# COMPREHENSIVE PROGRAM REVIEW: CONNECTING PROGRAM COSTS TO COMPLETION OUTCOMES

PATTY QUIÑONES, PHD – RESEARCH ANALYST

SEAN MALONE – RESEARCH ANALYST



### **PRESENTATION TOPICS**

- A brief summary of PCC Pathways Program
- Pathways Program Evaluation Outcomes
- Pathways Cost-Effectiveness Study

### FIRST YEAR PATHWAYS PROGRAM AT PCC

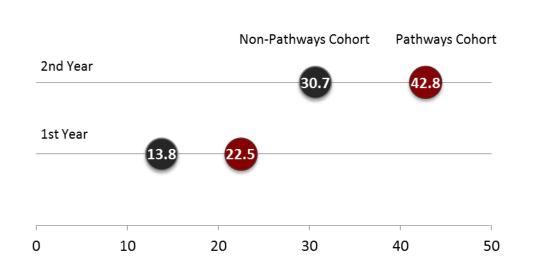
### **Mission Statement**

The mission of the PCC Pathways Program is to help students identify and achieve their academic goals in a timely manner, while addressing and closing equity gaps.

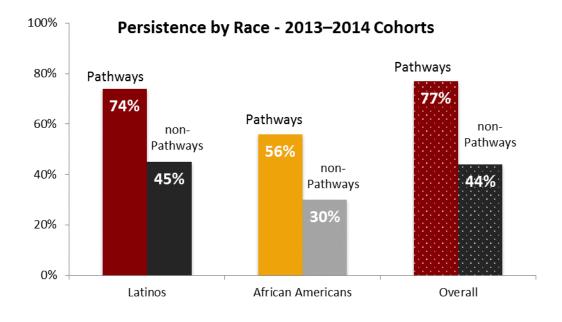
### ESSENTIAL PATHWAY COMPONENTS

- Summer orientation (Jam)
- Full-time enrollment with English and math
- Maintain a GPA 2.5
- College 1, "One Book, One College," FY Student Conference
- Priority registration
- Success Team: regular meetings with counselors, coaches, and tutors
- Study/resource centers

### EVALUATION OF FIRST YEAR PATHWAYS: 2013-14 COHORT



Cumulative Credits Earned - 2013–2014 Cohorts



### WHAT NEXT?

There is evidence to suggest that pathways students perform better (credits earned, persistence, transfer-ready)

- But "it costs too much"
- Is Pathways cost-effective? Is Pathways worth the extra cost?
- Why do we need to look at resources?
  - Money/resources are limited
  - Have to take into consideration if a program is affordable

# COST EFFECTIVENESS FRAMEWORK

- Cost-effectiveness Study
  - Cost-effectiveness study compares policy/education alternatives based on their costs to a quantifiable effectiveness measure

 $\frac{Cost \, of \, a \, program}{Quantifiable \, outcome}$ 

- Provide the link between resources needed for a program and its outcomes.
- Can use a business-as-usual approach if there are no multiple alternatives

### COST EFFECTIVENESS FRAMEWORK CONTINUED

#### Step I: Gather Ingredients Data

- Identifying all the ingredients (resources) needed to implement a program
- Creating an 'ingredients list'

#### Step 2: Pricing Ingredients

Tricky ingredients

#### Step 3: Calculating Cost Estimates

- Multiplying quantities by prices
- Calculating per student costs
- Calculating per student completion costs for pathways and non-pathways

