

# Evaluation of Intervention Programs for Low-Income Students and Students of Color

Florida Statewide Achieving the Dream Meeting

Tampa, Florida  
October 19, 2005

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# What Should Be Evaluated and Why Bother?

- Program structure
  - This evaluates the inputs into the program
    - Looks at funding, staffing, other resource allocations
- Program processes
  - Looks at the execution of programmatic elements
  - How have they worked, how were they received
- Program outcomes
  - Describes the extent to which program objectives were achieved by the program

# At the “End of the Day”

- Ask the Question: “What is generalizable about my program?”
  - How can you describe what you’ve done in a way that others can understand it?
  - Is it portable?
  - Are there factors to suggest that it won’t work anywhere else? If so, what are they?

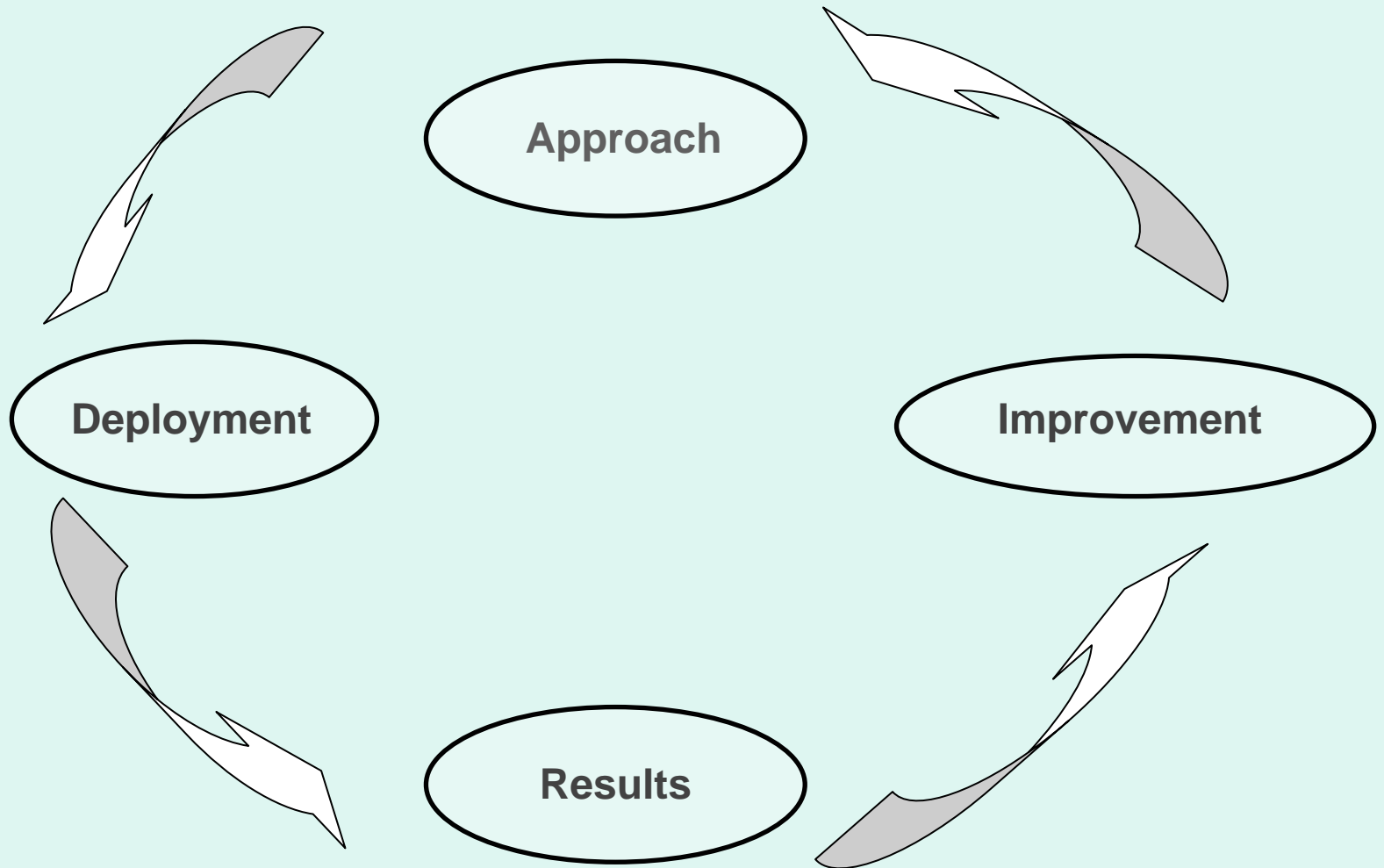
# Evaluation Steps

- Determine outcomes to measure
- Design assessments to measure those outcomes
- Determine the purpose for the assessment
- Determine the kind of assessment data you need to collect
- Design learning events based upon learning outcomes
- Measure those outcomes using quantitative and qualitative techniques

