

Benchmarking Cost & Productivity to Move the Needle



Using benchmarking data to assess programs and realign priorities to make sound strategic decisions.

Lou Guthrie, Ph.D.

Director, National Higher Education Benchmarking Institute

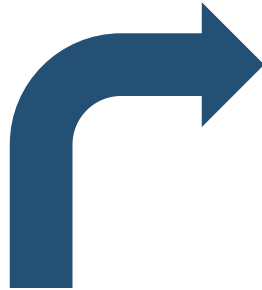




Why Benchmark Program Costs?

- Reallocation of resources
- Determine tuition pricing
- Adjustment class capacities
- Inform staffing decisions
- Program review
- Accreditation – empirical data linked to planning
- Strategic management decisions
- Accountability

Program Review Process



<p>1. Plan the Process Map out steps for process, develop timeline, build buy-in with all stakeholders, and explicitly identify desired outcomes of the self-study</p>	<p>4. Conduct and Interpret Ratings using Evaluative Evidence Clarify team's rating criteria; employ a process for rating [small group, individual, staff]; negotiate rating differences; and manage group ratings</p>
<p>2. Assemble and Educate Team 3-5 (program) to 8-10 (division) comprised of stakeholders including students; train team on self-assessment concepts and principles</p>	<p>5. Develop an Action Plan Identify discrepancies, corrective action, and recommended steps (e.g., identify strengths, weaknesses, benchmarks, resources, timeframe)</p>
<p>3. Identify, Collect, and Review Evidence Define what constitutes evidence; then gather, collect, manage, and review evidence</p>	<p>6. Prepare a Report Identify audience for report(s); describe self-study, evidence gathering, rating process, evaluations, strengths, weaknesses, and action plan; draft executive summary</p>
<p>7. Close the Loop Put action plans into practice; navigate politics and secure resources; identify barriers; and build buy-in to the program review results</p>	



Cost is only one element of program review!



What impacts academic program costs?

- Salaries and Benefits
 - Full-time, Part-time or adjuncts
 - Faculty level
 - Overloads
 - Administrative Support
- Credit Hours/Contact Hours
 - Labs, studios, etc.
- Course level

What impacts academic program costs?

- Class size
- Student/Faculty Ratios
- SCH – Student Credit Hours
 - Caps on class size
 - Time of day of the class
 - Limitations of classrooms
- Equipment and Supplies
- Facilities Costs

What impacts academic program revenues?

- Tuition and Fees
- Grants
- Other



What data do I need?



Benchmarking is usually done at the discipline level.

- The Classification of Instructional Programs (**CIP**) provides a taxonomic scheme that supports the accurate tracking and reporting of fields of study and program completions activity.
- National Center for Education Statistics, US Dept. of Education

	CIP Code ▲	CIP Title
⊖	01.0000	Agriculture, General.

Definition:

A program that focuses on the general principles and practice of agricultural research and production and that may prepare individuals to apply this knowledge to the solution of practical agricultural problems. Includes instruction in basic animal, plant, and soil science; animal husbandry and plant cultivation; soil conservation; and agricultural operations such as farming, ranching, and agricultural business.

⊕	01.0101	Agricultural Business and Management, General.
⊖	01.0102	Agribusiness/Agricultural Business Operations.

Definition:

A program that prepares individuals to manage agricultural businesses and agriculturally related operations within diversified corporations. Includes instruction in agriculture, agricultural specialization, business management, accounting, finance, marketing, planning, human resources management, and other managerial responsibilities.

Benchmarking: Cost of Instruction

Productivity:

Faculty Student Ratios:

1. Faculty FTE by full-time, part-time and other employees
2. Student credit hours by full-time, part-time and other employees

This is collected for a specific period of time – such as Fall semester.



Data Entry - Add

Academic Disciplines entered for 2017: 0

For detailed instructions and shortcuts, please [click here](#).

(*) are required fields.

*Academic Discipline:

01.0101: Agricultural Business and Management, General.

*How is student credit awarded in *Agricultural Business and Management, General?*:

Credit Hours

A. Instructional Courseload: Fall 2015

Classification	Faculty/Instructor Total Number of FTE Faculty ⓘ	Student Credit Hours ⓘ
Full-time instructional faculty ⓘ	<input type="text"/>	<input type="text"/>
Part-time instructional faculty ⓘ	<input type="text"/>	<input type="text"/>
Other full-time employees ⓘ	<input type="text"/>	<input type="text"/>

Benchmarking: Cost of Instruction

Cost per Credit Hour

1. Total student credit hours
2. Salaries & benefits for full-time, part-time and administrative and support staff

This is collected for a specific period of time – usually a fiscal year.