### PATHWAYS COSTS - TOTAL

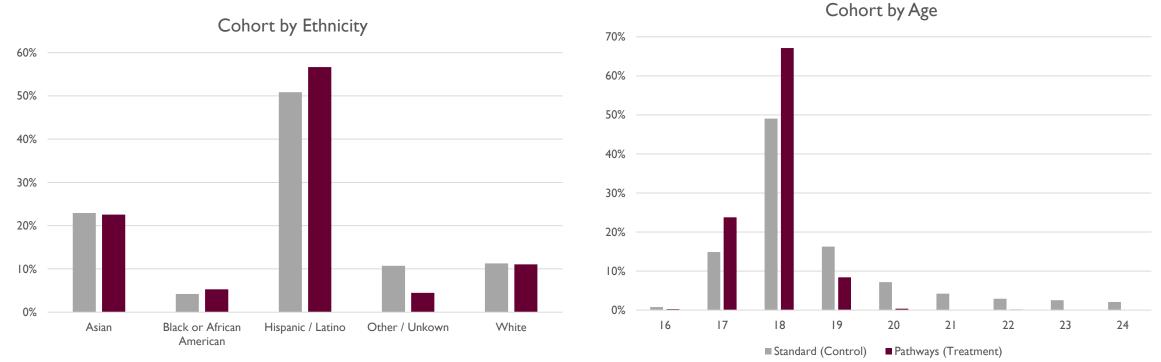
Cost Type	Tota	I
Personnel	\$	755,762.31
Supplies	\$	152,203.36
Facilities	\$	169,560.00
Other	\$	152,865.82
College 1	\$	202,270.52
FINAL COST	\$ 1	L,230,391.49

### **STUDY DESIGN**

- 2013-14 Cohort
  - First complete Pathways cohort
  - Cost data
  - Needed more than two years to assess outcome
- Calculated per student cost using 3-year budget averages
  - District Funds, no "soft" money
  - \$3430 per student, CA average \$5000
  - \$1439 extra per Pathway student
- Compared Pathways students to non-pathways students
  - Evaluated on transfer-ready and/or degree achievement

### COMPARISON COHORT 2013-14

- First-time Freshmen no older than 24 years
- Educational goal of earning a degree, transferring to a 4 year, or undecided



Standard (Control) Pathways (Treatment)

### EVALUATION OF FIRST YEAR PATHWAYS: 2013-14 COHORT

	Standard (Control)	Pathways (Treatment)
Cohort Size:	4060	833
Cost per Student:	\$3430	\$4869 = 3430 + 1439
Cumulative Credits Earned:	35 units	50 units
Completion Rate:	15%	29%
Time until Completion:	2.4 years	2.4 years
Cost per Completion:	\$51,917	\$39,500
Cost per student per year * years * student	s /	

completions

# INSTITUTIONAL COST EFFECTIVENESS COMPARISON

Institutional Average	(Cost per Student) x (Students)	(Total Cost) / (Completions)
	x (Years to Completion)	(lotal cost) / (completions)

	Cost per Student per year	Total Cost		Cost p	er completion
Regular		3430 \$	32,340,000	\$	52,000
Pathways		4869 \$	9,637,000	\$	39,000
Savings after 3 years		\$	18,629,000	\$	13,000

### CALIFORNIA PER STUDENT AVERAGE SCENARIO

	California Average		(Cost per Student) x (Students) x (Years to Completion)		(Total Cost) / (Completions)	
	Cost per Student per year	Total Cost		Cost per c	ompletion	
Regular	5	5000 \$	47,143,000	\$	76,000	
Pathways	6	5439 \$	12,744,000	\$	52,000	
Savings after 3 years		\$	34,392,000	\$	24,000	

# BEST CASE SCENARIO

	Pathways Scale Savings and California Average		(Cost per Student) x (Students) x (Years to Completion)		(Total Cost) / (Completions)	
	Cost per Student per year	Total Cost		Cost per co	mpletion	
Regular	50	000 \$	47,143,000	\$	76,000	
Pathways	60	000 \$	11,875,000	\$	49,000	
Savings after 3 years		\$	38,691,000	\$	27,000	

As Pathways scales up, the institutional cost per student is likely to go down. Combined with the California per student average

# CONCLUDING THOUGHTS

- Pathways has scaled up each year
- Working towards institutionalizing the entire cost of Pathways but currently supplemented by grants
- It is imperative:
  - To have a well run program
  - Have a program that helps the college achieve its goals
  - Owe it to the college to be fiscally responsible

### THANK YOU!

Contact information

pquinones@Pasadena.edu smalone1@Pasadena.edu