# Student Outcomes for Achieving the Dream

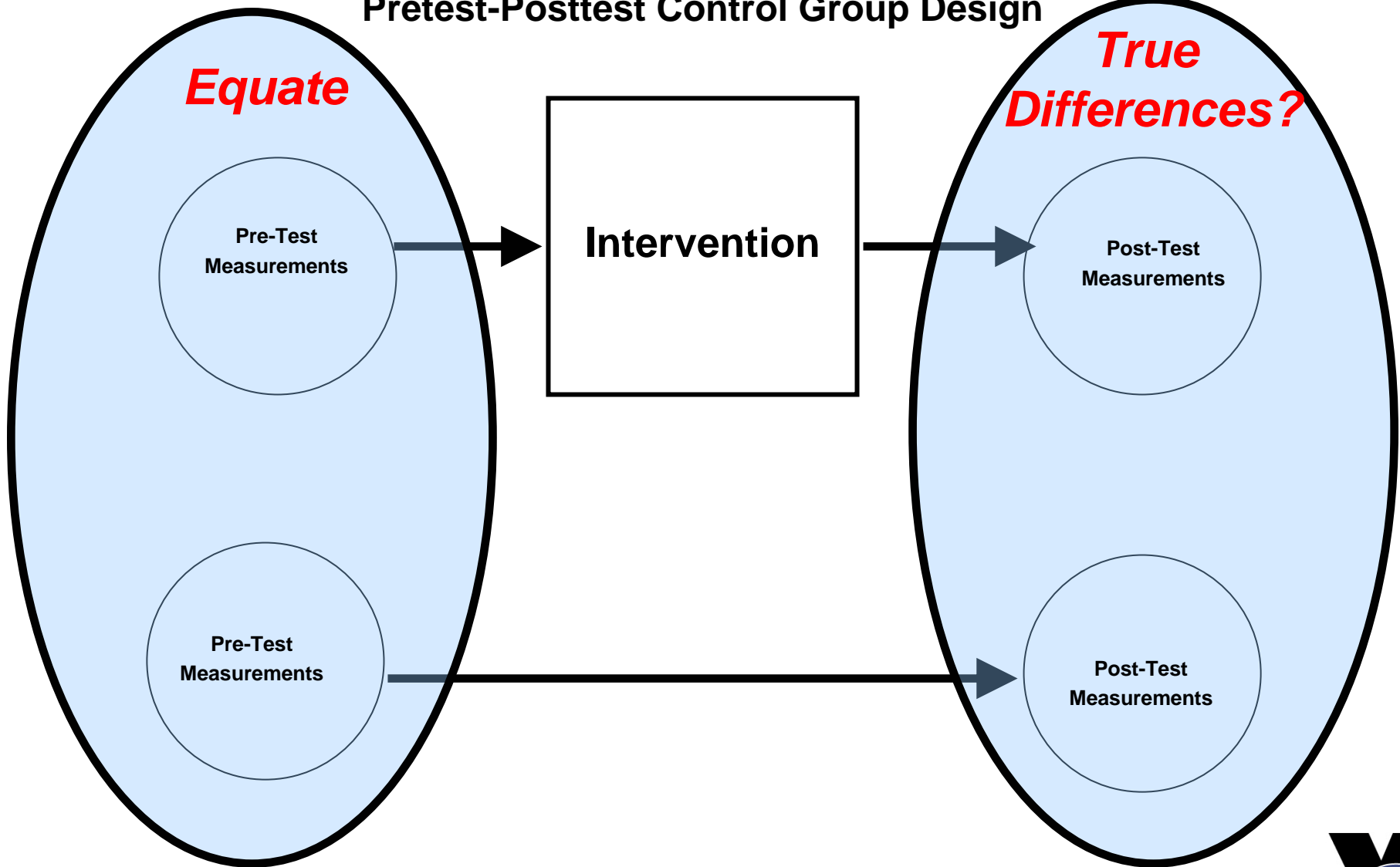
- Successfully complete developmental courses and progress to credit-bearing courses;
- Enroll in and successfully complete gatekeeper courses;
- Complete the courses they take, with a grade of C or higher;
- Re-enroll from one semester to the next; and
- Earn certificates and degrees.

