Teaching Research Methods: How to Make It Meaningful to Students

Show how research matters in students' lives and chosen careers

- Use reports, media stories about research, statistics, evidence that people claim to have, research and analysis used managerially to show the value of research.
- Have assignments that allow students to apply tools to their fields of interest (e.g., designing logic models and surveys on topics of their choice).
- Students often think that research methods are dry and removed from their careers and lives, but they finish seeing these as useful tools of importance to their careers—and to just about everything else.
- Have students practice speaking and writing about research—particularly interpreting research results in terms relevant for policy & practice

Teach methods using engaging, real-world examples of research

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- For example: The study of barriers to the delivery of a new malaria medicine in Kenya. This shows the usefulness of qualitative methods for uncovering unknown causes and also how qualitative methods can tackle hard-nosed issues (such as malaria).
- Have students read real studies each week – and use these as core material for reviewing topics such as measurement, sampling, or causation.

Importance of Causal Research

- Distinguish Descriptive and Causal Research: "What is?" vs. "What if?"
- Descriptive research is important; causal research builds on descriptive research .
- Correlation vs. causation is the first critical step.
- Strategies for disentangling causation, estimating causal effects. Although experiments are very valuable, there is a broad range of strategies to consider: control variables, natural and quasi experiments.
- Generally no perfect answers: illustrate pros and cons of each approach and show how multiple approaches are needed.

Encourage visual thinking with path diagrams

- A model of variables (ovals) and relationships (arrows) that illustrates assumed causal processes - provides a visual way of thinking about research.
- We use path models throughout the course to help students think about:
  - *Theory* (variables and relationships)
  - *Logic models* (of a program or intervention)
  - *Correlation vs causation* (common causes)
  - *Control variables and regression analysis*