MATHEMATICA
Policy Research

# Types of Evaluation:
## A Basic Training

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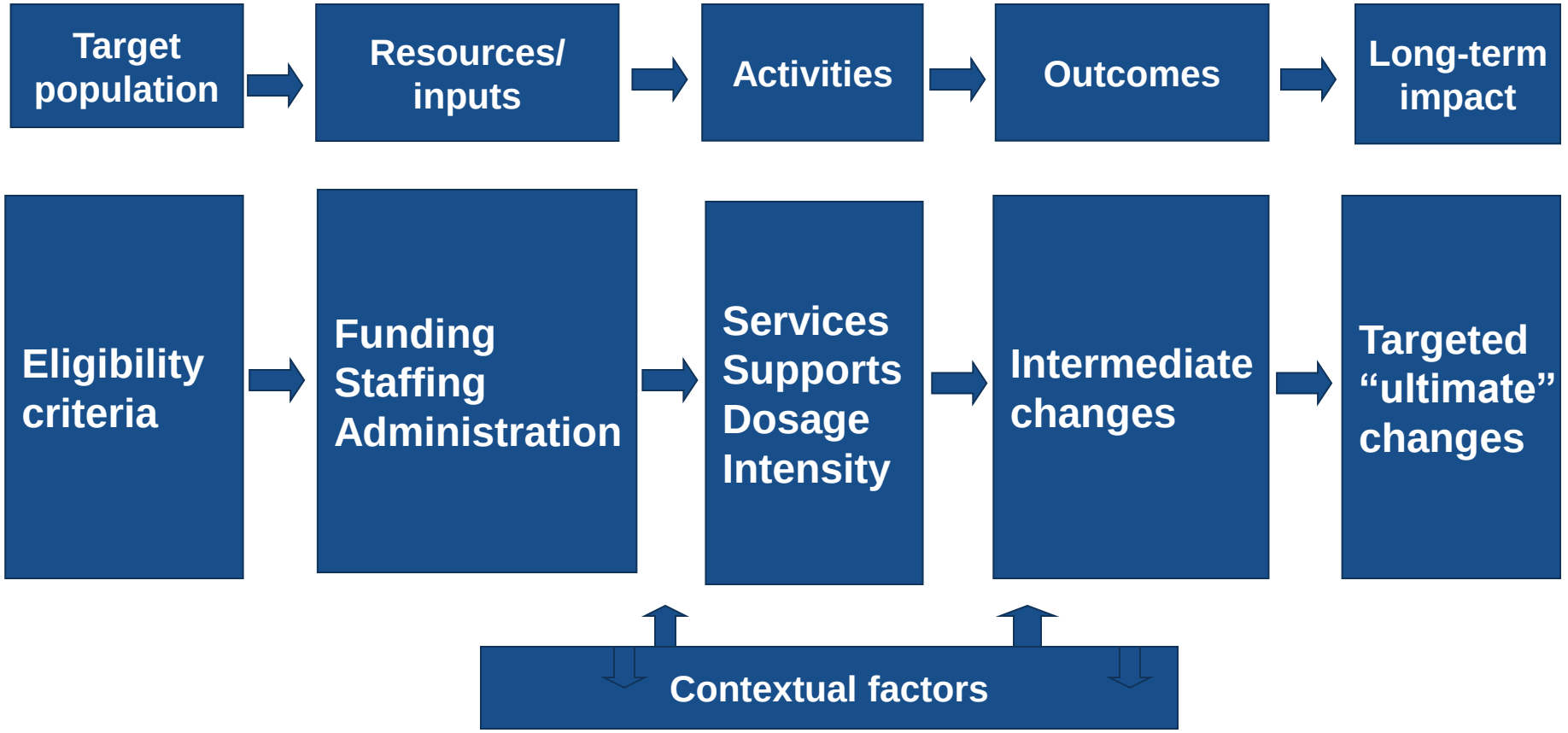
# Purpose of this training

- **Provide a basic overview of evaluation approaches**
  - **Implementation research**
  - **Outcome and impact evaluations**
    - Descriptive studies
    - Correlational studies
    - Causal studies

