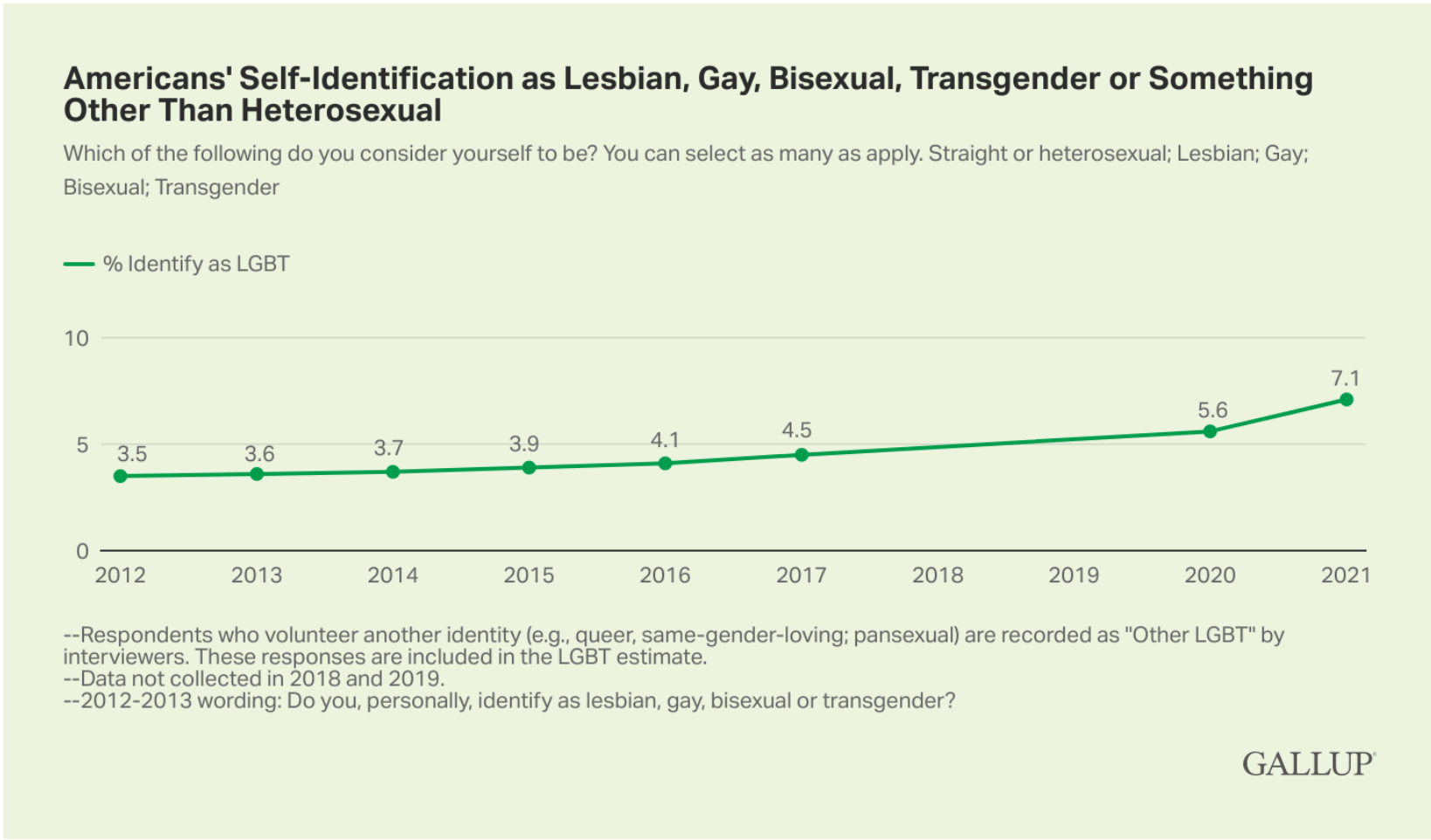
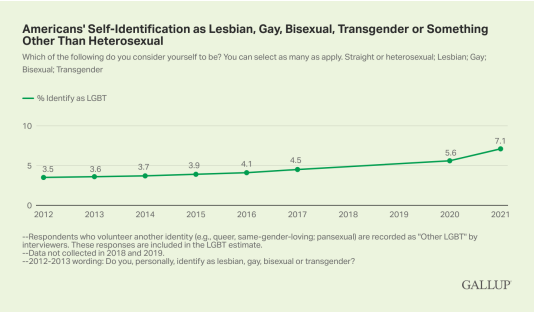


Image Source: Gallup https://news.gallup.com/poll/389792/lgbt-identification-ticks-up.aspx

The Queer Mathematics Teacher
Educational Coaching to Re/humanize Mathematics

Suggested Strategy: I Notice, I Wonder

https://www.nctm.org/Classroom-Resources/Problems-of-the-Week/I-Notice-I-Wonder/



Possible Qs to Explore

1. What's the story behind this data? Where does it come from? Why is that important to consider?
2. How do we know if this sample is representative?
3. Look closely at the notes included in the graphic. What stands out? How might this have impacted the data presented here?
4. What function might best model this data? What are the limitations of this model?
5. What is the y-intercept of your model? What does that represent contextually?
6. What is the x-intercept(s) of your model? What does that represent contextually? Does this seem realistic? Explain your reasoning.
7. Based on your model, what percentage of Americans will identify as LGBTQ+ in 2040? How many people would that be? Does that number make sense contextually?
8. Based on your model, when would the percentage of Americans that identify as LGBTQ+ hit 100%? Does that make sense contextually?
9. If we wanted to modify our function so it represented the number of people that identified as LGBTQ+ (rather than percentage), how would we go about that?

