

Variations in distributions and proportions obtained from random samples of...

compare variations in distributions and proportions obtained from random samples of the same size drawn from a population and recognise the effect of sample size on this variation

Learning intention

- compare variations in distributions and proportions obtained from random samples of the same size drawn from a population and recognise the effect of sample size on...

Teach and model

- comparing the proportion of students in favour of a proposal for a change in school uniform between different random samples of 50 students from the school population
- using digital tools to simulate repeated sampling of the same population, such as heights or arm spans of students, recording and comparing means, median and range of...
- using relative frequencies from historical data to predict proportions and the likely number of outcomes in situations such as weather forecasting or the countries of origin...

Check understanding

- Explain the main idea in variations in distributions and proportions obtained from random samples of... 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.