# A Conceptual Quality Framework (ADRI)



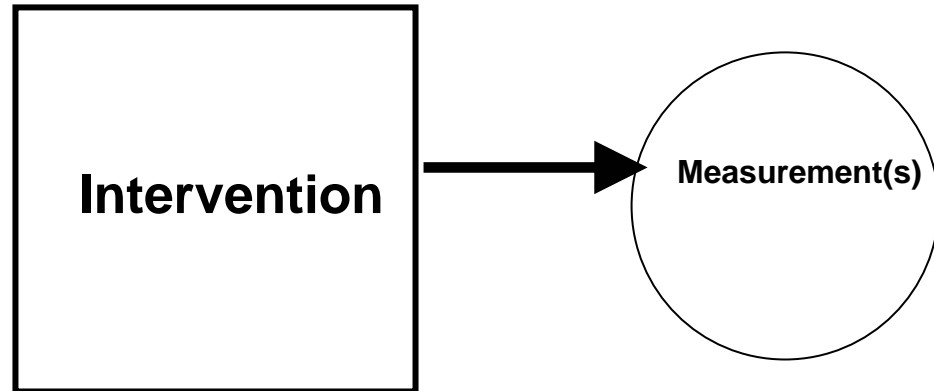
# True Experimental Design

## Pretest-Posttest Control Group Design



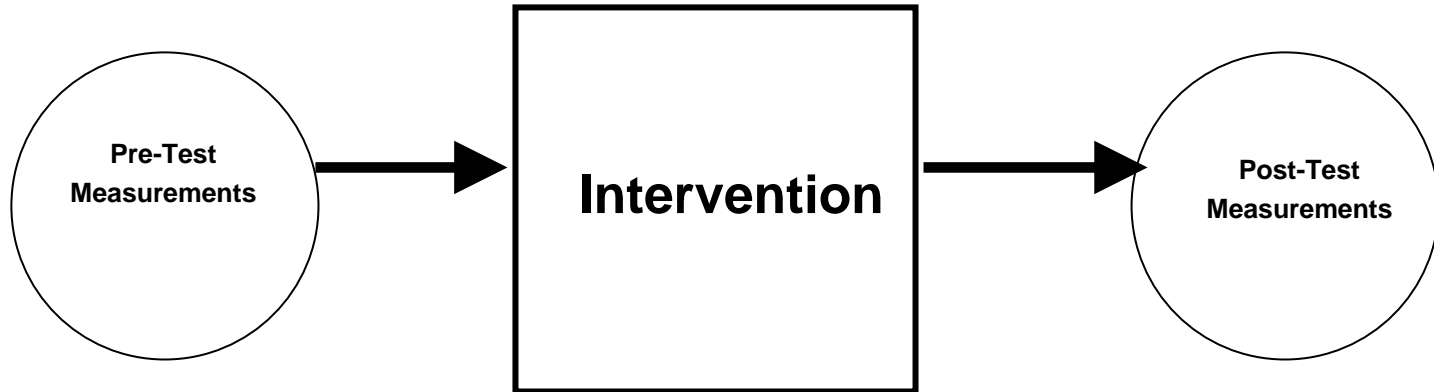
# Pre-Experimental Design

## One Shot Case Study



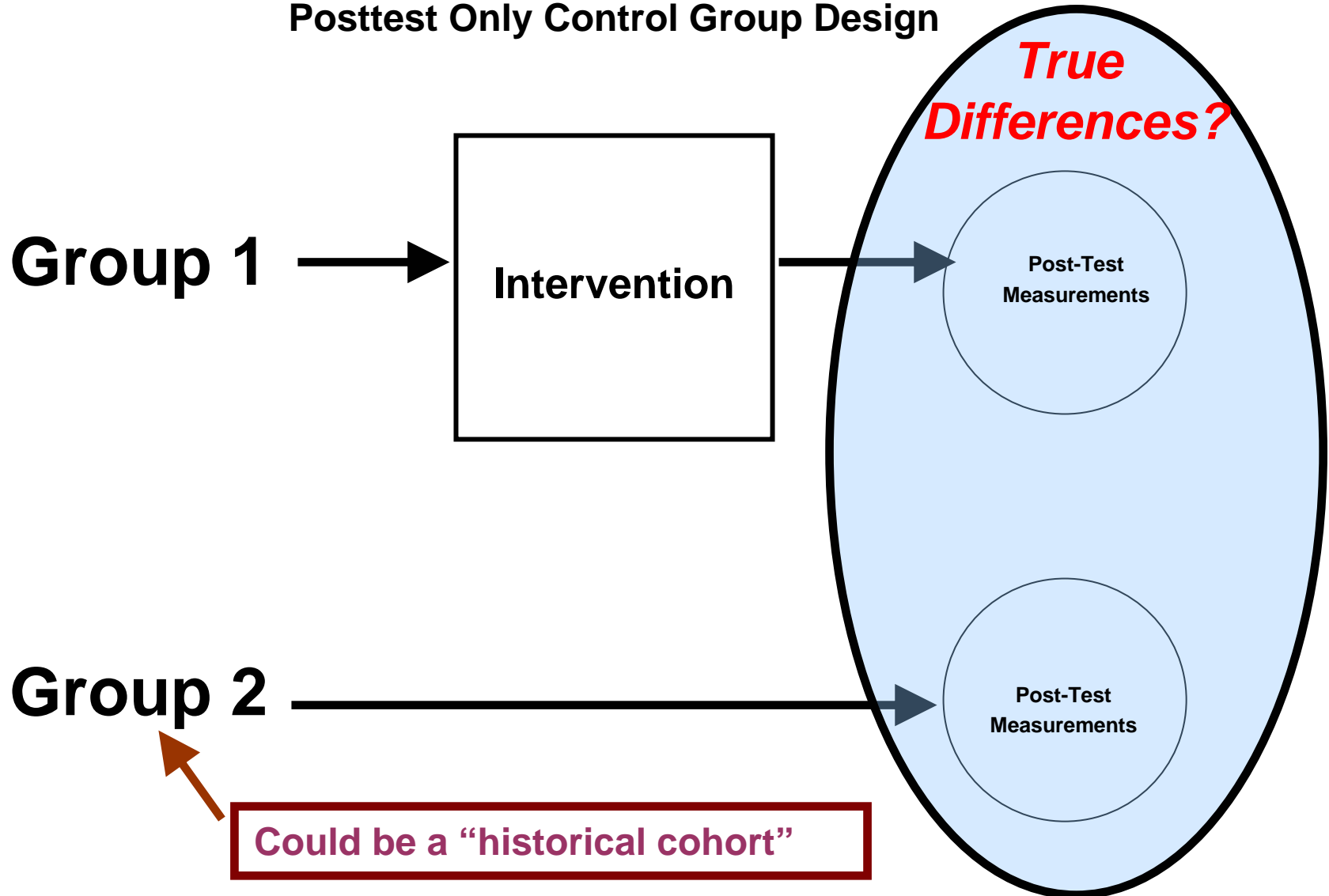