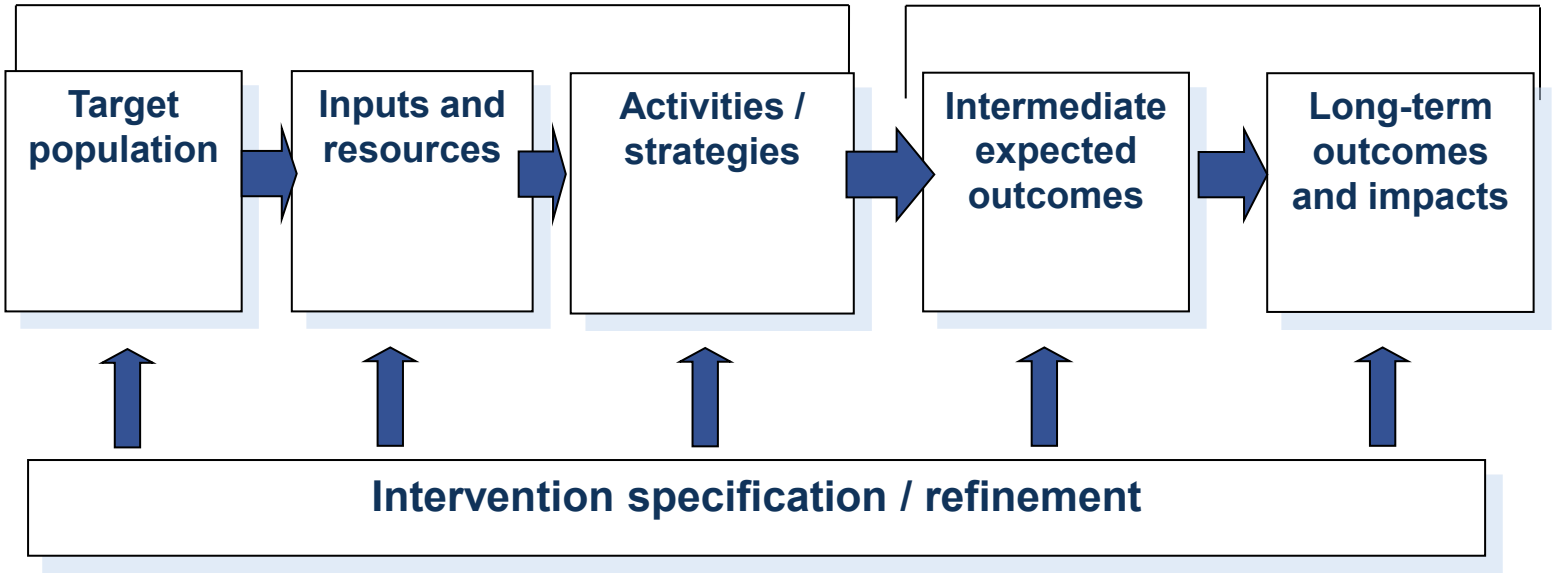
# Logic model


Target population
Resources/ inputs
Activities
Outcomes
Long-term impact
Eligibility criteria
Funding
Staffing
Administration
Services
Supports
Dosage
Intensity
Intermediate changes
Targeted "ultimate" changes
Contextual factors

# Types of evaluation

**Implementation research:**
**Feasibility and fidelity**

**Outcome and impact evaluations:**
**Monitoring outcomes and testing effectiveness**



# Implementation research

- Purposes
  - Assess feasibility and replicability
  - Identify activities in need of refinement
  - Hypothesis formation
  - Assess fidelity to program model
  - Measure activities
- Common methods
  - Document reviews
  - Case studies
  - Focus groups

# Outcome and impact evaluations

- Three general categories
  - Descriptive
  - Correlational
  - Causal

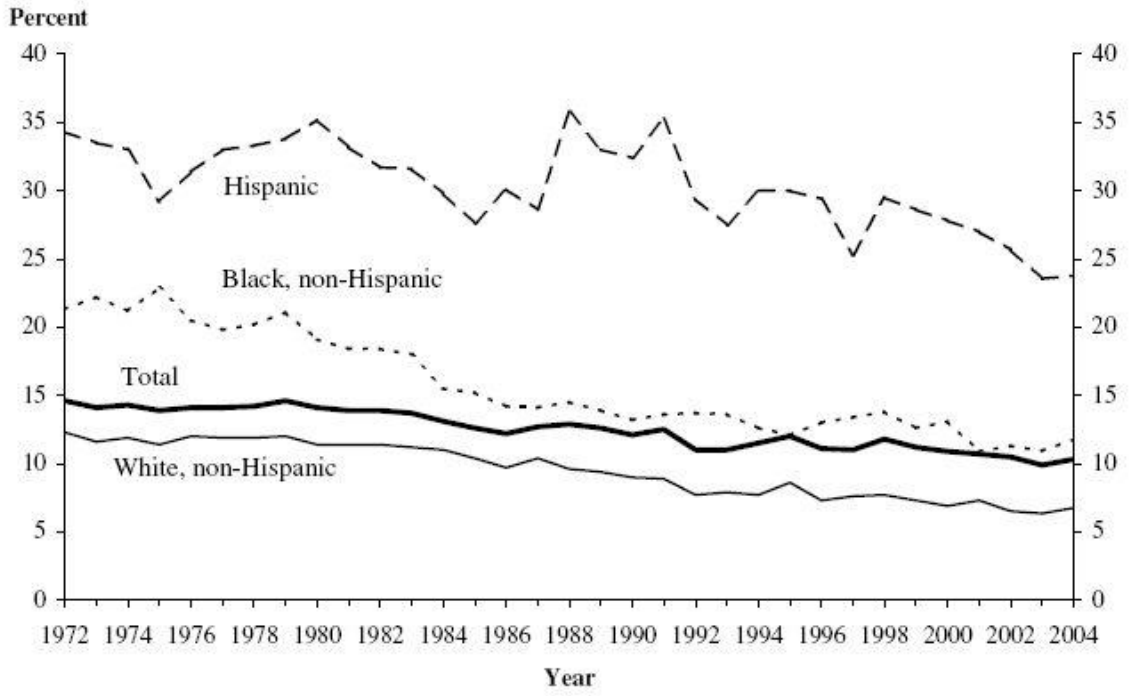
- Differences
  - Describing and monitoring program progress versus assessing effectiveness
  - Use of a comparison group and how the comparison group is formed

