>	when actions or decisions are clear and open	<i>Transparency in government helps build public trust.</i>

### Vocabulary Exercise — Fill in the Blank

Use one word or phrase from the glossary above to complete each sentence. Each item is used only once. Answers are on the final page.

1. The news article discussed the \_\_\_\_\_ in income levels across different regions.
2. It is important to have \_\_\_\_\_ in business to avoid misunderstandings.
3. Using positive feedback can \_\_\_\_\_ a student's interest in learning.
4. The movie challenged common \_\_\_\_\_ about teenagers.
5. The politician's speech focused on national \_\_\_\_\_ and unity.
6. The policy aimed to create a more \_\_\_\_\_ society for all citizens.

## Comprehension Questions

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*These questions are different from the online practice test. Choose the best answer (A, B, C, or D). Answers and explanations are on the final page.*

### Question 1

**What is one of the main roles of algorithms according to the passage?**

- A. To collect personal data from users.
- B. To predict user preferences and needs.
- C. To replace traditional teaching methods.
- D. To eliminate the need for human decision-making.

### Question 2

**What is a potential negative effect of biased algorithms on society?**

- A. They can reduce the number of online advertisements.
- B. They can cause financial losses for big companies.
- C. They can influence public opinion and political discussions.
- D. They can improve the accuracy of weather forecasts.

### Question 3

**Why is it important to understand the impact of biased algorithms according to the passage?**

- A. To develop faster computers.
- B. To ensure fairness in technology use.
- C. To create more entertaining content.
- D. To reduce the cost of software development.

### Question 4

**How can biased algorithms affect marginalized communities?**

- A. By providing them with more job opportunities.
- B. By increasing their visibility in social media.
- C. By downplaying critical issues affecting them.
- D. By encouraging cultural diversity in media.

### Question 5

#### What is the purpose of advocating for transparency in algorithm design?

- A. To increase profits for tech companies.
- B. To ensure fairness and inclusivity.
- C. To speed up technological advancements.
- D. To reduce the number of software engineers needed.

### Discussion & Writing Prompts

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*Each prompt references a specific detail from the passage above. Use for classroom discussion or a short written response (150–200 words).*

1. The passage mentions that biased algorithms can affect hiring practices. How do you think companies can address this issue to ensure fair hiring?

2. According to the passage, a 2020 study found that algorithmic bias affected news article visibility. How might this shape public opinion in your country?

3. The passage claims that algorithms are not neutral and have specific objectives. What are some ways we can ensure these objectives do not harm certain groups?

# Answer Key

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## COMPREHENSION QUESTIONS

Q1 B

Q2 C

Q3 B

Q4 C

Q5 B

## VOCABULARY EXERCISE

FIB1 inequalities

FIB2 transparency

FIB3 reinforce

FIB4 stereotypes

FIB5 discourse

FIB6 equitable

## Comprehension Question Explanations

Why the correct answer is right — and why each wrong option is incorrect.

### 1. What is one of the main roles of algorithms according to the passage?

- ✓ B — To predict user preferences and needs. The passage states that algorithms predict what we might like or need.
- ✗ A — To collect personal data from users. *The passage does not mention collecting personal data as a main role.*
- ✗ C — To replace traditional teaching methods. *The passage does not discuss replacing teaching methods.*
- ✗ D — To eliminate the need for human decision-making. *The passage does not suggest eliminating human decision-making.*

### 2. What is a potential negative effect of biased algorithms on society?

- ✓ C — They can influence public opinion and political discussions. The passage mentions that biased systems can shape public opinion and political discourse.
- ✗ A — They can reduce the number of online advertisements. *The passage does not discuss the impact on online advertisements.*
- ✗ B — They can cause financial losses for big companies. *The passage does not mention financial losses for companies.*
- ✗ D — They can improve the accuracy of weather forecasts. *The passage does not relate algorithms to weather forecasts.*

### 3. Why is it important to understand the impact of biased algorithms according to the passage?

- ✓ B — To ensure fairness in technology use. The passage emphasizes understanding biases for creating a more equitable digital landscape.
- ✗ A — To develop faster computers. *The passage does not mention developing faster computers.*
- ✗ C — To create more entertaining content. *The passage does not focus on entertainment content.*
- ✗ D — To reduce the cost of software development. *The passage does not discuss reducing software development costs.*

#### 4. How can biased algorithms affect marginalized communities?

✓ C — By downplaying critical issues affecting them.

The passage states that algorithmic bias often downplays issues affecting marginalized communities.

✗ A — By providing them with more job opportunities.

*The passage does not mention increased job opportunities.*

✗ B — By increasing their visibility in social media.

*The passage does not suggest increased visibility.*

✗ D — By encouraging cultural diversity in media.

*The passage does not talk about encouraging cultural diversity.*

#### 5. What is the purpose of advocating for transparency in algorithm design?

✓ B — To ensure fairness and inclusivity.

The passage suggests that transparency helps ensure fairness and inclusivity.

✗ A — To increase profits for tech companies.

*The passage does not mention increasing profits.*

✗ C — To speed up technological advancements.

*The passage does not focus on speeding up advancements.*

✗ D — To reduce the number of software engineers needed.

*The passage does not relate to reducing the workforce.*

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#### MORE B2 LEVEL READING PRACTICE

Letters Refugee Camp Family Story Hope — <https://www.esl-tests.com/reading/b2/letters-refugee-camp-family-story-hope>

Global Health Preparedness Lessons Recent Pandemics — <https://www.esl-tests.com/reading/b2/global-health-preparedness-lessons-recent-pandemics>

Climate Migration Communities Move — <https://www.esl-tests.com/reading/b2/climate-migration-communities-move>