

# Assessment and Evaluation

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## Four Questions

1. What do you expect from this class?
2. What do you know about assessment and evaluation **now**?
3. What assessment and evaluation work are you doing now?
4. How could assessment and evaluation improve your organization?

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## Foreword

- Huge literature on assessment and evaluation
- Research: How x (educational program) affects y (learning outcomes)
- Research = Descriptive and Explanatory; Evaluation = Judgment
- Evaluation uses research designs and methods:
  - Quantitative
  - Qualitative
  - Mixed Methods
  - Comparative Analysis
- Can be controversial and political, depending on competing values
- Evaluation professionals familiar with your field can help
- This basic overview can help you work with **professionals**

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## Learning Objectives

1. Explain what is evaluation
2. Explain how assessment and evaluation are different
3. Describe the process of backwards design
4. Understand how program outcomes convey social values
5. Explain how social values serve as a basis for judgment

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## Assessment versus Evaluation

- **Assessment:** Systematic collection of data to describe something
- **Evaluation:** Applying **judgment** to determine good/bad
- Evaluation requires a policy (referent, baseline) that clearly states **what counts as good or bad** so a value judgment can be made based on this policy
- Whenever you see an “evaluation” you can ask **on what basis** the judgment was made

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## Evaluation Involves Research

- Experimental research concepts apply to evaluation:
  - **Reliability:** Will the same effects happen all the time?
  - **Validity:** Are the effects true?
    - If few subjects: **Census** (include everyone)
    - If many subjects: May need **random sample** and statistical inference
    - To increase quality: May need a **control group**

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## Evaluation Time Frames/Types

- **Ex ante:** Pre-program evaluation
- **Formative:** *Evaluation while the program is in process*
- **Summative:** *Evaluation following completion of the program*
- **Longitudinal:** Evaluation carried on during the period following completion
- **Meta-evaluation:** Evaluation of the evaluation process itself
- **Meta-analysis:** Summary of multiple study findings
- **Secondary analysis:** Re-evaluation of old data with new methods

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## What to Measure?

- Depends on what **outcomes** you want
- Determine outcomes as dimensions
  - A dimension is a *measurable characteristic* of something
- Then work backwards to determine the best intervention to achieve outcomes
- Outcomes can convey **social value** preferences
- Why do you want one outcome versus another?
- These values become the **basis** for judgment/evaluation

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## What are Examples of Social Values?

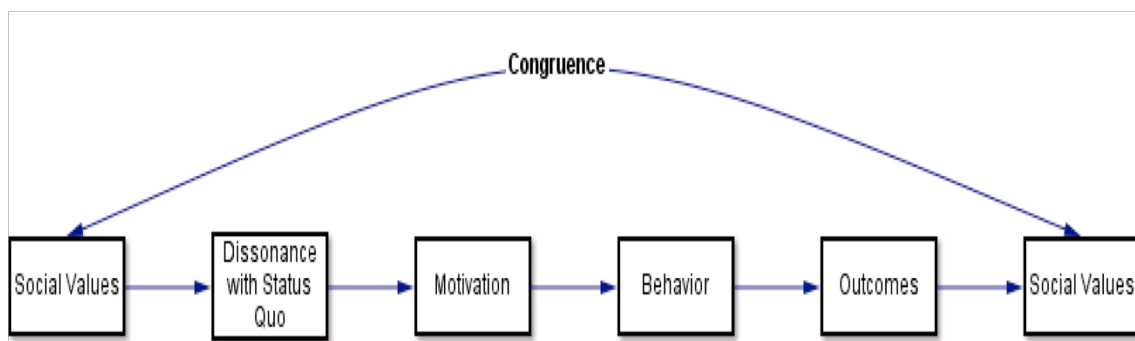
- **Fairness:** To help people in need
- **Equity:** To create equal opportunity
- **Knowledge:** To empower people through knowledge
- **Skills:** To empower people through skill building
- **Health:** To promote mental and physical well being
- **Voice:** To promote participation by those affected
- **Freedom:** To minimize barriers to free choice
- **Compassion:** To empower or care for the weak

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## Social Values in Social Entrepreneurship



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## Backward Design (Wiggins and McTighe)