# Pre-Experimental Design

## One Group Pretest-Posttest Design



# Quasi-Experimental Design

## Posttest Only Control Group Design



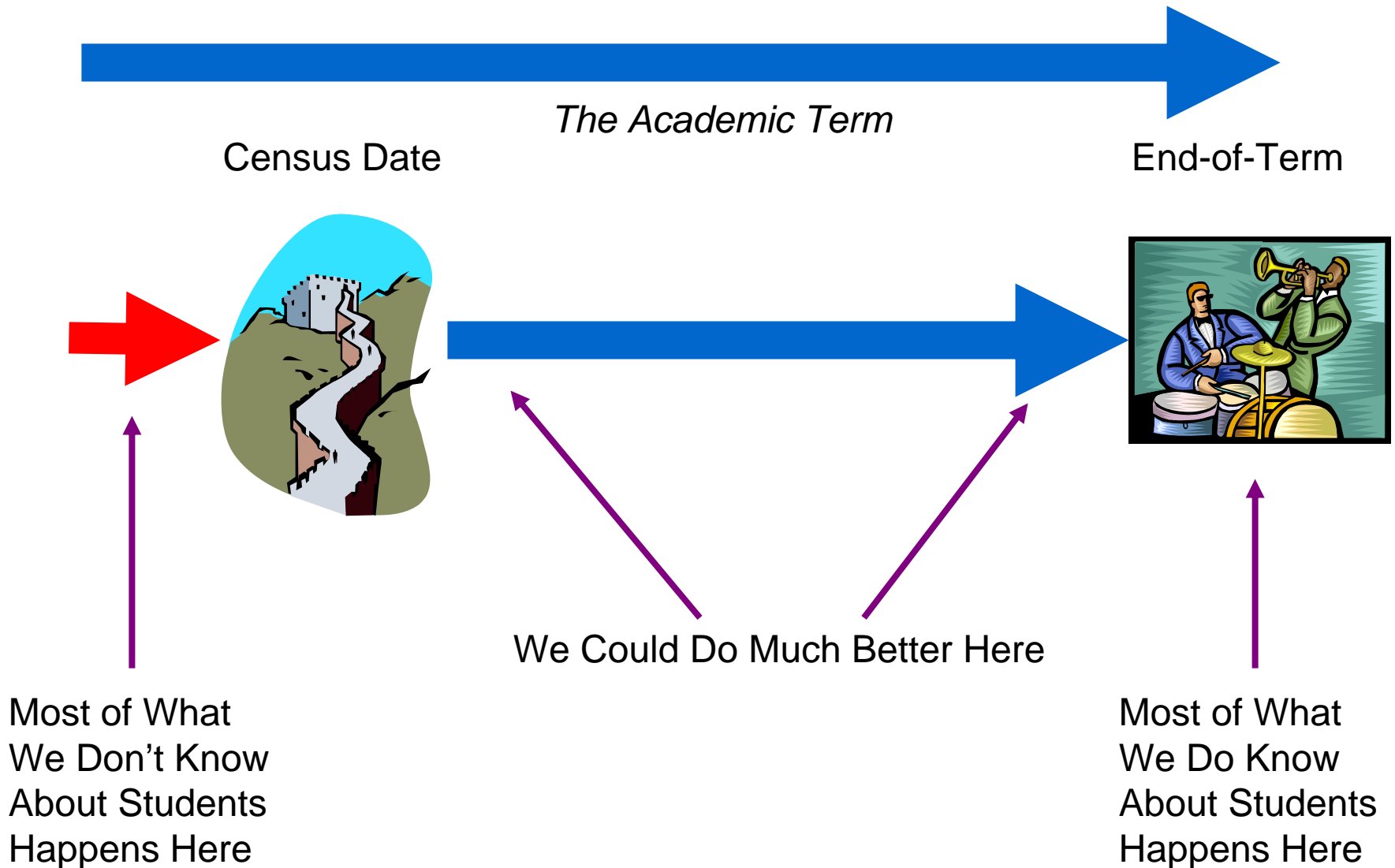
# What Causes What?

- To really show that there is a causal relationship, you have to simultaneously address the two propositions:
  - If X, then Y
  - and
  - If *not* X, then *not* Y
- Or, in plain English:
  - If the program is given, then the outcome occurs
  - and
  - If the program is *not* given, then the outcome does *not* occur