B. Cost Data: Fiscal Year ⓘ 2015-2016

1. Total student credit hours from 2015-2016 that were supported by the discipline instructional budget.

*Total student credit hours:

2. Total direct instructional expenditures for 2015-2016 (actual, after audit) ⓘ

*Are benefits included in the salary figures?:

Yes ▼

Percentage of salary that benefits
constitute at your institution:

 %

All Full and Part-time Faculty/Instructors ⓘ

*Salaries ⓘ:

\$

Administrative & Support Staff ⓘ

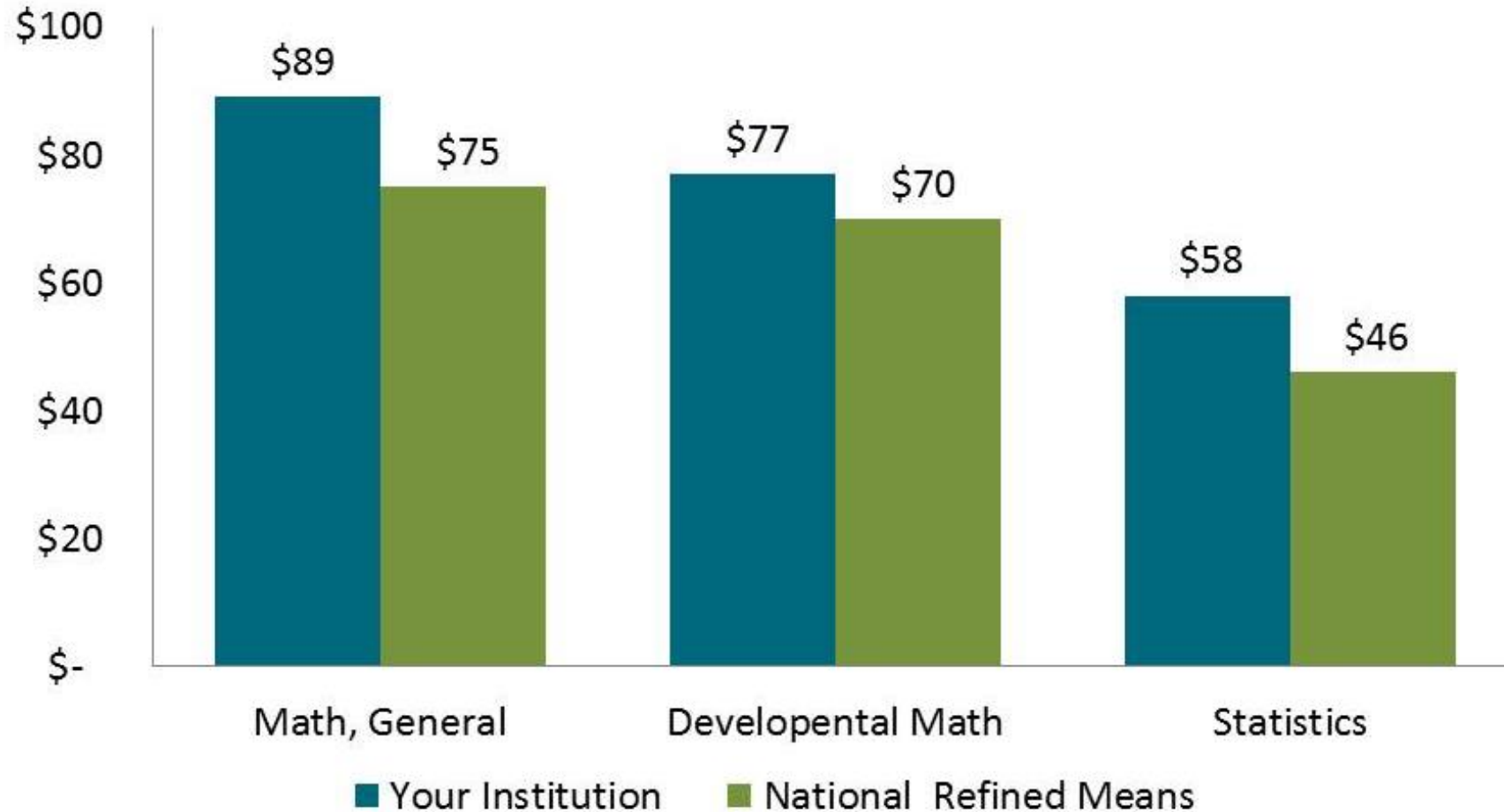
*Salaries:

