

Do Instructional Costs Matter? Use of Unit Instructional Cost Expenditure Measures for Campus Decision-Making

Association for Institutional Research Forum

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Thomas Sanford, St. Cloud State University
Takeshi Yanagiura, Postsecondary Analytics
Nate Johnson, Postsecondary Analytics
Kensuke Mizuta, Tohoku University of Community Service
and Science, Japan

Postsecondary Analytics
423 East Virginia Street
Tallahassee, Florida 32301
850-294-0672



www.postsecondaryanalytics.com
nate.johnson@postsecondaryanalytics.com
[@NateJohnsonFL](https://twitter.com/NateJohnsonFL)

Context: Why Did We Do the Survey?

- Commissioned by Japan Society for the Promotion of Science (international project funded by Ministry of Education)
- Focus on Cost Containment & Efficiency
- Lack of knowledge on how these measures influence institutional practices
- Universal need in higher education internationally to manage costs

Background

Questions about cost-effectiveness have a long history

- Carnegie Foundation, 1910, *Academic and Industrial Efficiency*
- National Center for Higher Education Management Systems (**NCHEMS**)
- National Study of Instructional Costs and Productivity (**Delaware Study**)
- National Community College Benchmarking Project (**NCCBP**)

Research Question

How are unit instructional cost expenditure measures defined, calculated, and used in campus-level decision making across higher education institutions in the US?

Components of Survey

- Census of SHEEO Agencies or State Board(s)/System(s)
- Survey of institutions that participated in the Delaware Study or National Community College Benchmarking Project (NCCBP) at least once from 2008-2012.
- Follow-up Interviews with Four Institutions

SHEEO Census

- 88% response rate
- When possible, information on nonrespondents was gathered from websites
- Three states require Unit Instructional Cost Expenditure Measure reporting: Illinois, Kansas (Community Colleges), Texas
- University systems in FL, OH, NY and MN calculate unit costs for institutions based on centralized finance and enrollment data

SHEEO Census Questions

- Does the SHEEO agency require institutions to report unit instructional cost measures?
- If yes, what are the definitions utilized for direct and indirect costs?
- How are unit instructional cost expenditure measures reported?
- If yes, are unit costs expenditure measures used in the annual budget process? If so, how?

SHEEO Census: Direct Costs Definitions

State	Direct Cost Definition
Florida	<p>Direct cost is defined to include the instruction and research program components and the following activities:</p> <p>Instruction (by level): Lower, Upper, Grad I, Grad II, Grad III, Clinical Professional, Total Instruction, Research and Public Service Program Component: Stand-Alone, Institutes and Research Centers (IRC), Museums and Galleries, Radio / TV, Extension (UF Institute of Food and Agricultural Science (IFAS) only), Teaching Hospitals and Clinics (UF, USF and FSU Health Science Centers).</p>
Illinois	<p>The data reported are based on the Faculty Activity Analysis. The Faculty Activity Analysis distributes costs for faculty salaries over the primary functions of instruction, organized research, and public service based on the proportion of each employee's time assigned to these activities. Faculty salaries assigned to instruction are then allocated to the categories of direct instruction, indirect instruction, and departmental research based on the proportion of time assigned to these activities in the Faculty Activity Analysis. Faculty salaries are allocated to direct instruction based on the proportion of credit hours taught in that discipline and the level of student enrollment in each course.</p>
Kansas	<p>Same Definitions as National Community College Benchmarking Project</p>
Texas	<p>Functional expenses are defined as the “direct” expenses specifically associated with a function, and would not include allocations of indirect expenses. The functional categories for expenses will continue to be the current categories of:</p> <p>Instruction, Research, Public Service, Academic Support, Student Services, Institutional Support, Operation and Maintenance of Plant, Scholarships and Fellowships. Auxiliary Enterprises, Depreciation</p>

SHEEO Census

Results (How Reported)

