

Data distributions for continuous numerical variables using appropriate data displays...

compare data distributions for continuous numerical variables using appropriate data displays including boxplots; discuss the shapes of these distributions in terms of centre, spread, shape and outliers in the context of the data

Learning intention

- compare data distributions for continuous numerical variables using appropriate data displays including boxplots; discuss the shapes of these distributions in terms of...

Teach and model

- constructing and interpreting box plots and using them to compare data sets, understanding that box plots are an efficient and common way of representing and...
- comparing shapes of distributions using box plots, histograms, cumulative frequency graphs and dot plots, discussing symmetry, skew and modality
- using digital tools to compare boxplots and histograms as displays of the same data in the light of the statistical questions being addressed and the effectiveness of the...

Check understanding

- Explain the main idea in data distributions for continuous numerical variables using appropriate data displays... 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.