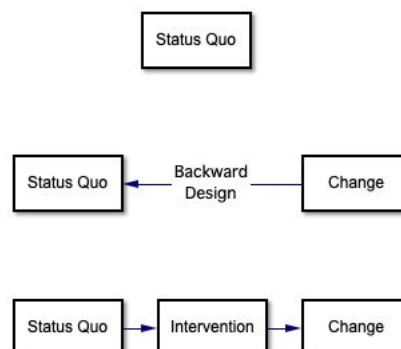
- Begins with the desired **outcomes** of a program and how to measure them (**summative** evaluation)
- Work backwards to determine what assessments will measure progress along the way (**formative** evaluation)
- Finally determine the work and content to achieve desired outcomes (your **work plan**)
- Backward design is used in:
  - **Curriculum development:** Start with what you want students to learn; work backwards to select the content and assessment that will lead to learning outcomes
  - **Trial law:** Start with what you want the jury to conclude; work backwards to put the logical elements and evidence in place that will lead to the desired verdict

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## Backward Design Model

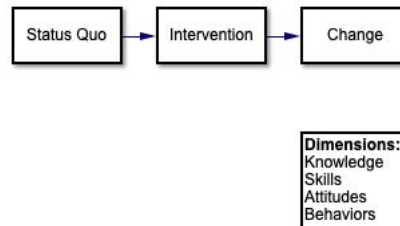


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## Outcome Dimensions to Measure



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## Experimental Designs

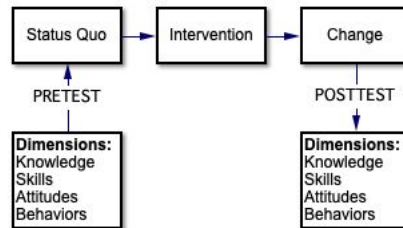
- *Experimental and Quasi-Experimental Designs*, Campbell and Stanley, 1963
  - **One Group** Pretest-Posttest: What changed from start to end?
  - **Control Group** Pretest-Posttest : Did change only apply to the experimental group?

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## Evaluation Model



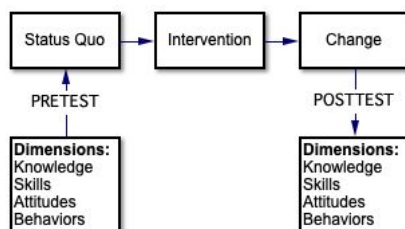
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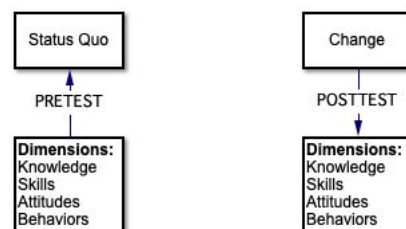
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## Comparison Model

### Experimental Group



### Control Group



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## Key Questions

- **Assessment** Question: Was there any change?
  - *Descriptive, Explanatory*
  - Resulting from the intervention
  - Not due to chance or other factors
- **Evaluation** Question: Was the change good or bad?
  - *Judgmental*
  - “Good or Bad” is determined by policy
  - The policy can be controversial

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## Ways to Collect Data

- Secondary sources – what **others** found:
  - Desk research
  - Literature search
- Primary sources – what **you** found:
  - Direct observation
  - Interviews (phone, face-to-face)
  - Focus groups
  - Paper and pencil surveys
  - Web surveys (Google surveys or forms, SurveyMonkey)

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## Methods

- Quantitative (numerical data driven, statistical analysis)
- Qualitative (interviews, surveys, observations, desk research, case studies)
- Mixed methods (use both)

## Kirkpatrick Four Levels of Evaluation

- Typically used in training programs
- Each level measures different dimensions:
  1. **Reaction:** What did the participants think of the course?
  2. **Learning:** What did they learn?
  3. **Behavior:** How did it change their behavior?
  4. **Results:** How did the result change our operation?

## Key Points

- Start with the **social values** to be achieved (judgment referents)
- Define objectives in terms of **measurable outcomes**
- Work backward to determine **assessment methods and timing**
- Select the appropriate **research design**
- Determine **internal vs. external evaluator**
- Be mindful of **Institutional Review Board (IRB)** requirements
- Get **baseline** measures
- Realistically **estimate costs**
- Get **funder approval**

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## Closing Remarks

- Using professionals makes sense
- Good evaluation is not cheap
- Credibility depends on quality
- Start designing evaluation at the beginning
- Try to anticipate how other people will respond to the results
- Educate yourself to be a good evaluation consumer:
  - Working with evaluation professionals
  - Understanding evaluation reports

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## Four Questions

1. **Reaction:** How satisfied are you with this class?
2. **Learning:** What do you know about assessment and evaluation **now**?
3. **Behavior:** How will you use assessment and evaluation?
4. **Results:** How will assessment and evaluation improve your organization?

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## Questions?

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