# There Are Always Barriers



# Academic Terms, Administrative Data Systems, and What We Know About Students



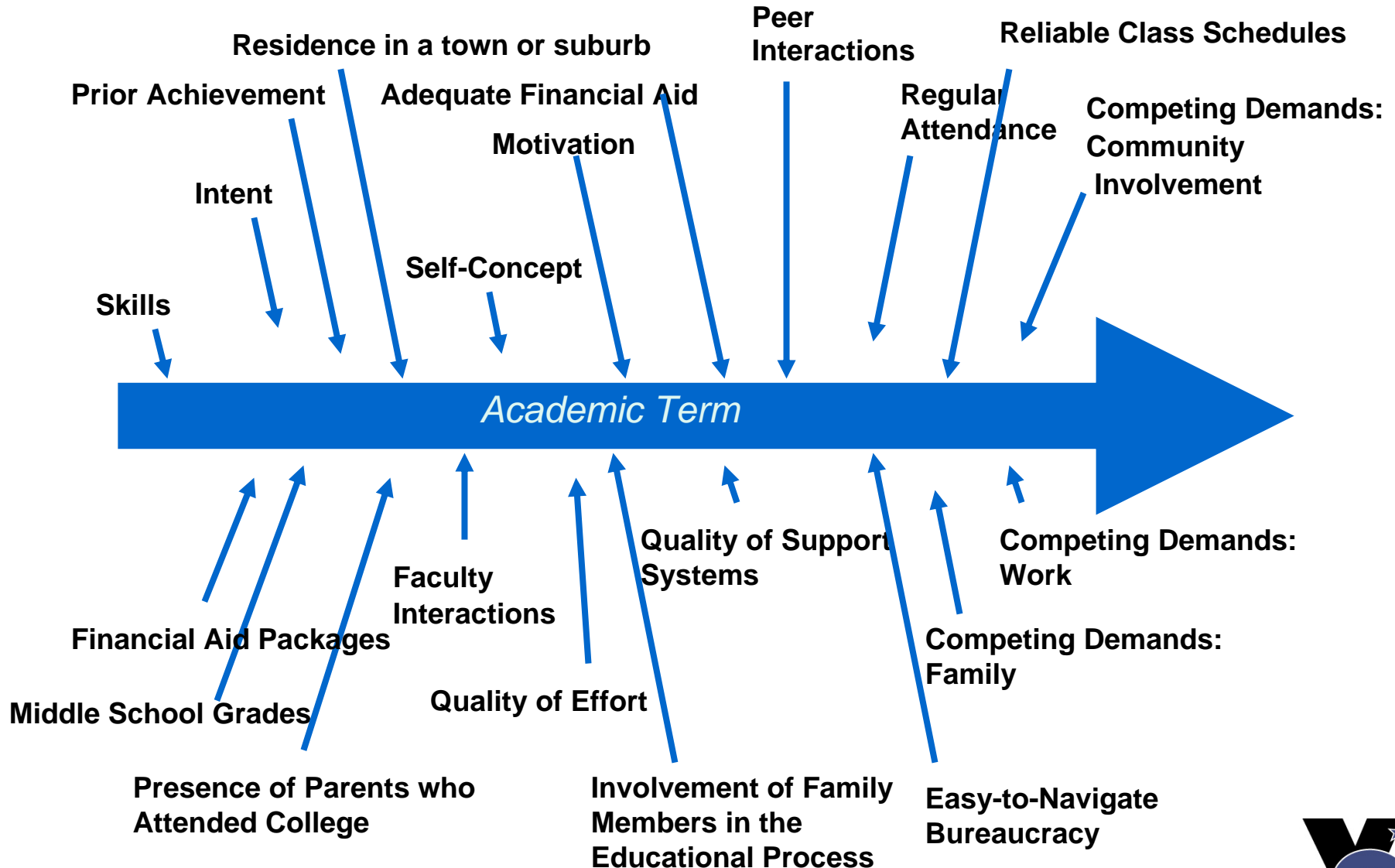
# Business As Usual

- Most administrative student data systems will provide baseline information about program effectiveness
- They won't, however, give you much more than the basics
- They are incapable of providing either early measures of success or rich detail
- At most they'll produce fractions, for example:

