# Assessment: There's More to Research than Data Collection

IR's Role in Assessment

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### **Function Levels of Institutional Research**

#### Research

Assessment
Planning
Special Studies

#### **Data Restructure and Reporting**

Tailored Reports
Basic Statistical Analysis

#### **Data Collection and Management**

Databases (Campus & National)
Survey Administration

### Assessment

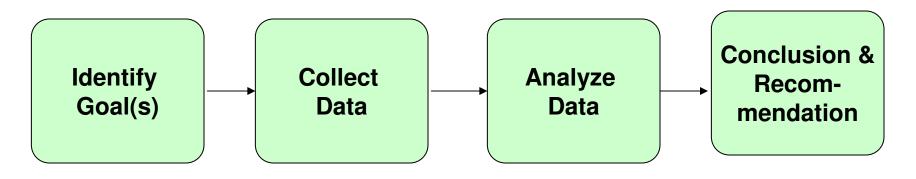


- Identify the goal of a program/curriculum
- Collect evaluative information related to the goals
- Analyze and interpret data
- Make a judgment and make recommendations to decision makers

(Worthen and Sanders, 1988)



# Assessment Process





# Identify the Goals of the Program

### General Goals

### Learning Community

To assist students in making meaningful connections and forming supportive relationships with students and faculty.

### First-year Seminars

To provide students with an introduction to the nature and meaning of higher education and to the functions and resources of the University.

### Equity Program

To improve access and retention of low-income and educationally disadvantaged students.

# **Data Collection**



- > Enrollment
- Academic Status
- Academic Performance
- Academic Background



- Learning Communities Survey
- First-year Seminar Survey



### Measurements

- Enrollment Trend Analysis
  - Number of Participants
  - Program Participation rate
- Comparison Analysis
  - First-term/First-year GPA
  - > First-term/First-year Passing Rate
  - > First-year Retention Rate
  - High School GPA
  - > SAT Composition



# Methodology



- > Participants
- > Non-participants
- Statistical Analysis
  - Independent Samples T-Test
  - Chi-Square Test



# **Enrollment Trend I**

### Program Enrollment (2005-2006)

	Learning Communities		Freshman Seminars		<b>Both Programs</b>
	Fall 2005	Fall 2006	Fall 2005	Fall 2006	Fall 2006
Section Enrollment	449	550	737	980	392
Sections Offered	21	25	45	57	-
Total First- time Freshmen	2,520	2,655	2,520	2,655	2,655
% of Participants	17.80%	20.70%	29.20%	36.90%	14.60%

# **Enrollment Trend II**

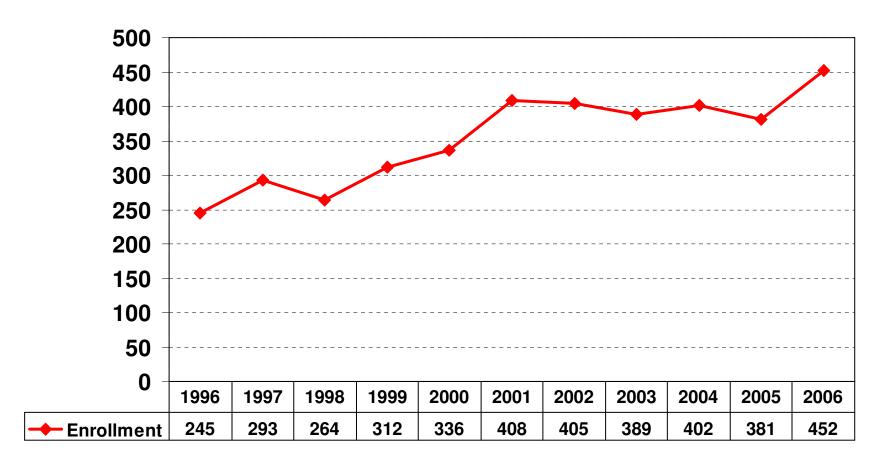
#### **EOP Program**

Semester	All FTF	Participation Rate	EOP Enrollment	% change
F-96	1523	16.1%	245	
F-97	1473	19.9%	293	19.6%
F-98	1568	16.8%	264	-9.9%
F-99	1830	17.0%	312	18.2%
F-00	2155	15.6%	336	7.7%
F-01	2415	16.9%	408	21.4%
F-02	2506	16.2%	405	-0.7%
F-03	2445	15.9%	389	-4.0%
F-04	2342	17.2%	402	3.3%
F-05	2520	15.1%	381	-5.2%
F-06	2655	17.0%	452	18.6%
Max		19.9%	452	21.4%
Min		15.1%	245	-9.9%
Mean		16.7%	353	



