

ROUTINE: NOTICE, MEAN, & WONDER

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Panel 1: We're going to think about the dialogue in the book. Let's look at this bar chart showing the total number of words attributed to each character. What do you **NOTICE**, what do you think it **MEANS**, and what do you **WONDER**?

Panel 2: I **NOTICE** that Harry's bar graph is the longest, and that **MEANS** he talks the most. I **WONDER** why Hermione is shorter than Ron?

Panel 3: Is there anything we know about the text to help us make a guess about that question?

Panel 4: Hermione is petrified for a part of the story! Right! So she would have talked less!

A routine to develop observation skills, inference skills, and curiosity about data and texts.

PURPOSE

What is this routine for?

This routine helps students develop data literacy by helping them make sense of graphs, figures, and other ways to represent data. In this routine, students share their observations about the data and consider possible meanings of those observations in relation to the text. Then students share what makes them curious about the data and its connection to the text. Students can use this routine before, during, or after reading.

QUESTIONS & PROMPTS

What can I ask students?

- What do you **notice** in the visualization?
 - What trends or patterns do you notice?
 - What are three interesting or surprising things that stand out to you?

- What do you notice in terms of labels, keys, scales, patterns, trends, outliers, direction of lines, big/small?
- What do you think it **means**?
 - What can you interpret about what you see?
 - What do you think explains what you noticed?
 - How do you think the data connects to the text?
 - How do you think the data relates to your responses to the text?
 - What do you think might explain what you notice?
- What do you **wonder**?
 - What are you curious about?
 - What questions do you have about what you see?
 - What aspects of the data confuse you or make you extra curious?

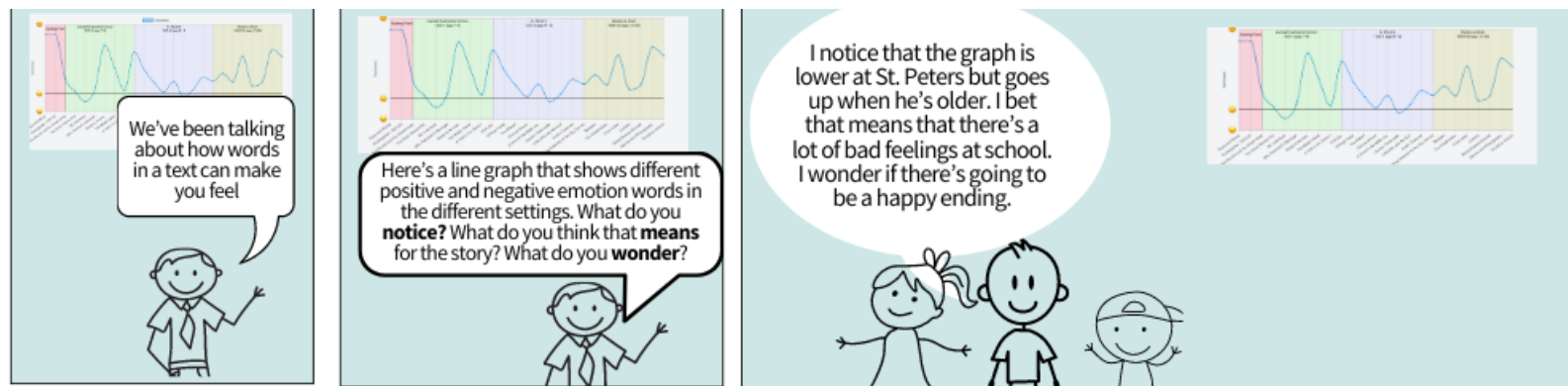
Sometimes it's useful to have students first focus just on noticing before students move to any interpretation ("In pairs, write down 10 things you notice in this visualization--every detail you see"). That's because sometimes students jump to conclusions about data without observing first. Other times, you can invite students to do all three in any order.

APPLICATION

What types of data visualizations does this routine support?

This routine is applicable to all types of data visualizations. Examples include:

LINE GRAPH



WORD CLOUD