\$

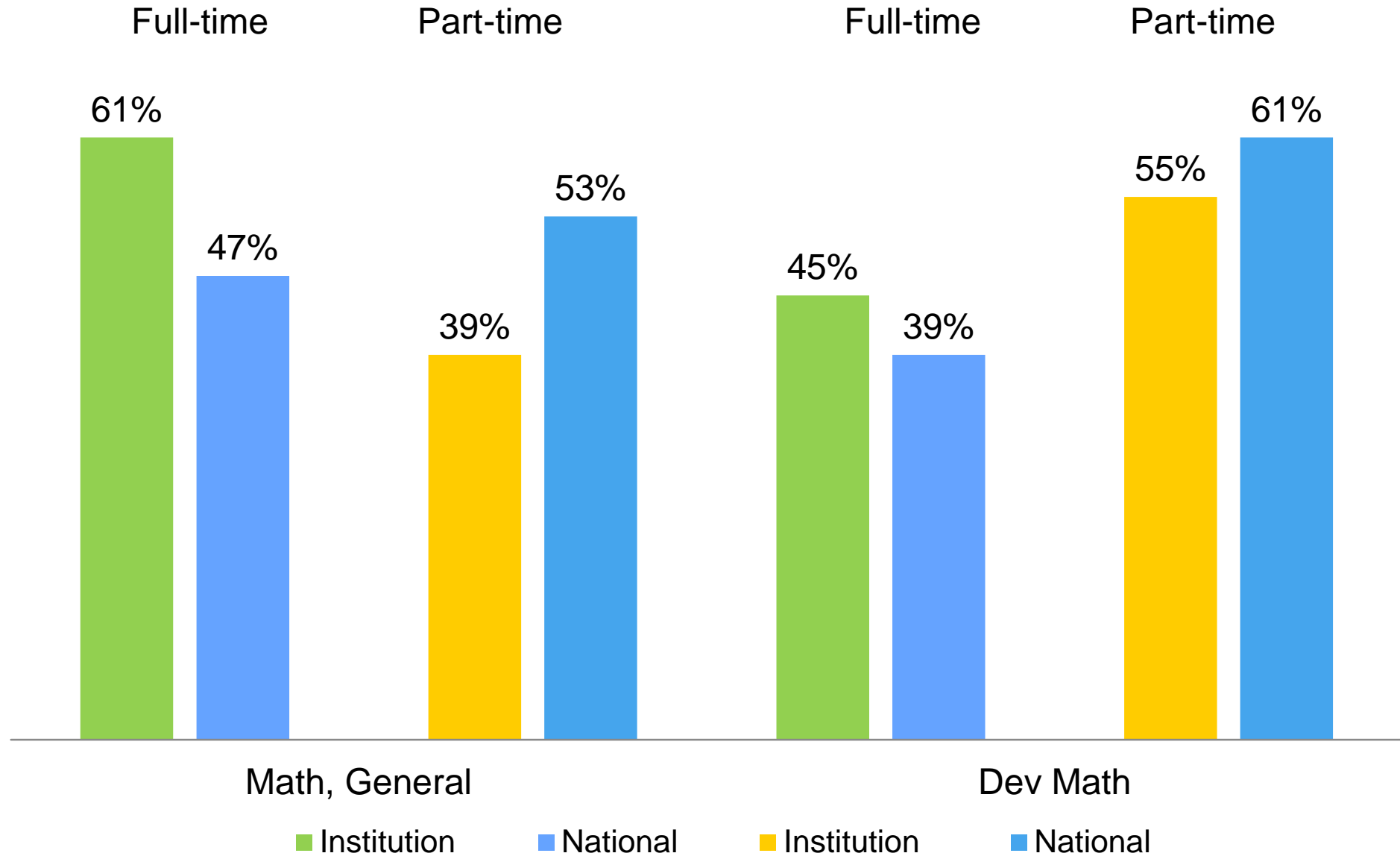
Tips:

- Break out to the most detailed instructional level possible. For example, break out math to algebra, statistics, geometry, etc.
- If a faculty member crosses disciplines, proportion out faculty FTE and salary/benefits data between the disciplines that they teach
- For any non-faculty member who teaches, proportion out their time spent on instruction/teaching from other duties

