

Represent the distribution of multiple data sets for numerical variables...

represent the distribution of multiple data sets for numerical variables using comparative representations; compare data distributions with consideration of centre, spread and shape, and the effect of outliers on these measures

Learning intention

- represent the distribution of multiple data sets for numerical variables using comparative representations; compare data distributions with consideration of centre...

Teach and model

- describing the shape of the distribution of data using terms such as “positive skew”, “negative skew” and “symmetric” and “bi-modal”
- using stem-and-leaf plots to compare 2 like sets of data such as the heights of girls and the heights of boys in a class
- constructing grouped histograms that show trends in health issues such as lung cancer, leukemia, stroke and diabetes, and using the graph to justify, verify or invalidate claims

Check understanding

- Explain the main idea in represent the distribution of multiple data sets for numerical variables... using an example.
- Show the idea in a second way: with words, a model, a diagram or symbols.
- Apply the idea to a short unfamiliar situation and justify the result.

Teaching cautions

- Ask the student to explain their choice, not only state an answer.
- Check that key vocabulary is understood in a new example.
- Mix representations so the skill is transferred rather than copied.

Quick lesson sequence

- Connect to prior knowledge and introduce the key vocabulary.
- Model one clear example, then solve a second example together.
- Finish with an independent check and a short student explanation.