

## Research Design Session

### Phase 1 –Goal Success Measures (Independent Variables) - Definitions & Options

- The Research Cycle    • Metric Definitions    • Example: Honors Program Completion Study

Measure & Options	Course Sequence	Support	Student Preparation	Special Populations	Group Exercise Match Metric with Focus Area
Course Completion		X			
• Successful Completion (A, B, C, P) with W in Denominator					
• Successful Completion (A, B, C, P) without W in Denominator					
• Course Retention: ABCDFPNP / ABCDFPNPW					
• Successful Completion After Multiple Attempts					
Basic Skills: Reading, English, ESL, Math: credit & noncredit	X	X	X		
• Successful Course Completion					
• Enrolled in Next Course					
• Successful Completion of Next Course					
• College Ready (Meet Prereq for Math 71 & English 1A)					
• Transition from Noncredit to Credit					
Transfer		X			
• Actual Transfer with 60 units					
• Actual Transfer with <60 units					
• Transfer Ready (60/2.0 + Pass Transfer Math or English)					
• Transfer Ready (60 + Golden 4 <sup>1</sup> )					
Degree Completion	X	X	X		
• Associate					
• Certificate 18 units or more					
• Certificate 17 units or less					
• Noncredit					
Access				X	
• Mt. SAC Enrollment as % of District Adult Population					
• Mt. SAC Enrollment as % of District 19-64 Population					
• By Priority Registration Status					
• Access to Specific Program					

<sup>1</sup> 1) Oral Communication, 2) Critical Thinking, 3) Math/Quantitative Reasoning, 4) Written Communication

## Phase 2 – Disproportionate Impact: The Five Equity Demographic Areas

- How to Calculate the 80% Rule; How to Calculate Proportionality
- Sample Data on Disproportional Impact on the Five Equity Areas
- Group Exercise: Proportionality or 80% Rule PLUS basis groups as ALL or DOMINANT

## Phase 3 – Creating the Research Question: Stating the Dependent Variable

- Group Exercises: Writing the Research Question; Combining Issues; Extending Research

<b>Independent Variable (Stands Alone; Input)</b>	<b>Dependent Variable (Something that depends on Other Factors; Output)</b>
<b>Course Sequence</b>	
Basic Skills	Taking Basic Skills Early
	Effect of Entering at Lowest Basic Skills Level
	Effect of Basic Skills Stop Out
Course Completion	Program Path or Random
	Program Prerequisite
	Student Awareness and Understanding (Number of Courses Needed in a Program)
<b>Support</b>	
Basic Skills	Participation in Orientation
	Academic Readiness
	Motivation & Connectedness
Course Completion	Online Tutoring
	Extent of Support Service Use: Tutoring, Counseling etc.
Degree Completion	Completing Program but Not Degree
	Support Incorporated with Instruction
Transfer	Accessing Learning Support: Tutoring, etc.
	Accessing Counseling Early
	Use of Feedback on Transfer Progress: MAP, etc.
<b>Student Preparation</b>	
Basic Skills	Curriculum Alignment Between Levels
	High School Preparation in Basic Skills
Degree Completion	Low Student Expectations Upon Entry
	Not Prepared Academically
<b>Special Populations</b>	
Access	Registration Priority
	Access to Technology
	Outreach/College Awareness in the District Communities

## Phase 4: Characteristics of “Successful Students” and of “Unsuccessful Students”

- Group Exercise: Intuition on characteristics “cuts” of data to define the two student groups

### Student Characteristics

MIS Data Elements: Student Basic, Student Success Data Elements, Special Population  
Local: ACES, ARISE, etc.

### Population Sample Characteristics

Cohort or Snapshot?      Day or Evening Section?      Adjunct or Fulltime Faculty?  
Su, Fa, Wi, Sp Term?      In Person or Online Course?      Division & Department of Course/Program?

- Group Exercise: Do group characteristics lead to actionable intervention strategy or is qualitative research needed to define the “why?”