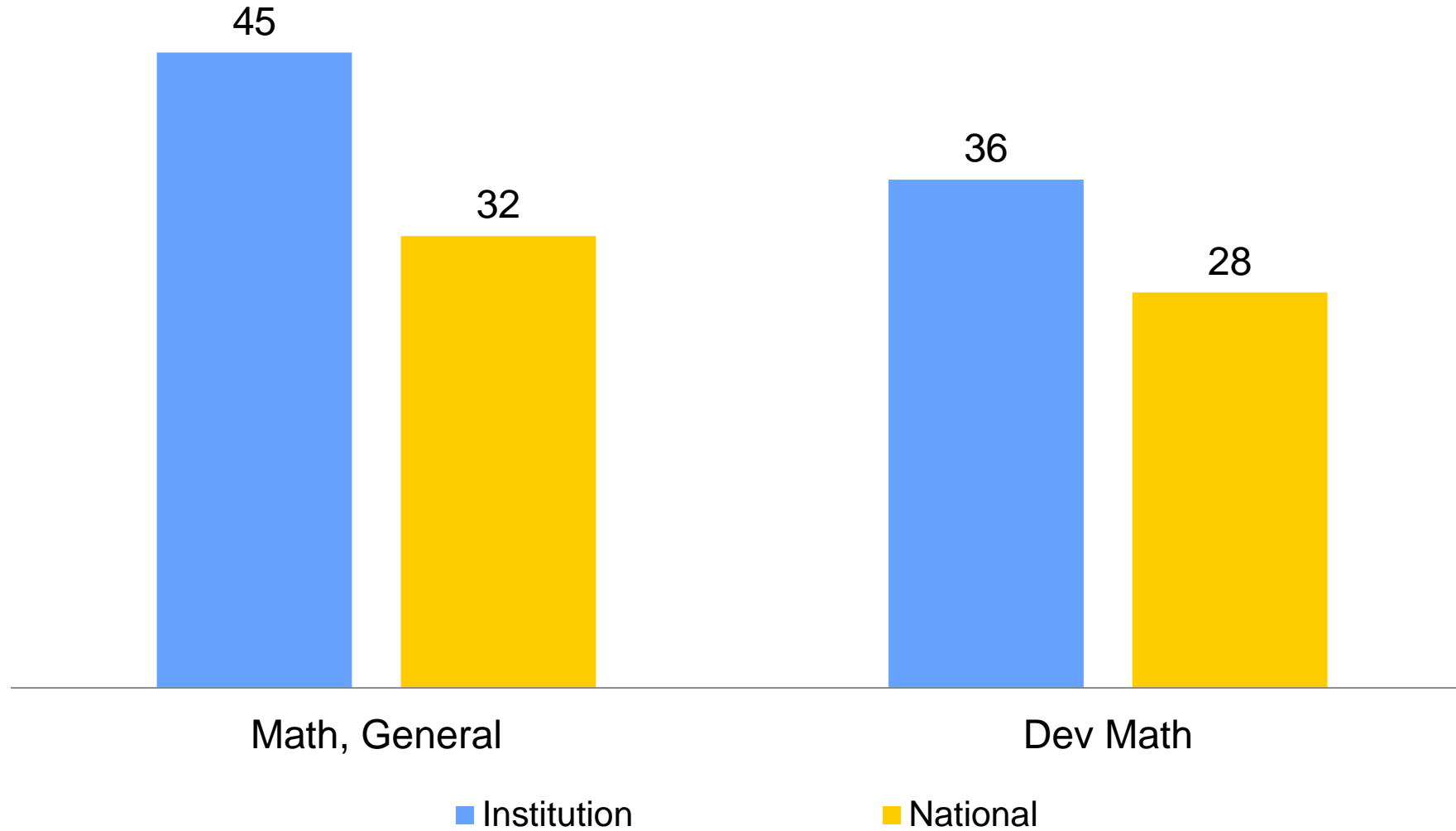
COST PER CREDIT HOUR



TYPE OF FACULTY

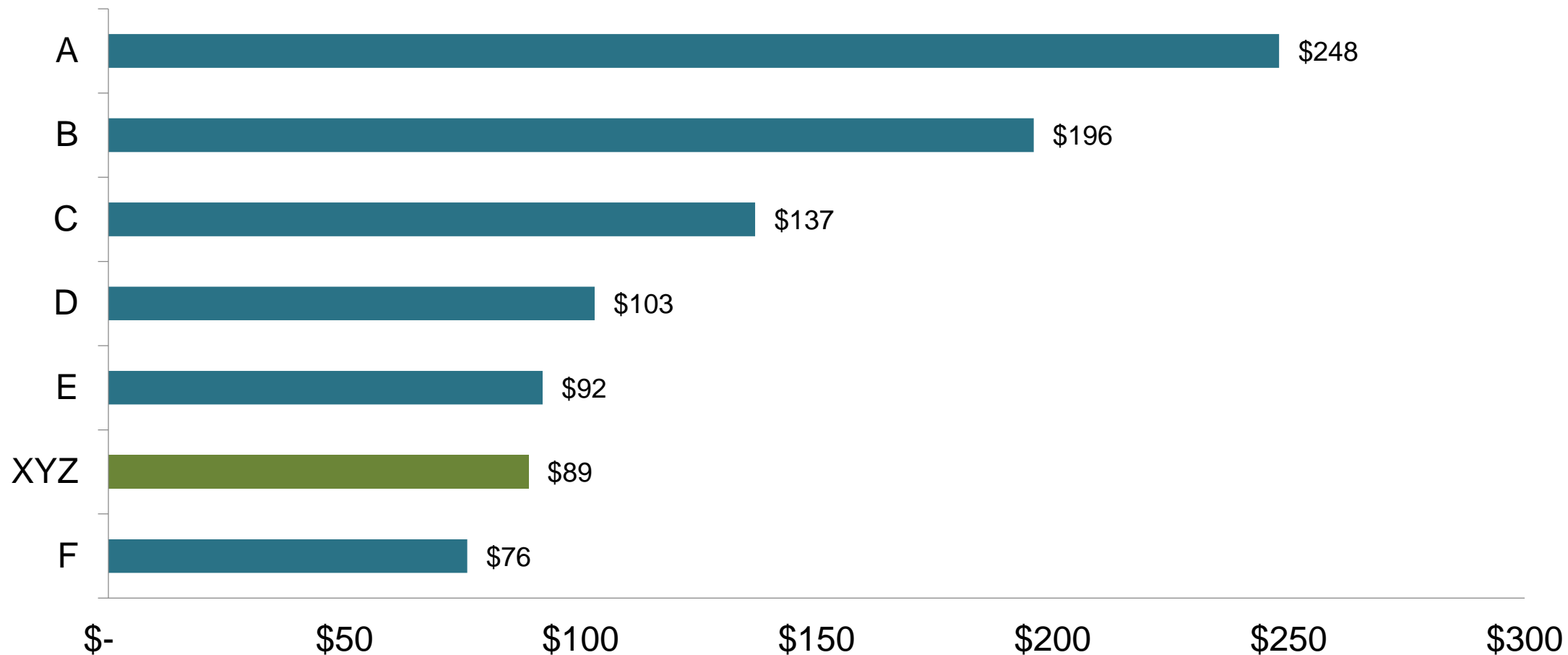


STUDENT / FACULTY RATIO



Cost per Credit Hour - Math, General

XYZ College and Peer Institutions



Case Studies

<i>PTA program</i>							
<i>Faculty</i>	<i>SCH/Fall</i>	<i>SCH/Spring</i>	<i>Total SCH</i>	<i>Salary</i>	<i>Benefits</i>	<i>Individual ROI</i>	
Faculty	107	85	192	\$ 110,418.95	\$ 44,830.10	18.2%	
Faculty	119	310	429	\$ 92,979.22	\$ 37,749.56	48.2%	
Faculty	110	94	204	\$ 44,560.12	\$ 18,091.41	47.9%	
<i>PT-Faculty</i>							
Totals	336	489	825	\$ 247,958.30	\$100,671.07		
Tuition Revenue = SCH x \$147.00			\$ 121,275.00				
Faculty Costs (Salary + Benefits)			\$ 348,629.36				
FT Overloads + benefits			\$ -				
Clinicals & adjuncts+benefits			\$ -				
Other than Personnel (Supplies)			\$ 5,580.00				
Production cost/SCH			\$ 429.34				
Margin (Revenue-Costs) =			\$(232,934.36)				
ROI/% Efficiency (Revenue/Costs) =			34.24%				