# Descriptive studies

- Purposes
  - Describe characteristics of the target population and program participants
  - Examine outcomes over time for population or program participants
- Limitations
  - Purely descriptive; does not assess effectiveness
  - No comparison group

# Example of descriptive analysis

**Figure 2. Status dropout rates of 16- through 24-year-olds, by race/ethnicity: October 1972 through October 2004**




- Describes conditions
- Establishes patterns
- Helps refine hypotheses about possible solutions

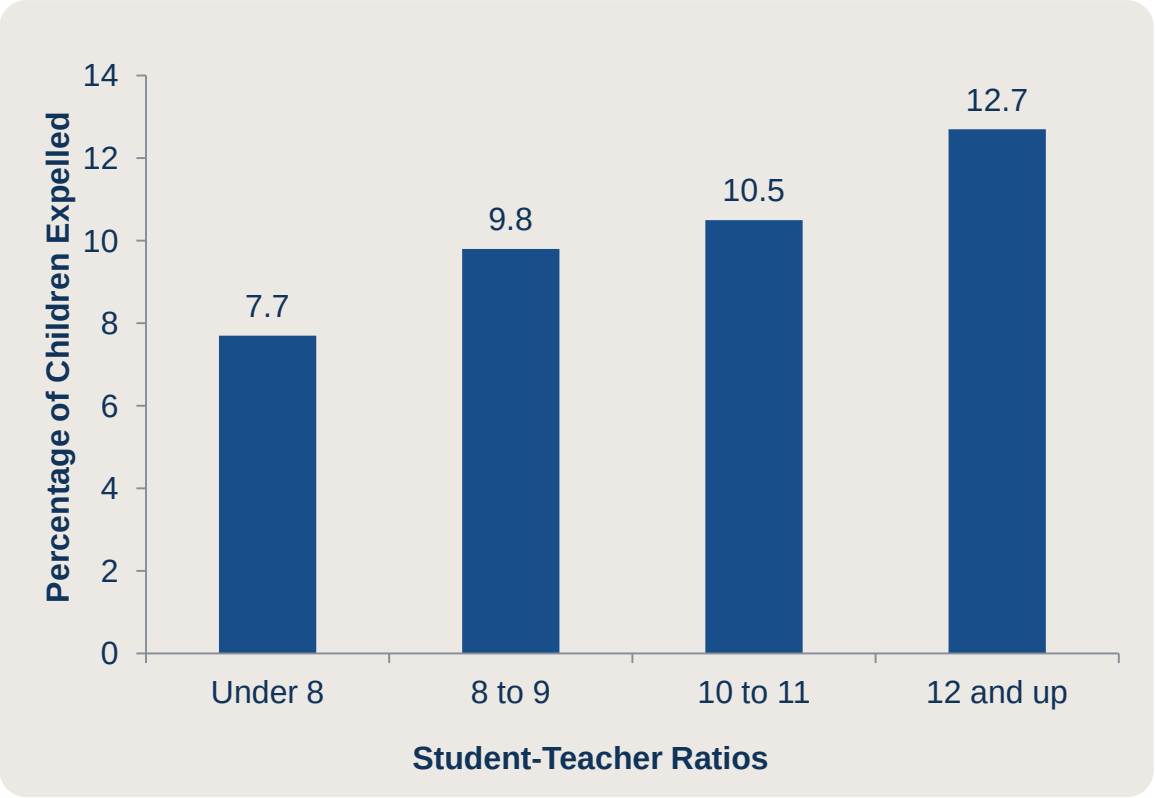
Source: National Center for Education Statistics 2008.