# Enrollment Trend II (Con't)

#### **EOP Enrollment Trend**



# Academic Performance I

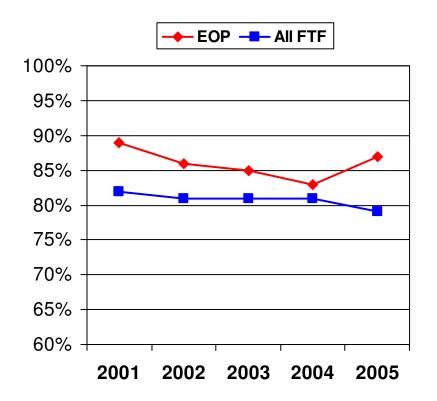
#### **Learning Community and First-year Seminars (Fall 2006)**

	LCOM Participants	LCOM Non- participants	Freshman Seminar Participants	Freshman Seminar Non- participants
Average Term GPA	2.9**	2.7	2.8**	2.6
Good Standing Rate	84.5%**	74.7%	83.1%**	70.6%
Fall to Spring Retention Rate	94.5%*	91.1%	93.9%**	89.8%

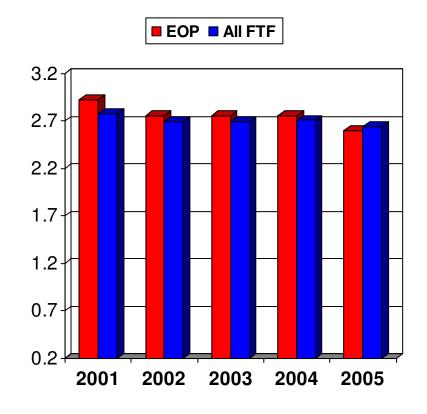
<sup>\*</sup>p< 0.05, \*\*p< 0.01

# Academic Performance II

### Good Standing Rate of EOP vs. All First-time Freshmen

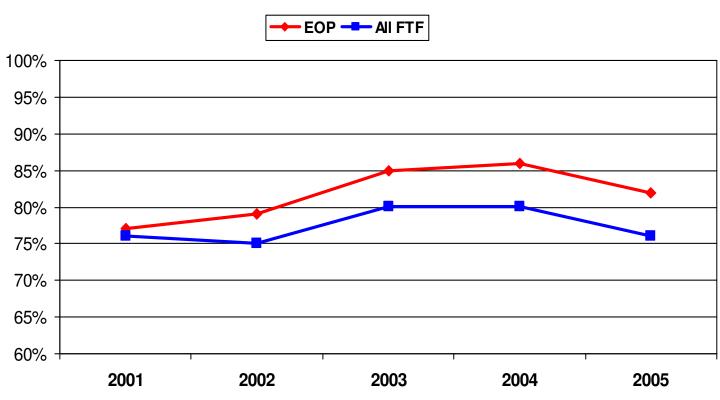


### First Year GPA of EOP vs. All First-time Freshmen



# Academic Performance III

# Second-year Retention Rate of EOP VS. All First-time Freshmen



# Academic Background I

#### **Academic Background of LCOM and Freshmen Seminar Cohort (2006)**

	LCOM Participants	LCOM Non- participants	Freshman Seminar Participants	Freshman Seminar Non- participants
Average High School GPA	3.25**	3.17	3.19	3.21
SAT Composition Scores	1,015**	942	975	976

<sup>\*\*</sup>p< 0.001

# Academic Background II

#### **Academic Background of EOP Cohort (2006)**

	HS GPA	SAT Comp	College GPA	Good Standing
EOP	3.1**	820**	2.7	87%**
Non-EOP Participants	3.2	997	2.6	77%
T-test or Chi-Square	Lower	Lower	No difference	Higher

