

Lesson 2 - Systemic Sexism

How might sexism be embedded into our interactions, products, and expectations?

NGSS connections: **Practices:** Asking Questions and Defining Problems; Analyzing and Interpreting Data; Engaging in Argument from Evidence; **CCCs:** Patterns; Cause and Effect; Systems & System Models.

Starting point for instructors

- Do [Unit 0 - Setting the Stage](#) before this, and review norms if needed
- This lesson is limited to cis-identifying women and men in the United States: be explicitly transparent with your classes on this choice.
- Be aware of any gender-questioning, gender-nonconforming, or transgender students in your classroom, as this lesson may be very uncomfortable for them. Trans-women (and -men) [can be a part of very important insights and conversations](#). While trans-women are women and (obviously) self-identify as women, in many contexts they still exist in their own category, and are not recognized by many parts of American society. [Sciences are often not welcome places either](#). There is potentially additional discussion around [sex vs. gender](#).
- It may be beneficial to teach [Unit 2 - Meritocracy](#) first, to show how residents of the United States of America are taught to consider people as individuals, and how the truth can be more complicated.
- Talking about sexism can feel risky, but we do so bravely. Consider this a step towards addressing the [growing concerns about sexism in this country](#).
- It may seem that the labelling of what is and isn't sexism might seem semantic. However, spending time defining overt/blatant sexism (examples of [overt/blatant sexism](#) here) vs. [systemic sexism](#) motivates a different set of actions.

Pre-Lesson Student Exploration / Bell-Ringer

Before coming to class/at the start of class, students need to:

1. Thinking systemically, what do you think [this cartoon](#) is trying to say?
2. Read this [Science Magazine article](#) or this [summary from Nature](#) about three female professors suing the Salk Institute for alleged sex discrimination.

Optional: ask students to write a few sentences about whether they think the described incident was an example of sex discrimination.

Instructor Notes:

This example was chosen because this sort of disagreement seems so common: accusations of sexism today are often not "because you're a girl", but more often under the guise of work quality.



In-Class Investigations

Write-Pair-Share: ideas around the homework article [15-20 minutes]

For last night's homework, students should have read an article on accusations of sex discrimination in scientific fields. One group says that sex discrimination occurred, and the other does not.

- *Write (may have already happened as homework)*: Students write a few sentences about whether they think the sequence of events at the Salk Institute constitute sexism.
- *Pair*: What would help you decide? What evidence would help you know for sure?
- *Share*: What definitions of "sexism" do we hear people using as they answer this question?

Continuing the Discussion:

- Instructor shares the following information with students:
 - The president of the Institute when the events transpired was a Nobel-laureate woman (who has since resigned).
 - As of November, 2018, the three lawsuits [have been settled](#) out of court.
 - A [male researcher resigned](#) after investigation.
- *Pair/Share*: Do these new facts change your perception about the original story? What would need to be revealed to turn the tide one way or another?

Create a working definition of sexism. [10-15 minutes]

Writing: Ask students to answer the following questions in a sentence or two:

1. How would you define sexism?
2. How does it feel to discuss this? Consider using a Classroom Discussion Routine: [Emotional Check In](#). Make sure to emphasize that the goal is **not guilt or superiority**, it is to see more clearly. Considering systems, we **all** have systems that benefit us.
3. *Optional: Share*: Have all students quickly share their definitions (via a Google Doc, whiteboards, or orally if others are not possible). Ask for volunteers to identify/share definitions that differ significantly from what has been said.

Instructor Notes:

Defining sexism tends to produce comments around overt and (often) malicious verbiage, such as "for a girl", "man up" or "acting hormonal". The best examples for "*Which fit your definition of sexism?*" are the ones which will engage your students and help move them to add systemic forms of sexism into their definition. This will be different for every group, but try to use ones that feel really relevant: currently in the news, local, charged, etc. Possibilities include affirmative action, hiring practices & promotions, invited talks, tenure, etc.



Students tend to start with a definition of sexism that requires bad intent by individuals. If nobody votes for an example that illustrates systemic sexism, consider stepping out of Facilitator Mode and share why someone might consider that to also be an example of sexism. For example, male instructors are rated more highly than female instructors even when teaching the same online course ([reference](#)).

Because many people are [resistant to change](#), this lesson can be more successful when focusing on asking students to *broaden* their definition instead of *changing* it. Rather than getting caught up in



disagreements about individual examples, ask students, “can you consider that this might also be an example of sexism?” Rather than debating [whether women can be sexist](#), ask, “can you see how there are systems that benefit men and harm women?”

