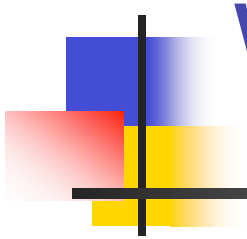

WORKSHOP 1

Building conceptions of populations and samples and the connections between them.

Supported by TLRI grant

Aims of the Session

- Link between sample and population
- Students need to experience the need to sample.
- Describe sample distributions and then think about the population distributions.
- Predict population distributions.
- Care with language, these boys, these girls.

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Questions that can be asked about each variable.

- What was the survey question asked to collect the data?
- Who was surveyed? By whom? When?
- How was the variable measured?
- What are the units, if any, for the variable?
- What are the possible outcomes for the variable?
- What type of data is it? Categorical or numerical?

Supported by TLRI grant

Karekare College Data

- Handout 1
- Contains variable list and the questions asked in the survey.

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Investigative Questions

- *Do the heights of Karekare College boys tend to be greater than the heights of Karekare College girls?*
- *Do the popliteal lengths of Karekare College boys tend to be longer than the popliteal lengths of Karekare College girls?*
- *Do Karekare College students who walk to school tend to get there faster than Karekare College students who take the bus?*
- *Do Karekare College students who go by car to school tend to get there faster than Karekare College students who take the bus?*
- *Do Karekare College students who go by car to school tend to get there faster than Karekare College students who walk to school?*

On back of handout1.

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Investigative Questions

- Select an investigative question to explore.
- What does “tend to” mean?
- Predict and draw the population distributions for the variable in the question.
- Show one population distribution relative to the other.
- Give a rough indication of the range of values expected.

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Investigative Questions

- How would you go about answering the question?
- *Teachers' stories.*

- Handout graph plots.

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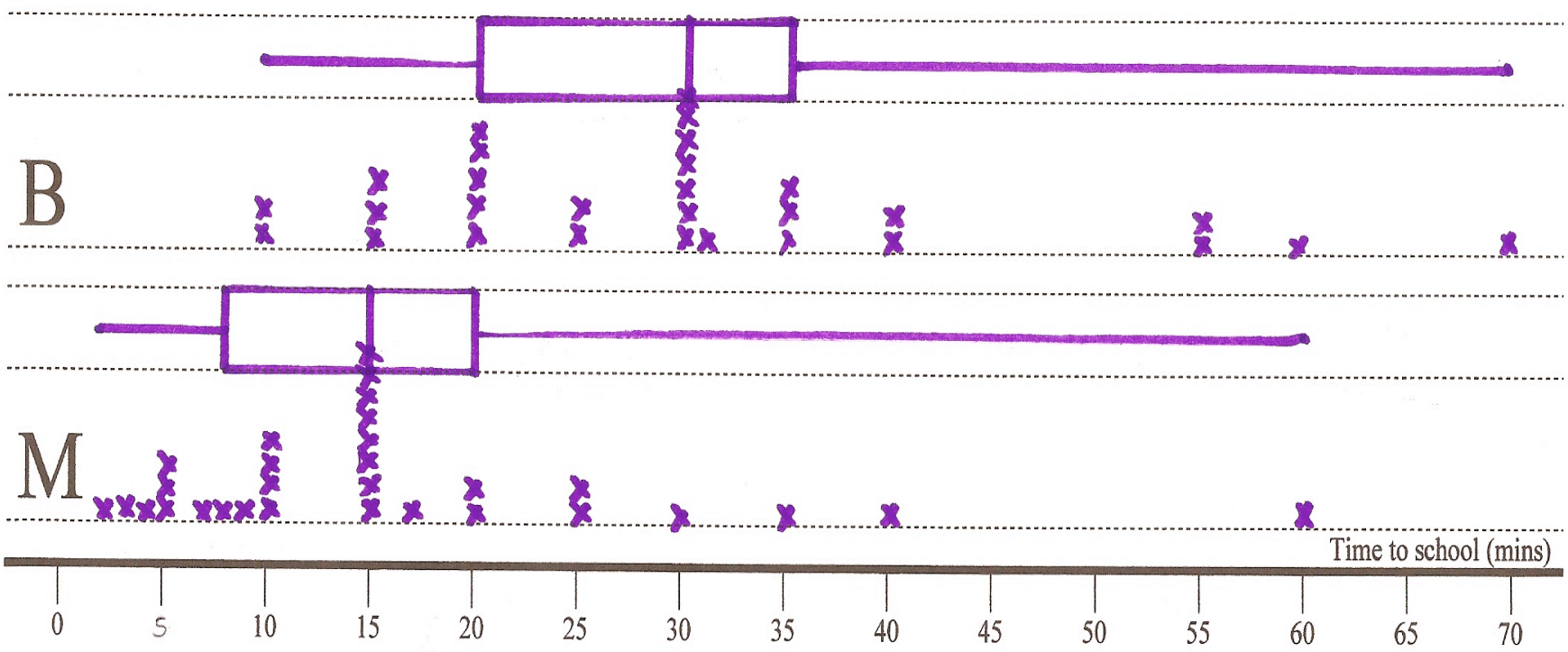
Drawing graphs



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Describing graphs

- Handout 2.

- Middle 50%
- Anything unusual
- Shape
- Spread

- *Matt's message about purpose - intro session.*

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Sampling variability

- Find others with same question as you.

- Compare and contrast your graphs.
- What is similar?
- What is different?
- What can you say about the populations that these samples came from?

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Wrap Up

- Link between sample and population
- Students need to experience the need to sample.
- Describe sample distributions and then think about the population distributions.
- Predict population distributions.
- Care with language, these boys, these girls.

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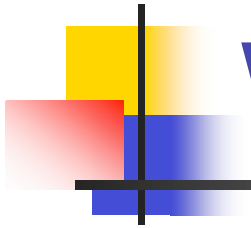

Workshop 2

- Making a call.
- Same room after lunch.

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