State	How are unit instructional cost expenditure measures reported?
Florida	CIP and (Lower, Upper, Graduate I, Graduate II, Graduate III, Clinical Professional)
Illinois	Reported by four-digit CIP code and broken out by level
Kansas	Reported by four-digit CIP code
Texas	5 levels of instruction and 20 disciplines used in the I&O formula

SHEEO Census

Results (Use in Budget Process)

State	Are unit instructional cost expenditure measures used in the annual budget process? If so, how?
Florida	No, through 2007-08, the unit cost data was utilized to support funding for enrollment growth. However, with the economy and declining budgets they have not used it recently. They are moving to a performance funding model.
Illinois	Yes, they are included in the performance funding calculations used to derive the performance funding component of the annual higher education budget recommendation.
Kansas	Yes, they are used for the allocation of state appropriations for community colleges.
Texas	Yes, the relative weights established in the expenditure study are a key driver for the I&O formula, which accounted for 49 percent of total state funding distributed to the universities and 17 percent of the universities' total revenues in FY 2010.

Delaware Study & NCCBP Survey

Methodology

- Population – 271 institutions, including 60 community colleges. No private institutions were included.
- Quota sampling technique – stratified by institutional type (4-yr, 2-yr). – Response goal – 50 institutions (11 community colleges and 39 universities)
- Utilized pre-testing measures, including: expert review and pilot testing to improve the instrument's clarity and reliability.
- Administration Protocol: survey sent to senior level finance/budget administrators.

Delaware Study & NCCBP Survey

Key Questions

- Are institutions reporting unit instructional cost measures? If so, to whom?
- How do institutions disaggregate these measures?
- How are unit instructional cost expenditure measures utilized (e.g., for accreditation, budgeting, tuition decisions, benchmarking, program continuation/elimination)?