PHYSICAL THERAPY ASSOCIATES PROGRAM

<i>Full-time Faculty</i>	<i>SCH/Fall</i>	<i>SCH/Spring</i>	<i>Total SCH</i>	<i>Salary</i>	<i>Benefits</i>	<i>Individual ROI</i>
Faculty Smith	107	85	192	\$ 110,418.95	\$ 44,830.10	18.2%
Faculty Jones	119	310	429	\$ 92,979.22	\$ 37,749.56	48.2%
Faculty Doe	110	94	204	\$ 44,560.12	\$ 18,091.41	47.9%
Part-time Faculty						
None						
Totals	336	489	825	\$ 247,958.29	\$ 100,671.07	

<i>Full-time Faculty</i>	<i>Salary + Benefits</i>	<i>Tuition Revenue Generated</i>	<i>Individual ROI</i>
Faculty Smith	\$ 155,249.05	\$28,224.00	18.2%
Tuition = \$147 per SCH			
ROI = Revenue/Costs			



	<i>SCH/</i>					<i>Salary +</i>	
	<i>SCH/Fall</i>	<i>Spring</i>	<i>Total SCH</i>		<i>Salary</i>	<i>Benefits</i>	<i>Benefits</i>
Totals	336	489	825		\$ 247,958.29	\$ 100,671.07	\$348,629.36
<i>Tuition SCH</i>	\$147	<i>Tuition Revenue</i>	\$ 121,275.00				
	<i>Faculty Costs</i>		\$ 348,629.36				
FT Overloads + Benefits			\$ -				
Clinicals			\$ -				
Adjunct +benefits			\$ -				
Supplies			\$ 5,580.00				
<i>Total Costs</i>			\$ 354,209.36				
<i>Production Cost per SCH =</i>			\$ 429.34				
<i>Margin (Revenue - Costs) =</i>			\$ (232,934.36)				
<i>ROI% Efficiency (Revenue/Costs)=</i>			34.24%				

PHYSICAL THERAPY ASSOCIATES PROGRAM

		Summary Data	Benchmarking Data Means
	Tuition Revenue	\$ 121,275.00	
	Faculty Costs	\$ 348,629.36	
	Supplies	\$ 5,580.00	
		<hr/>	
Percentage of SCH taught by PT		100%	73%
Percentage of SCH taught by FT		0%	27%
SCH taught by FT Faculty		112	139
SCH taught by PT Faculty		0	247
Student/Faculty Ratio		7 to 1	15 to 1
Instruction cost /SCH		\$429.34	\$283.00

Criminal Justice

			<i>SCC Summary Data</i>	Benchmarking Data Means
Tuition Revenue = SCH x \$147.00			\$ 333,690.00	
Faculty Costs (Salary + Benefits)			\$ 151,701.30	
FT Overloads + benefits			\$ 7,008.91	
Other than Personnel (Supplies)			\$8,277.00	
Percentage of SCH taught by FT			69%	31%
Percentage of SCH taught by PT			36%	64%
SCH taught by FT faculty			373	253
SCH taught by PT faculty			342	382
Student Faculty Ratio			24/1	23/1
Instructional cost/SCH			\$ 73.56	\$ 79.00
Margin (Revenue-Costs) =			\$ 166,702.79	
ROI/% Efficiency (Revenue/Costs) =			199.83%	

Developmental/Remedial English

CIP Code: 32.0108

		XYZ College Summary Data	Cost and Productivity National Mean
Tuition Revenue = \$88 per Credit Hour		\$81,576.00	
Faculty Costs (Salary + Benefits)		\$335,816.00	
Percentage of SCH taught by FT		92%	44%
Percentage of SCH taught by PT		8%	56%
SCH taught per FT faculty member		211	324
SCH taught per PT faculty member		208	301
Student Faculty Ratio		14 to 1	18 to 1
Instructional cost/SCH		\$245.00	\$112.00
SCH=Student Credit Hours			

Developmental/Remedial English

XYZ College Summary Data

Tuition Revenue = \$88 per Credit Hour

\$81,576.00

Faculty Costs (Salary + Benefits)

\$335,816.00

Margin (Revenue -Costs)

