Meeting 1

Course Overview

What is Research?

What is Program Evaluation?

Types of Evaluation

20170906

Introductions: a little bit about me

- I also teach International Economic Development and Advanced Empirical Methods at Wagner.
- Previously MPA and PhD courses Columbia/SIPA, Tufts/Fletcher, LSE, Harvard.
- Previous research:
  - On program evaluation methods (matching -- we will discuss it briefly later in the course).
  - On US policy issues including welfare reform, traffic fatalities, birth rates.
  - On development policy issues including microcredit and child labor.
- Some current projects:
  - Thinking about external validity in large data sets (is it better to compare a highly educated person in Uganda with a highly educated person in the US or to a less-educated person in Kenya?)

  ➔ You can see why I enjoy teaching this course!

Introductions: all about us

- Professors are absent minded: remind me when I forget something!
- Professors like to talk, but prefer to listen: interrupt with thoughts, questions, observations, comments.
- It's the give and take among us that makes this course interesting.

Expectations

- Expect to learn a lot and to work hard.
- No grade inflation, but no grade obsession either.
- An old-school approach.
  - Arrive on time. Don't be late.
  - No cellphones.
  - Computers only for note taking.
  - Don't, don't, don't check e-mail, Facebook, Twitter, etc.
- There is no pause, rewind, or skip.

The fine print

- Late assignments: point-reductions as noted on syllabus.
- E-mail blackout 24 hours prior to submission of assignments.

Course objectives

- An overview of research methods.
  - Understand the key steps and concepts.
  - Understand the scope and potential of the methods.
  - Learn to read and evaluate evaluations.
- Main focus is on concepts.
  - Like learning how to drive.
  - To actually implement a research project you will need more specialized skills (some from AEM).

About the course

- This course is a mix between lecture (2/3) and discussion (1/3).
  - We will have four discussion classes.
- Required readings on the syllabus with a solid bullet (•), supplemental with an open circle (o).
  - Most readings are background – will get a quick mention.
  - Some will get in-depth discussion.

Course overview

- Introductions
- Texts & readings
- Exercises
- Assignments
- Midterm
- Final Paper
- In-Class Presentation
- Participation
- Office hours, contacting me
  - I am always available.

Example: microcredit

- Microcredit has taken off around the world, heralded as a development revolution.
- Small loans made for small business, high repayment rates. A win-win:
  - Instead of “give a man a fish”, let him/her borrow to buy a fishing pole.
  - Repayment means that donor funds are used multiple times
  - A perpetual motion machine!

Evaluating micro credit?

- The idea has strong theoretical motivation
  - Indivisible investments, incomplete insurance, credit constraints.
  - Do you need to evaluate aspirin?
- It's an unstoppable social movement empowering the poor and marginalized.
  - Do you need to evaluate the women's or civil rights movement?
- Well, potentially yes.

What might we want to know?

- Does it really work? I.e., if not microcredit would people do worse? Do they do better?
- Will it work, elsewhere in the future?
- How does it work?
- Does it work better than the alternatives, e.g., for donors?

  → In short, an evaluation.

What is research

- **Kerlinger (educational researcher)**
  - Research is the systematic, controlled, empirical and critical investigation of phenomena guided by theory and hypotheses about the presumed relations among such phenomena.

- **Depoy and Kiltin**
  - Social research consists of multiple, systematic strategies to generate knowledge about human behavior, human experience, and human environments in which the thought and action processes of the researcher are clearly specified so that they are logical, understandable, confirmable, and useful.

Five defining principles of research

- Theoretical (developing theory)
  - Propositions that present a systematic view of phenomena by specifying relations among variables with the purpose of explaining and predicting the phenomena
- Empirical
- Causal
- Probabilistic
- Nomothetic (vs. Idiographic)

Science

- Scientific method
  - Collect empirical data such that results are independent of investigator
  - Develop inferences from data that minimize subjectivity
- Differentiates
  - Observations (direct sensory experience) from
  - Inferences (inductive reasoning about observations)
    - Multiple and divergent inferences from the same observations
    - Competing interpretations & theories
    - Self-correcting process

Goals of Research

- Describe (descriptive studies)
  - Objective depiction of what is
- Understand (relational studies)
  - Relationships among variables
- Predict (causal studies)
  - Establish causality

What is a “program”?