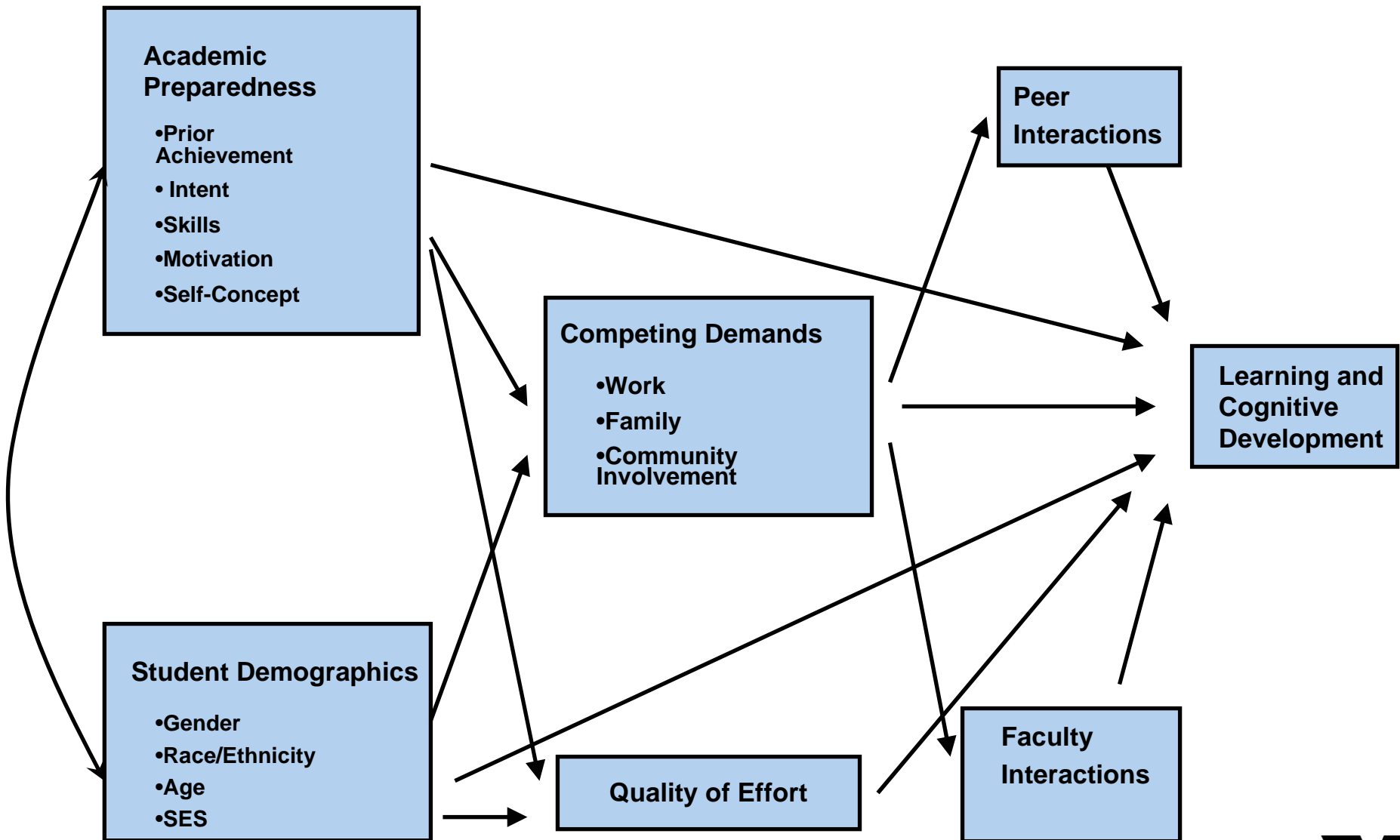
$$\frac{42 \text{ Finished}}{100 \text{ Students Started}} = 42\% \text{ Success Rate}$$



# Pre-college and Early Indicators of Success for Low-Income Students



# A Community College Success Model



## Prior to Enrollment

### Academic Preparedness

- Prior Achievement
- Intent
- Skills
- Motivation
- Self-Concept

### Student Demographics

- Gender
- Race/Ethnicity
- Age
- SES

## While Enrolled

### Competing Demands

- Work
- Family
- Community Involvement

### Quality of Effort

### Peer Interactions

### Faculty Interactions

## Outcome

### Learning and Cognitive Development



# Evaluation Pointers

- Developing measures is not straight forward for some but they should be
  - Grade-Point Average is not usually desirable as posttest measures because it is not as sensitive to the treatment (intervention) as a measure specifically appropriate in content and timing (Campbell and Stanley, 1963)
- Specification of competencies can pay dividends for vertical articulation of programs
- Selecting measures (instruments) should be driven by the program and its targets/objectives.
- Don't use an instrument if it does not match desired outcomes

# Evaluation Pointers

- Don't wait until the end to evaluate your program (summative). Engage in identifying early indicators of success and measure them often (formative).
- Use both qualitative as well as quantitative data
- Qualitative techniques include focus groups of students, faculty, and administrators. Journaling (on-line or otherwise) can also capture change as it occurs.
- Structure your evaluation so that it institutionalizes a culture of evidence and informs strategic planning. Link it to budgeting and resource allocation decisions.

# Sources

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Presentation Available at:

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Thank you very much!