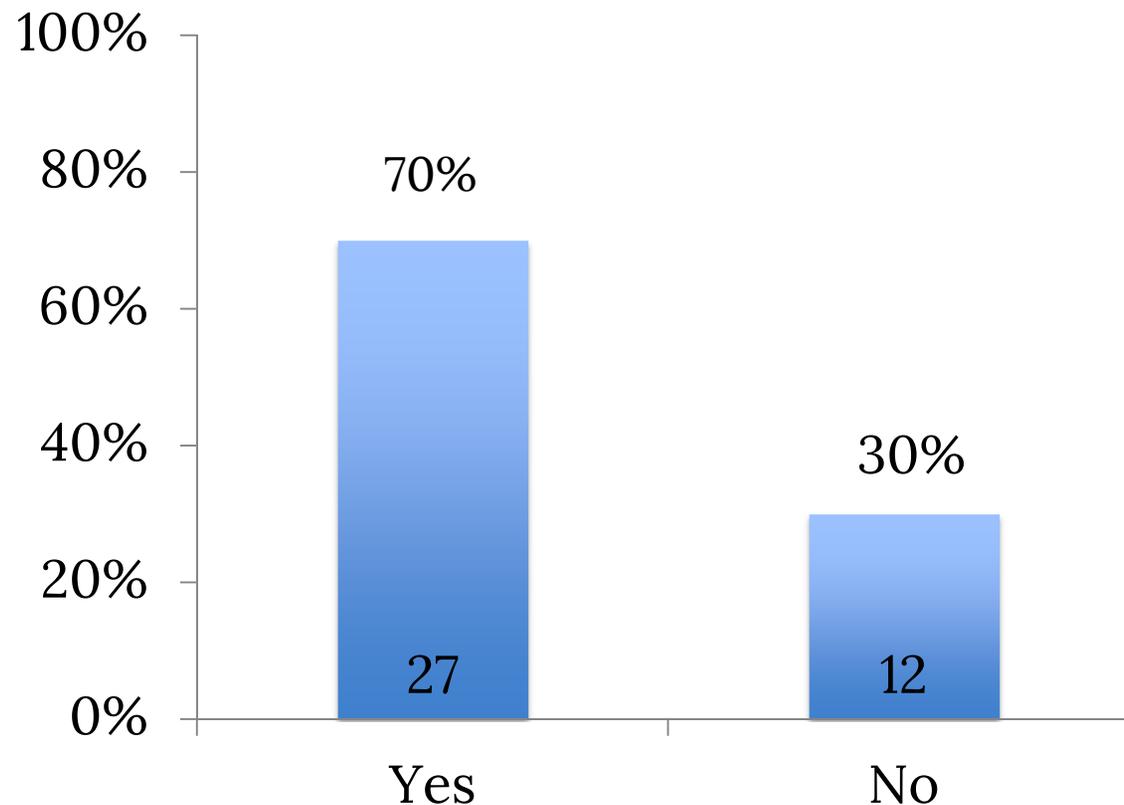
Delaware Study & NCCBP Survey

Results

- 39 institutions responded
 - Response Rate: 15%
 - 4-yr vs. 2-yr: 31 to 8 (78% to 22%)
 - Region
 - Midwest: 13 (33%)
 - Northeast: 8 (21%)
 - South: 14 (36%)
 - West: 4 (10%)
 - Institutional Type (Carnegie)
 - Community College: 8 (22%)
 - Baccalaureate: 3 (8%)
 - Master's: 16 (41%)
 - Research: 12 (31%)

Delaware Study & NCCBP Survey

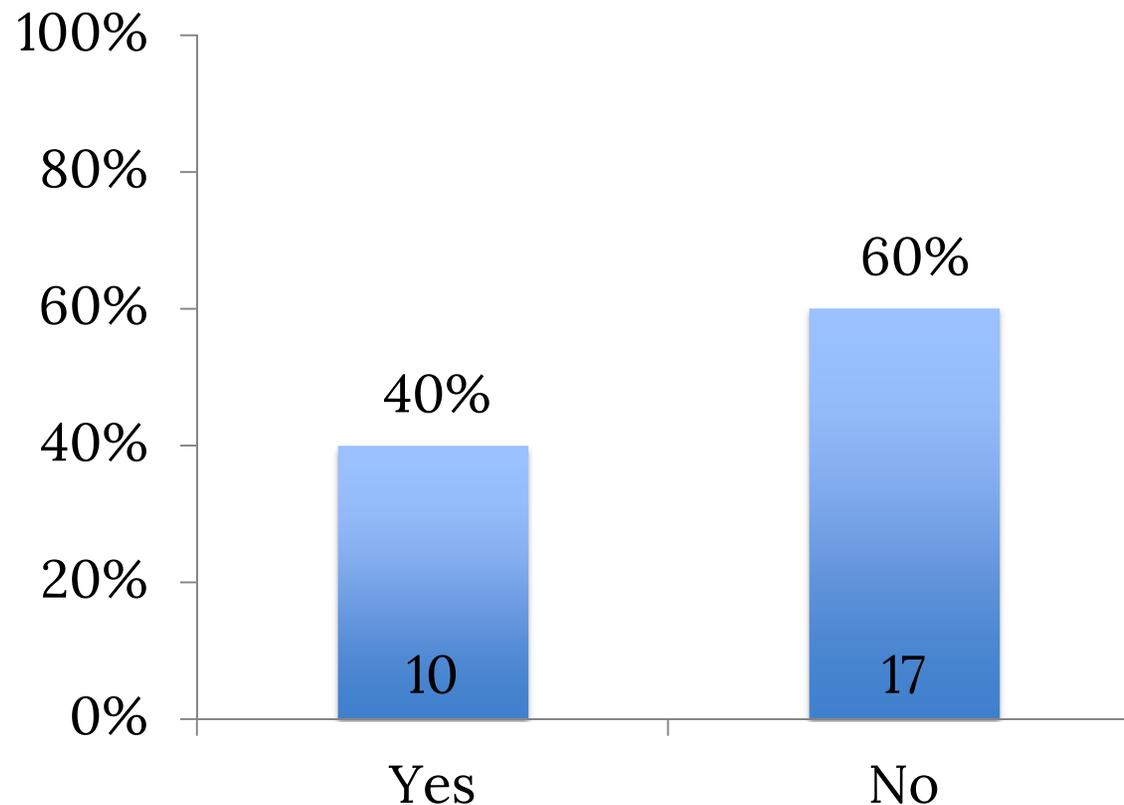
Institutions reporting unit instructional cost expenditure measures at least once in the last three years.



