COLUMBIA | Zuckerman Institute

BRAIN STEM | Bringing Neuroscience to the Classroom

Implicit Bias and Racism

Supported by: ΙΣΝ / SNF ΙΔΡΥΜΑ ΣΤΑΥΡΟΣ ΝΙΑΡΧΟΣ STAVROS NIARCHOS FOUNDATION

For more resources, visit zuckermaninstitute.columbia.edu/brainstem-resources

Implicit Bias and Racism

Students will use probing questions to reflect on and examine patterns of implicit and cognitive bias.

Suggested duration

- 1 x 60 min class period

Essential question

- How can we use questions to create awareness of implicit bias?

Objectives

All students will...

- Participate in classwide discussion about implicit bias by reflecting on Implicit Association Test results.
- Explore how the brain processes implicit bias.
- Develop strategies to examine and build awareness of implicit bias using probing questions.

Materials

- Implicit Association Test (IAT) online
- Computer/tablet/phone with internet access
- Slidedeck
- Question Formulation Technique Faciliatation Guide (Source: The Question Formulation Technique (QFT) was created by the Right Question Institute (rightquestion.org))
- IAT Results reflection sheet (Source: Kirwan Institute at The Ohio State University)
- Implicit Bias Workbook (Source: Taquelia Washington, LCSW, and Center for Innovation and Resources Inc. (CIR))

Based on

The Stavros Niarchos Brain Insight Lecture

- "Changing Behavior to Fight Racism and Bias" By Dr. Courtney D. Cogburn https://www.youtube.com/watch?v=A3J_JdJKzjs
- "The humanitarian crisis of racism & white toxicity" By Dr. Dana Crawford https://www.youtube.com/watch?v=Vpen6UEPQB0

Instructional Activities

1. Warm up: What do you see in the optical illusions? | 5 min

Show slides 3-4

- Ask students to respond to the following questions:

  1. What does this illusion tell us about our brain's ability to perceive 'objective' reality? Discuss the terms "objectivity" and "subjectivity".

  2. How can our brain's biases impact the way we communicate with eachother or perceive the world? Discuss the term "implicit bias".

  3. How can our brain's biases impact the way we respond to situations and to other people?

- Define "Implicit Bias". Emphasize the importance of not being afraid to acknowledge our biases and subjectivity.

Suggested language prompt: "We all have biases. This means that we are influenced by our feelings, opinions, and backgrounds. For example, we have biases about race, gender, physical ability, or age. The problem happens when we deny having biases, and ignore how our biases can make us act in ways that hurt other people".

2. Implicit Bias Test | 15 min

Show slide 5-6

- Students will take an online Implicit Association Test.
- Without discussing individual scores and without asking about specific results, invite students to share observations about their experience taking the test or seeing their results.

  Examples of prompting questions: *What feelings or reactions did you have upon learning your IAT results? How might your life experiences (media messages, neighborhood, family upbringing, etc) shape your biases? How might knowing your IAT results impact your future actions and decisions?*

- Show previously-collected IAT macrodata and invite students to share their observations about the graph.

3. Question Formulation Technique (QFT) Protocol | 15 min

Show slides 7-13

- Explain the QFT rules. Instruct the students to think about the rules and discuss one of the following questions:

  1. What might be difficult about following the rules for producing questions?

  2. Which rule might be the most difficult to follow?

- Step 1: Have students generate questions about QFocus (the swing image)
- Step 2: Categorize questions as closed-ended or open-ended. Discuss the value of each type of question, identifying advantages and disadvantages of each type.
- Step 3: Change from Closed to Open. Discuss how to change a question from "closed" to "open" and have students try a few from their own list.
- Step 4: Prioritize questions. Ask students why they selected their priority questions and where the questions were on the original list (beginning, middle, or end).
- Step 5: Reflect or Apply

4. Connection to AIR (Awareness-Investigation-Reduction) | 15 min

Show slides 14-18

- Emphasize that this lesson is helping with the "A" in the AIR bias reduction theory (the awareness piece).
- Use questions from QFT protocol to apply to the "I" portion of AIR (the investigation piece).
- How can we connect AIR to processing in the brain? Explain to students the idea of "thinking fast" and "thinking slow", and how implicit bias shows up in system 1 (unconscious system) with fast, involuntary associative parts of the brain. In this lesson, the goal is to bring those associations to awareness in system 2 (conscious system).