# Correlational studies

- Purposes
  - Describe outcomes of different groups or different conditions
  - Identify associations between conditions and outcomes
  - Hypothesis refinement
  - Indicator of readiness to test hypotheses
- Common methods
  - Pre-post  analysis using administrative and/or survey data
  - Multivariate analyses
- Limitations and pitfalls
  - Cannot demonstrate causal relationship
  - Often misinterpreted and used to demonstrate success

# Example of correlational analysis

**Expulsion increases with student-teacher ratios**

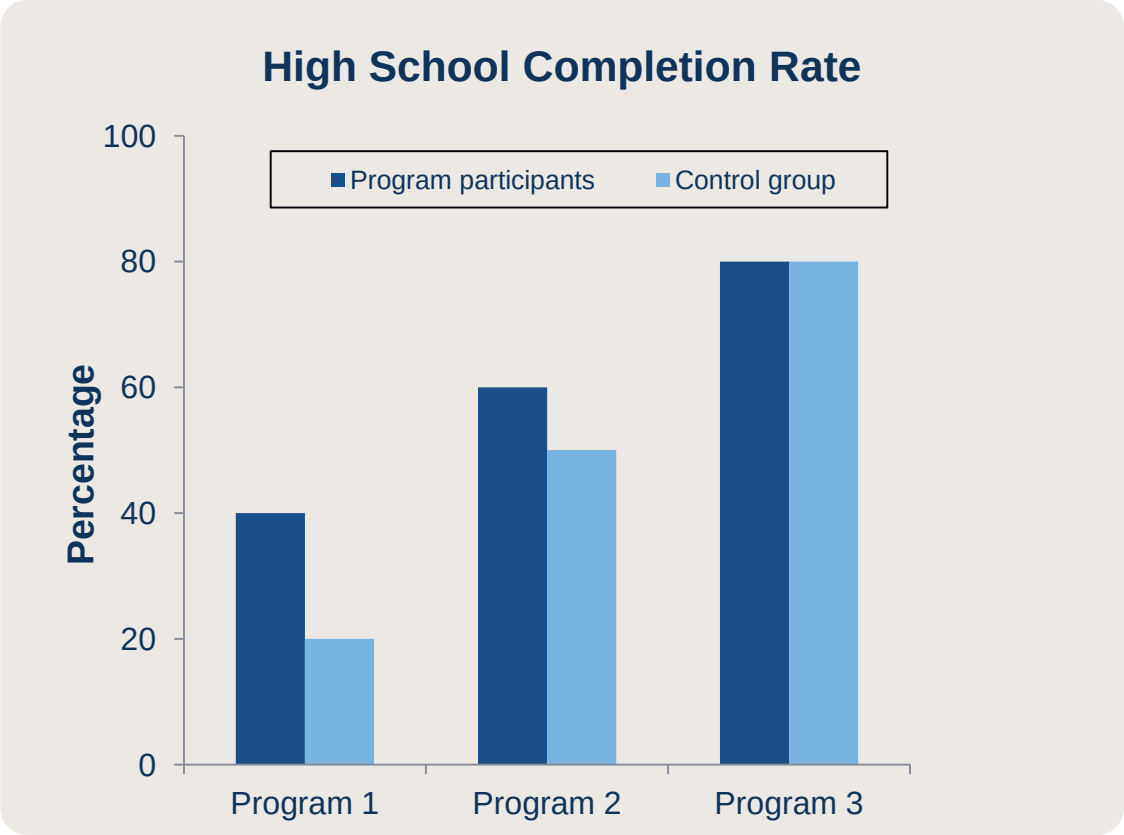



- Describes pattern of outcomes
- Identifies association between conditions and outcomes
- Helps refine hypotheses without establishing causality

# Causal studies

- **Purpose**
  - **ONLY way to determine effectiveness—did it work?**
    - Compare treatment and control groups that are the same before implementation
    - Able to assess what would have happened in the absence of the intervention
- **Methods**
  - **Random assignment**
  - **Quasi-experimental**

# Example of causal analysis




- Describes outcomes for participants and control group
- Identifies causal relationship between participation and outcomes

# Six questions for choosing an evaluation approach

1. What is the purpose and who is the audience?
2. What is the project trying to accomplish?  How?
3. What are the research questions?
4. What types and sources of data can address each research question?
5. What is the evaluation budget?
6. When do we need the findings?