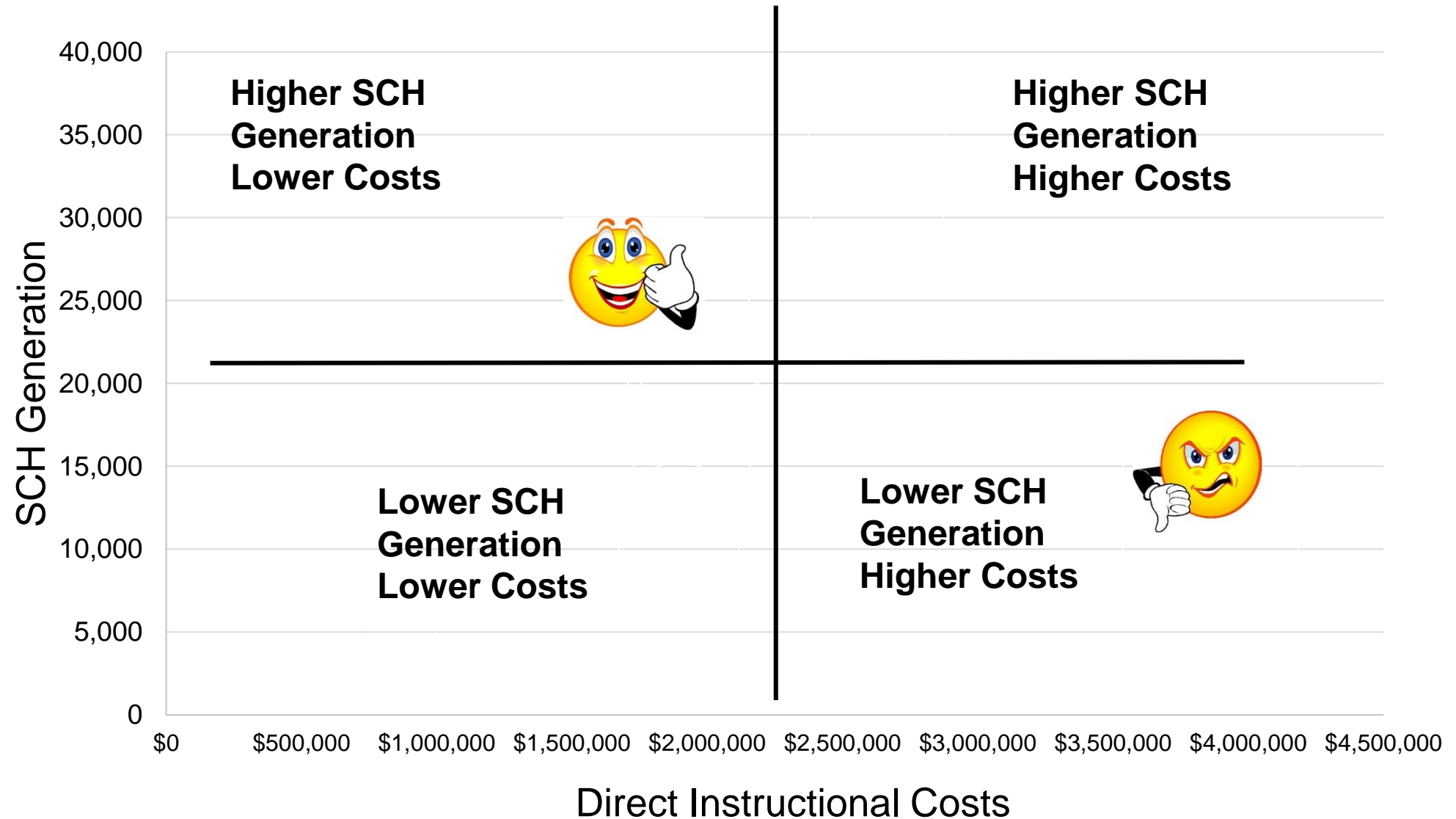
-\$254,240.00

ROI/% Efficiency (Revenue/Costs)