5. Closing | 10 min

Show slides 19-20

- Students will share what they learned, share examples of how implicit bias is around them, or generate a list of ways that people could address their own implicit bias.
- Students will brainstorm goals addressing implicit bias and share a goal with a partner.

6. Extension | 15 min

Show slide 21

- Students will develop an investigation based on the questions generated from the QFT. This will connect to the "I" (investigation piece) of AIR and expand on responses to the Closing questions and responses to the Apply question on slide 13.

Standards

NEXT GENERATION SCIENCE STANDARDS (NGSS)	• SEP 1: Asking Questions & Defining Problems • SEP 4: Analyzing and Interpreting Data • SEP 8: Obtaining, evaluating, & communicating information • CCC 1: Patterns
COMMON CORE STANDARDS	• CCSS.ELA-LITERACY.RST.9-10.8 Assess the extent to which the reasoning and evidence in a text support the author's claim or a recommendation for solving a scientific or technical problem. • CCSS.ELA-LITERACY.RST.9-10.1 Cite specific textual evidence to support analysis of science and technical texts, attending to the precise details of explanations or descriptions.
LIVING ENVIRONMENT CONTENT SPECIFIC STANDARDS	• 1.1a Scientific explanations are built by combining evidence that can be observed with what people already know about the world. • 1.1c Science provides knowledge, but values are also essential to making effective and ethical decisions about the application of scientific knowledge. • 1.2a Inquiry involves asking questions and locating, interpreting, and processing information from a variety of sources. • 3.1a Interpretation of data leads to development of additional hypotheses, the formulation of generalizations, or explanations of natural phenomena.
NYS SEL STANDARDS	• 1C.4a. Identify strategies to make use of resources to overcome obstacles to achieve goals. • 2A.4a. Analyze similarities and differences between one's own and others' perspectives. • 2B.4a. Analyze the origins and negative effects of stereotyping and prejudice. • 2B.4b. Demonstrate respect for individuals from different social and cultural groups.

Sources

- The Stavros Niarchos Brain Insight Lecture, “Changing Behavior to Fight Racism and Bias”. 2021. By Dr. Courtney D. Cogburn https://www.youtube.com/watch?v=A3J_JdJKzjs
- The Stavros Niarchos Brain Insight Lecture, “The humanitarian crisis of racism & white toxicity”. 2021. By Dr. Dana Crawford https://www.youtube.com/watch?v=Vpen6UEPQB0https://www.sciencedaily.com/releases/2019/01/190115121122.htm
- "Making Sense of Your IAT Results (Common Reactions to the Implicit Association Test)" by the Kirwan Institute for the Study of Race & Ethnicity at The Ohio State University. kirwaninstitute.osu.edu.
- "Facilitating the Question Formulation Technique (QFT)" By the Right Question Institute. The Question Formulation Technique (QFT) was created by the Right Question Institute (rightquestion.org)
- "Implicit Bias Workbook". 2019. By Taquelia Washington and the Center for Innovation and Resources Inc. (CIR, Inc). www.CIRinc.org.

Acknowledgements

Co-created by:

Erik Shold

Brittany Klimowicz

Edited by:

Diana Li

Maia Gumnit

With input from:

Andrew Anderson

Angeli Maystry

Anna Solovyeva

Bonnie Lestz

Danielle DeBenedetto

Deborah Reich

Eilon Dorit

Francesca DiPietro

Franchesca Frias

Jessica Abrams

Jessica Kim

Mashfiq Ahmed

Melissa Braxton

Meng-Ping Tu

Michael Becker

Nicole Kamar Aldin (Holmes)

Preeti Natarajan

Ramona Fittipaldi

Tamanna Shahid

Tchnavia Merrick

Theresa Stanley

Vanessa Keen

Verithia Hood

Vincent Joralemon