- Any intervention, whether intentional or accidental, that influences individual behavior.
- This might seem like a very broad definition.
  - It is!
- Includes self-consciously designed programs like microcredit or food aid.
- But also includes accidental (random) events, e.g., a strike the reduces your time in school, a natural disaster that destroys crops.

Program evaluation as a paradigm

- Taking the broadest definition program evaluation is trying to understand causal processes.
- As such it is a (*the* key?) paradigm for social science research.
- One key difference: pure research requires to prior steps:
  - Framing a theory.
  - Drawing the theory toward testable implications.

Research vs evaluation research: tobacco example

Table 1. Distinguishing Principles of Research and Program Evaluation

Concept	Research Principles	Program Evaluation Principles
Planning	**Scientific method** ■ State hypothesis. ■ Collect data. ■ Analyze data. ■ Draw conclusions.	**Framework for program evaluation** ■ Engage stakeholders. ■ Describe the program. ■ Focus the evaluation design. ■ Gather credible evidence. ■ Justify conclusions. ■ Ensure use and share lessons learned.
Decision Making	**Investigator-controlled** ■ Authoritative.	**Stakeholder-controlled** ■ Collaborative.
Standards	**Validity** ■ Internal (accuracy, precision). ■ External (generalizability).	**Repeatability program evaluation standards** ■ Utility. ■ Feasibility. ■ Propriety. ■ Accuracy.

Questions, designs, data collection

Questions	**Facts** ■ Descriptions. ■ Associations. ■ Effects.	**Values** ■ Merit (i.e., quality). ■ Worth (i.e., value). ■ Significance (i.e., importance).
Design	**Isolate changes and control circumstances** ■ Narrow experimental influences. ■ Ensure stability over time. ■ Minimize context dependence. ■ Treat contextual factors as confounding (e.g., randomization, adjustment, statistical control). ■ Comparison groups are a necessity.	**Incorporate changes and account for circumstances** ■ Expand to see all domains of influence. ■ Encourage flexibility and improvement. ■ Maximize context sensitivity. ■ Treat contextual factors as essential information (e.g., system diagrams, logic models, hierarchical or ecological modeling). ■ Comparison groups are optional (and sometimes harmful).
Data Collection	**Sources** ■ Limited number (accuracy preferred). ■ Sampling strategies are critical. ■ Concern for protecting human subjects. **Indicators/Measures** ■ Quantitative. ■ Qualitative.	**Sources** ■ Multiple (triangulation preferred). ■ Sampling strategies are critical. ■ Concern for protecting human subjects, organizations, and communities. **Indicators/Measures** ■ Mixed methods (qualitative, quantitative, and integrated).

Analysis, judgments, conclusions, and uses

Table 1. Distinguishing Principles of Research and Program Evaluation *(continued)*

Concept	Research Principles	Program Evaluation Principles
Analysis & Synthesis	**Timing** ■ One-time (at the end). **Scope** ■ Focus on specific variables.	**Timing** ■ Ongoing (formative and summative). **Scope** ■ Integrate all data.
Judgments	**Implicit** ■ Attempt to remain value-free.	**Explicit** ■ Examine agreement on values. ■ State precisely whose values are used.
Conclusions	**Attribution** ■ Establish time sequence. ■ Demonstrate plausible mechanisms. ■ Control for confounding. ■ Replicate findings.	**Attribution and contribution** ■ Establish time sequence. ■ Demonstrate plausible mechanisms. ■ Account for alternative explanations. ■ Show similar effects in similar contexts.
Uses	**Disseminate to interested audiences** ■ Content and format varies to maximize comprehension.	**Feedback to stakeholders** ■ Focus on intended uses by intended users. ■ Build capacity. **Disseminate to interested audiences** ■ Content and format varies to maximize comprehension. ■ Emphasis on full disclosure. ■ Requirement for balanced assessment.

Challenge of research

- Flexibility
  - Match research methods, designs, procedures to the research questions and the circumstances
- Circumstances
  - Social phenomena are inherently inhospitable environments for research purposes (complex, political, emotionally loaded)
- Showing effects
  - Rossi's Iron Law
    - Expected value for any measured effect of a social program = 0
- Need for justification
  - Because it's there?
  - Contributes to knowledge?
  - Contributes public thinking / debate?