<sup>\*\*</sup>p< 0.001

# Survey Results: Learning Communities

- Helped their transition from high school to Sac State (72.3%)
- Encouraged their academic interaction and social interaction with their classmates in the classroom (84.7% and 84.3% respectively)
- Felt greater classroom comfort in their Learning Communities courses (79.5%)
- Provided them with more opportunities for collaborative and cooperative learning experiences (75.8%)

# Survey Results: First-year Seminars

The following are the top five outcomes of participation in a Freshman Seminar which students either strongly agree or agree with:

- "I have a better understanding of the qualities of an educated person" (88%)
- "I have a better understanding of the value of general education" (87%)
- "I take more responsibility for my own learning and education" (86%)
- "I have a better understanding of how external factors influence my development & behavior" (86%)
- "I am better able to see the relationship between education and personal development" (86%).

### Discussion and Recommendation Enrollment I

### Learning Communities:

- Offered 6 more sessions
- Total enrollment increased by 21%
- The participation rate increased by 3%

### First-year Seminars:

- Offered 12 more sessions
- Total enrollment increased by 33%
- The participation rate increased by 8%
- The best\* way to recruit more students to participate in programs such as these (among all evaluated recruiting efforts) is through the orientation process.
  - \*based on the LCOM & First-year Seminar survey results

### Discussion and Recommendation Enrollment II

- Program enrollment has gradually expanded although there have been downturns. It is necessary to investigate the reasons why the enrollment decreased during those years and then determine how to improve the recruiting process.
- Participation rates, as relevant to EOP, may need to be re-examined since we currently do not have sufficient data to be able to identify their target group. As their participation rates are subject to the availability of their target group, we would need to know how many students met their specific criteria in order to discern their true participation rates.

# Discussion and Recommendation (Cont.) Academic Performance

#### Results:

### **Learning Communities:**

- Higher First-term GPA
- Higher First-term Passing Rate
- Higher Fall-to-Spring Retention Rate

### First-year Seminars:

- Higher First-term GPA
- Higher First-term Passing Rate
- Higher Fall-to-Spring Retention Rate

#### Reasons:

- Value of college Education
- Cooperative learning
- Social interaction
- Personal responsibilities

## Discussion and Recommendation (Cont.)

- Participants of Learning Communities, as a group, generally come from stronger academic backgrounds in terms of their high school GPA's and combined SAT scores. Even if we exclude all participants of Equity Programs from this group, they would still represent the upper end of the spectrum in terms of their academic backgrounds. Consequently, these factors should be taken into consideration when evaluating the contributions of Learning Communities to the academic performance of their participants.
- In contrast, participants of Freshman Seminars had the same level of high school GPA and combined SAT scores as Non-participants but achieved higher academic performance and retention rates than their peers.
- Therefore, both Learning Communities and Freshman Seminars appear to have made a significant contribution to the success of their participants during their first semester of college and beyond (based on statistical analyses, as well as student perception).

# Discussion and Recommendation (Cont.)

The EOP program helps students who often come from low-income educationally disadvantaged communities to not only stay in college but also to make significant progress in terms of their academic performance during their first year.

- The second-year retention rate for EOP participants has been consistently higher than that of all other First-time Freshmen for the past four years.
- EOP participants have also made great progress toward achieving the same level of academic performance as Non-EOP participants in terms of their average GPA's.
- Moreover, they often attained a higher rate of good standing than their peers who come from much stronger academic backgrounds.

# Functions of Assessment Reports

- Present data in a meaningful manner
- Provide solid data and supply analysis to the directors of those programs
- Help them to understand the strengths and weaknesses of their programs
- Assist their decision making with regard to planning, budget and performance and help them to set priorities
- Discuss results with them to facilitate an understanding of the findings and their meaning

# Data Report vs. Assessment Report

### Data Report

- Enrollment numbers
- Participation rate
- First-year GPA
- First-year passing rate
- Second-year retention rate
- Historical data (5 or 10 years in length)

### Assessment Report

- All the data on the left, plus
- Trend analysis
- Comparison analysis
- Academic background analysis
- Survey results analysis
- Discussion of findings
- Recommendations