Which Fit Your Definition of Sexism? Applying and revising working definitions. [20-30 minutes]

- a. [Anonymous Poll](#): Share several examples of links or images and poll students on whether they believe each example has evidence of sexism or not. Options could include:
- [The rate of acceptance for scientific journal articles](#)
 - [Girls score higher in reading than boys](#)
 - [The pay-gap, visualized, countries ranked for gender balance](#) (the US is on pp. 353-354)
 - [The ex-Google employee who wrote a 10-page anti-diversity commentary](#)
 - [Programs related to girls/women in science](#)
 - [The \(STEM\) teaching profession isn't pink enough](#)
 - [Bic pens for her, science kits for girls](#)
 - [Americans' views on women in politics](#)
 - [H. Clinton on “performing masculinity”](#)
 - [Ed Yong on improving the gender disparity in his articles](#)
 - [The Bechdel-Wallace Test](#)
 - [The tampon tax](#)
- b. *Discuss*: It can be particularly powerful and useful to look not at *intentions* (individual) but at the *outcomes* (systems): rather than needing to know who’s responsible and what’s in their heart, we need only to look at the outcomes and whether they are biased by sex.
- Do we seem to be defining sexism based on *intent* or *outcome*?
 - What might be the advantages and disadvantages of using either type of definition?
 - **(If you have done the lesson on [Unit 2 - Meritocracy](#), you can also ask: do our answers seem to reflect individual or systemic definitions?)**
 - If we adopt an outcome-based definition of sexism, how does this affect your perception of what occurred at the Salk Institute?
 - *Extension*: You can ask students to suggest an additional complex example for discussion!

Instructor Notes:

So far in this lesson, we have not explicitly told students what the “right” definition of sexism is. **If your students have not yet arrived at a definition that considers systemic factors, it is essential that you bring it up for consideration.** As an example, you could highlight how a lab hiring only based on resume (which doesn’t reflect gender animus/hostility) might combine with the relative lack of academic opportunities for students who identify as women to create an outcome in which fewer women are hired, which then perpetuates the system.



Optional: Further Prompts to Deepen Discussion. [10+ minutes each]



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- Now that we've discussed definitions of sexism, do you think differently about the Salk Institute article you read for homework?
- Does our city fit your definition of sexist? Our school community? Our country? Why/why not?
 - How do the [#MeToo](#) and [#TimesUp](#) movements connect to the perception of what is societally necessary (to some) or too much (to others)?
 - When different people disagree as to whether gender is involved or a problem, who gets to decide?
- The differences between "[glass ceilings](#)" and "[glass escalators](#)".
- A longer activity that breaks down student descriptions of teachers by male/female and positive/negative: [Gendered Language in Teaching Reviews](#) simulation.

Optional: Gender Bias in a Scientific Context [20-25 minutes]

Listen to the Short Wave Podcast from NPR on telescope equity: "[Fighting Bias in Science: When There's A New Telescope, Who Gets To Use It?](#)" (14 minutes; the selection process and results are described from 3:49-14:20)

Share these prompts with students and give them time to discuss.

- How was telescope time awarded before 2018?
- How did the selection process change in 2018? What motivated this change?
- What were the results of this change?
- Can you think of any institutions making competitive choices that might benefit from a similar shift? How would that work?
- Can you think of any actions, based on what you heard, that you could take to reduce this sort of unintentional bias in your own life?

The type of sexism described here is an example of *implicit bias*. To explore this topic further, or if you wanted to learn more, you may want to teach or explore [Unit 2 - Implicit Bias](#) at some point.

Writing Conclusions. [10-15 minutes]

- a. What are the costs of systemic sexism to you? (below are two more examples)
 - i. Who ends up inventing depends on income: [costs to society](#).
 - ii. Who holds patents, becomes role models, holds high-paying STEM jobs affects focus of research: [Underrepresentation in science](#).
- b. Many of us think of overt sexism before we think of systemic sexism. What is an example of systemic sexism that you discussed or heard about today?



Post-Lesson Homework

Option 1: Reflection on outside sources

Choose 3-4 articles from the [Lesson Plan Resources](#) and share them with your students. Each student needs to choose one to read and reflect on (*TIP: tell students what you are expecting them to write, e.g., write a paragraph or two*).

Option 2: Further reflection about the in-class discussion

Students can write in response to the following prompts. Instructors can decide whether to collect this writing or not, and whether to ask students to put their names on it or not, understanding that students may write differently depending on these choices.

- How did today's discussion change your definition of sexism? Was there something someone said that particularly shifted your views?
- Actions can be sexist. Do you think inaction can be racist?
- What other examples do you wish we had discussed?
- In what ways does systemic sexism harm science? In what ways does it harm your life?

Homework Debrief: Reflecting on the reflections

At the beginning of the next class, group students by the articles they read (or by some other means if they wrote reflections). Have the students share what they found to be most important/surprising. Then have a share-out with the entire class.

Resources

- [Lesson Plan Resources](#)

Notes from the Instructors

When this goes well, students often ask what to *do* about systemic sexism. The answer will vary from student to student and place to place. In our experience, moving from the societal to the personal is key. Consider following this lesson with [Unit 2 - Racial Privilege and Affirmative Action](#) or [Unit 3 - Taking Action](#).

