Big Idea – Averages Hide Differences

Statistics like **mean (average), median (middle value), and mode (most frequent value)** help us understand how data represents **people and groups**. In schools, demographic data reveals whether student populations are **fairly represented** in classrooms, programs, and leadership opportunities. When some groups are underrepresented, that data becomes both a **mirror of inequity** and a **map for action.** Every student deserves to be seen, respected, and valued—because their culture, language, and experiences **strengthen the entire school community.**

Math + Equity Example

School Population by Racial/Ethnic Groups (in %):

Group % of Students

A	40%

B	35%

C	15%

D	10%

Calculations:

- **Mean:** (40 + 35 + 15 + 10) ÷ 4 = **25%**

- **Median:** (15 + 35) ÷ 2 = **25%**

- **Mode: 40%** (Group A has the largest representation)

This data shows that **Groups C and D are underrepresented.**
When numbers highlight uneven participation, schools can use math as a **tool for awareness and advocacy** by asking:

- How can every group's voice and presence be reflected in leadership and recognition?

- How can statistics become a way to promote inclusion and belonging?

Equity Connections

Representation matters.
Fair representation means that every student group has access to the **same opportunities**—in programs, honors, clubs, and decision-making spaces. By studying demographic data, schools can identify where **representation gaps** exist and design solutions such as mentorship programs, student voice initiatives, and inclusive recruitment. When math helps us see these realities, **equity becomes measurable, actionable, and real.**

Data Reflection

Circle or underline the word that stands out to you:

representation | fairness | diversity | inclusion | belonging

Share Your Thinking

The word I picked is: _____
I picked this word because:

_____

_____

_____

_____

Reflection:

How does this word connect to what we are learning today?

_____

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Student Equity Reflections

1. What does **equity in representation** mean to you?

_____

_____

2. Which group in the example is the **mode**? What does that reveal about who is most represented?

_____

_____

3. Why is it important for **all student groups** to have fair access to opportunities?

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4. How could your school promote **more balanced representation** in programs or leadership?

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