24.29%

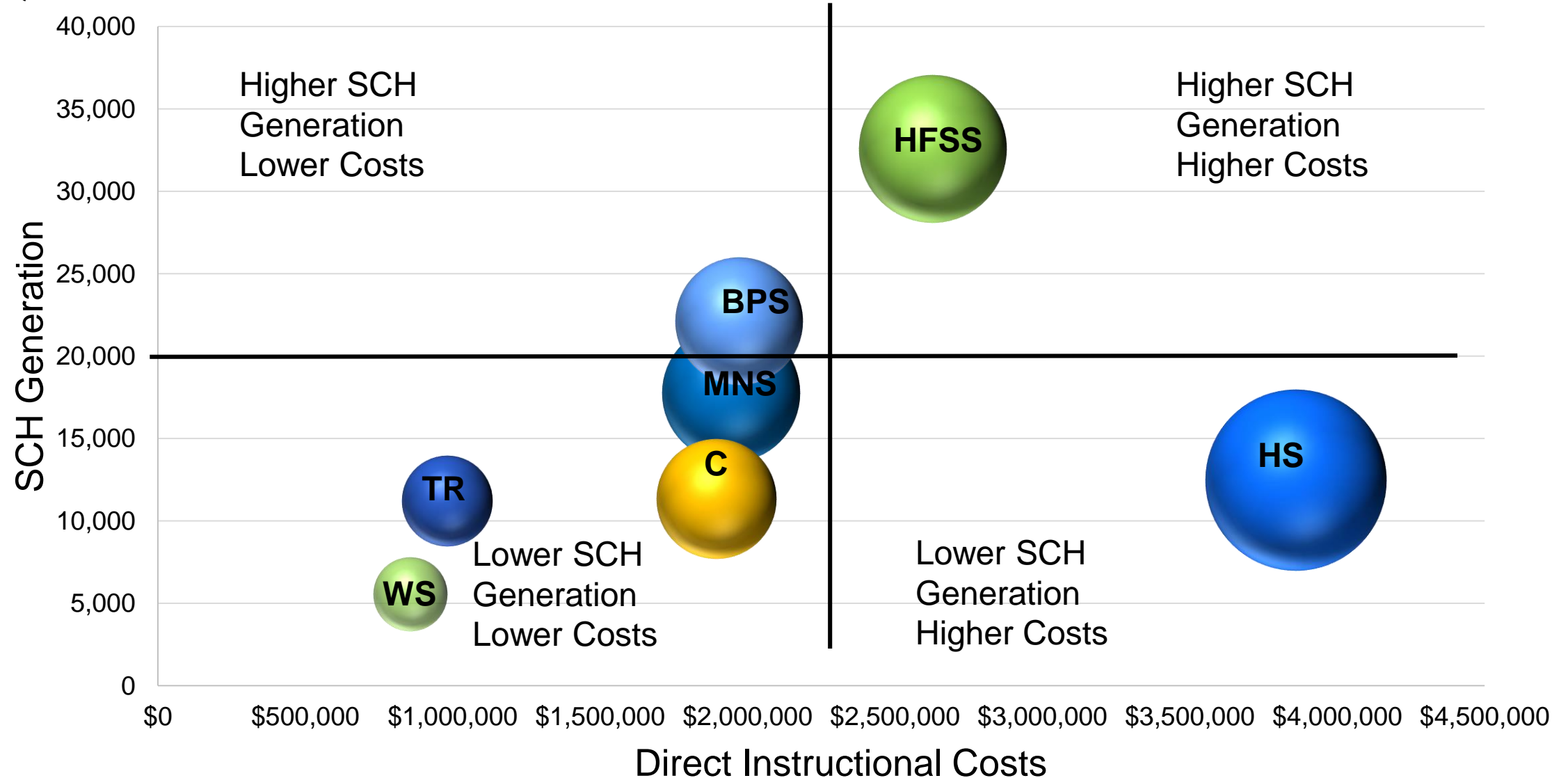
Cost & Productivity/Academic Divisions

Quadrants



Cost & Productivity/Academic Divisions

Quadrants



Conclusions

- Cost & Productivity measures are a key part of a program review
- Cost per SCH and Student/Faculty Ratios are key measures to examine the efficiency of programs
- Benchmarking enhances the analysis by adding context
- Decisions should not be made based on cost alone
- Use analysis to balance programs/divisions, adjust teaching loads and class sizes, and make strategic decisions



Find out about the Cost and Productivity Project

The Cost and Productivity Project allows community college planners to measure and compare their instructional costs and faculty workload to those of other institutions across the country.

[Learn more](#)

Learn More about Benchmarking and Best Practices

BenchmarkingInstitute.org

Maria Harper-Marinick



Michelle Asha Cooper



Randy Swing



A promotional poster for the 2017 National Benchmarking Conference. The background is light blue with a pattern of colorful circles. The year "2017" is prominently displayed in large blue numbers, with "Register now!" written inside the "0". Below this, the text "National Benchmarking Conference" is written in a bold, dark font. Underneath, a smaller line of text reads: "Join us to learn more about best practices in higher education and how to use benchmarking data from our current members." At the bottom, the dates "May 2-4" are written in large white letters. In the bottom right corner, the logo for the National Higher Education Benchmarking Institute is displayed.

Keep up with the Benchmarking Institute and all of our projects by joining us on LinkedIn and following us on Twitter



@EdBenchmark



Join the National Higher Education
Benchmarking Institute Group

louguthrie@jccc.edu

