



SPHERE

Fostering Civil Discourse and Diverse Viewpoints for Every Classroom

Bias Bite #10: Dunning-Kruger Effect

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Overview

This mini-lesson is designed to help your students recognize and better understand the Dunning-Kruger effect. This bias can help us take on new challenges by giving us a sense of self-confidence and self-efficacy; however, it can also promote poor decision-making through inaccurate assessments and a resistance to feedback.

The following activities will guide students in an exploration of the way the Dunning-Kruger effect works, when it happens, and most important, how to recognize it in themselves. By developing this self-awareness, students can become more open to different perspectives and engage in more thoughtful, civil discussions both in and out of the classroom.



Driving Question

Why do we often overestimate our own knowledge and abilities about subjects we know little about?

Objectives

- Explain the bias.
- Provide examples of the bias in practice.
- Construct strategies for overcoming and dealing with the bias.

Materials Needed

- “Why Incompetent People Think They’re Amazing—David Dunning” video
- Mental Notes graphic organizers for students

Bias Description

The Dunning-Kruger Effect describes a cognitive bias in which people with low competence in a given area tend to overestimate their abilities. Conversely, highly competent individuals may underestimate their skills because they assume everyone has the same level of understanding.

PROS AND CONS OF THE BIAS

Pros

- Can lead to sense of confidence and self-efficacy and can motivate the individual, which can be helpful with new challenges

Cons

- Can lead to poor decision-making through inaccurate assessments, judgments, and ineffective strategies
- Individuals who are unaware of their own limitations may resist criticism or feedback because they view themselves as an expert.

REAL-WORLD EXAMPLES OF THE BIAS

- A student who is a self-professed great driver, despite having limited experience, is overly confident, potentially leading to risky driving behaviors.
- After playing a few video games, a player professes better skills than most, not realizing the variety of experiences top players have.

Learning Activities

OPEN

Have students write the name of the day's bias and the driving question on their Mental Notes graphic organizer.

ACTIVATE

Watch the video "[Why Incompetent People Think They're Amazing—David Dunning.](#)"

Ask

- What is the Dunning-Kruger effect?
- Why do you think people have such difficulties perceiving themselves accurately?


EXPLAIN

- Describe the Dunning-Kruger effect. Explain that this bias occurs because incompetent individuals lack the metacognitive skills to recognize their own shortcomings. They don't know what they don't know or where their knowledge gaps lie. They may also misinterpret positive feedback as confirmation of their expertise. Give the following examples to illustrate the bias:
 - More than 100 studies demonstrate that people tend to overestimate their abilities to a degree that violates the laws of math.
 - A high percentage of software engineers at 2 companies, 32 percent and 43 percent respectively, put themselves in the top 5 percent.
 - 88 percent of American drivers describe themselves as having above-average driving skills.
- Tell students that they can effectively deal with the Dunning-Kruger effect in the following ways:
 - Actively seek out feedback from people with a range of opinions.
 - Use objective metrics to gauge your competence.
 - Remember to be intellectually humble and remind yourself that we all have areas of growth and knowledge development.
 - Collaborate with people who challenge your thinking.

DISCUSS

Divide students into groups and have them discuss the following questions:

- In what situations can the Dunning-Kruger effect be helpful? Harmful?
- When have you seen this bias in action?
- When are people most susceptible to this bias?
- How can people recognize when they are being affected by this bias?

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- What are some ways to overcome and deal with this bias?
 - What is the relationship between this bias and humility? In what ways can our awareness of this bias improve our relationships with others?

SYNTHESIZE AND CLOSE

Ask each group to share what they discussed for at least 1 of the questions. Revisit the driving question and make sure each student has responded to the driving question in their Mental Notes for the day.