Teacher Notes

- Elicit student understandings of the terminology issued in this graphic before having them pose or explore any of the Qs here. Definitions of pertinent LGBTQ+ terminology are included on the following page.
- Students might be asked to consider why LGBTQ+ identity has been increasing over the years (Possible answers - younger generations more accepting; greater representation/visibility has lead more folx to "come out" and openly identify as LGBTQ+).
- Q3 is intended to have students consider what the percentages might have been in the two years data was not collected (the model creation of later questions would be helpful in finding this), as well as how the changing of the question between the 2013 and 2014 administration of the data may have impacted who disclosed LGBTQ+ identity and/or who was included in the data.
- Q4 provides an opportunity for teachers to discuss the "parent" graph of function families, as well as translations/ transformations and models of best fit.
- The question about the x-intercept (Q5) is included to elicit students understanding of the limitations of their model and to highlight that queer folx have always been here (see https://www.learningforjustice.org/magazine/queer-people-have-always-existed-teach-like-it).
- To answer Q7 (part 2) and Q9, teachers will first need to nudge students to consider what information is missing in order to answer the Q (e.g., what is the total US population?).
    - The estimated population of the US is 329.5 million, but not all of them are over the age of 18 (and thus less likely to have been included in this poll). Students might be encouraged to consider the implications of this.
- Q8 will likely allow room for debate - some will likely argue that, in theory, if our society becomes fully accepting, then everyone *would* identify as LGBTQ+ at least to some degree (or maybe the identification will become obsolete). Others might argue the permanence of cissexism and heterosexism (similar to the permanence of racism tenet of CRT), which will prevent such total acceptance and identification.
- Q9 provides an opportunity for students to think about how using different units/scales can impact how people view and interpret data.

Terminology

Note: All terminology is directly quoted from Learning for Justice's (2018) *The Acronym and Beyond,* unless otherwise indicated.

Bisexual, Bi (*adj.*) A person emotionally, romantically, or sexually attracted to more than one sex, gender, or gender identity though not necessarily simultaneously, in the same way or to the same degree.

Cisgender (*adj.*): Describes a person whose gender identity (*defined below*) aligns with the sex assigned to them at birth. [Also, *cis.*]

Cissexism (*noun*): A system of discrimination and exclusion that oppresses people whose gender and/or gender expression falls outside of normative social constructs. This system is founded on the belief that there are, and should be, only two genders—usually tied to assigned sex.

Coming out (*verb*): A lifelong process of self-acceptance and revealing one's queer identity to others. This may involve something as private as telling a single confidant or something as public as posting to social media.

Gay *(adj.*): Used to describe people (often, but not exclusively, men) whose enduring physical, romantic and/or emotional attractions are to people of the same sex or gender identity.

Gender expression (*noun*): External appearance of one's gender identity, usually expressed through behavior, clothing, haircut or voice, and which may or may not conform to socially defined behaviors and characteristics associated with being masculine or feminine.

Gender identity (*noun*): One's innermost feeling of maleness, femaleness, a blend of both or neither. One'll gender identity can be the same or different from their sex assigned at birth.

Heterosexism (*noun*): The assumption that sexuality between people of different sexes is normal, standard, superior or universal while other sexual orientations are substandard, inferior, abnormal, marginal or invalid.

Heterosexual (*adj.*): Used to describe people whose enduring physical, romantic and/or emotional attraction is to people of the opposite sex. Also, *straight*.

Lesbian (*adj.*) Used to describe a woman whose enduring physical, romantic and/or emotional attraction is to other women.

Pansexual (*adj.*): Used to describe people who have the potential for emotional, romantic or sexual. Attraction to people of any gender identity, though not necessarily simultaneously, n the same way or to the same degree. The term *panromantic* may refer to a person who feels these emotional and romantic attractions, but identifies as asexual. [Also, *pan.*]

- My addition: Some folx use pansexual and bisexual interchangeably, but some prefer pansexual because its prefix (*pan-)* more accurately captures all genders, whereas the prefix of bisexual (*bi-*) usually means only two (and thus reinforces a gender binary).

Queer (*adj*.): Once a pejorative term, a term reclaimed and used by some within academic circles and the LGBTQ community to describe sexual orientations and gender identities that are not exclusively heterosexual or cisgender.

- My addition: For more information on the word "queer," you can check out my blog post: Why I use queer. https://www.thequeermathematicsteacher.com/queer/why-i-use-queer/

Same-gender loving (*adj*.): A term coined in the early 1990s by activist Cleo Manago, this term was and is used by some members of the black community who feel that terms like gay, lesbian and bisexual (and sometimes the communities therein) are Eurocentric and fail to affirm black culture, history and identity.

Sexual orientation (*noun)*: An inherent or immutable emotional, romantic, or sexual attraction to other people; oftentimes used to signify the gender identity (o identities) to which a person is most attracted.

Transgender (*adj*.): An umbrella term for people whose gender identity differs from the sex they were assigned at birth. Not all trans people undergo transition. Being transgender does not imply any specific sexual orientation. Therefore, transgender people may identify as straight, gay, lesbian, bisexual or something else. Also, *trans.*