n = 39

Delaware Study & NCCBP Survey

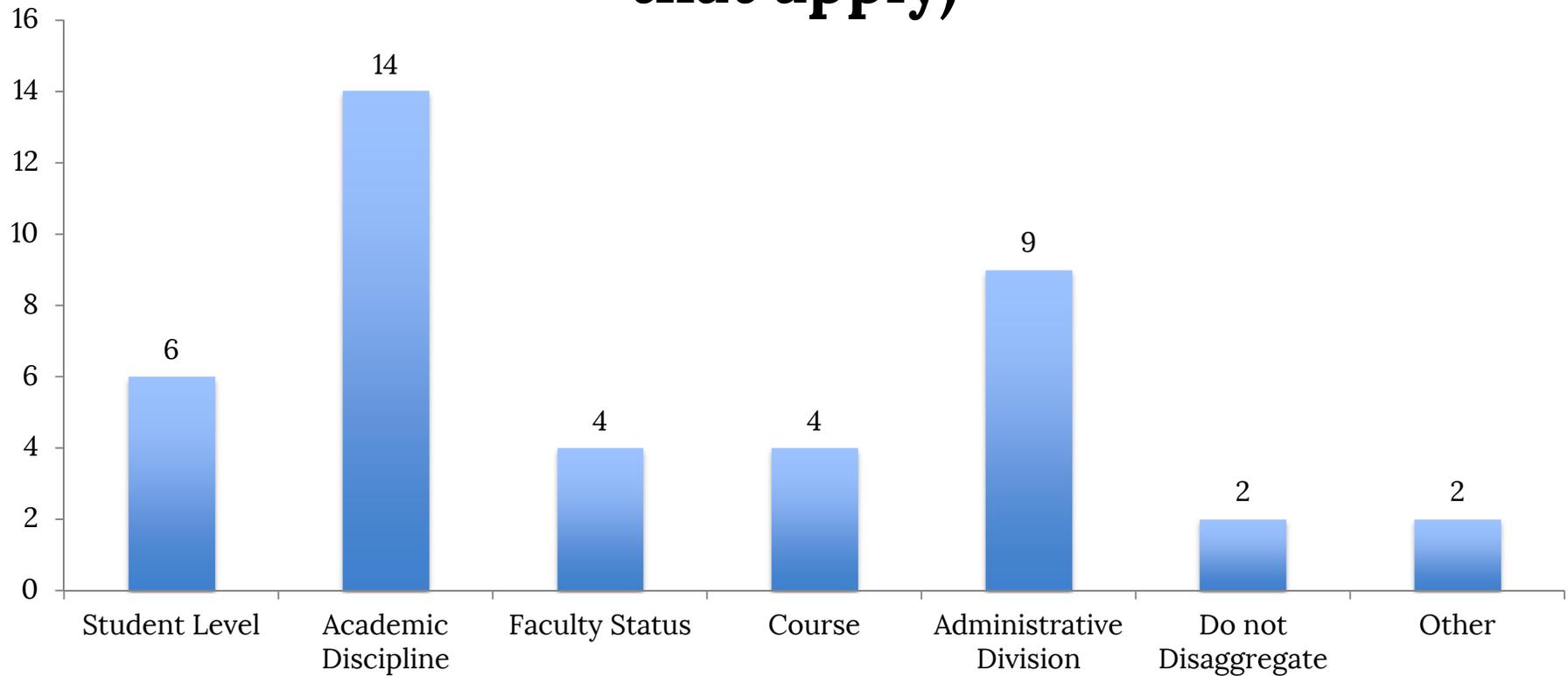
Institutions required to report unit cost expenditure measures to their SHEEO agency or system.



n = 27

Delaware Study & NCCBP Survey

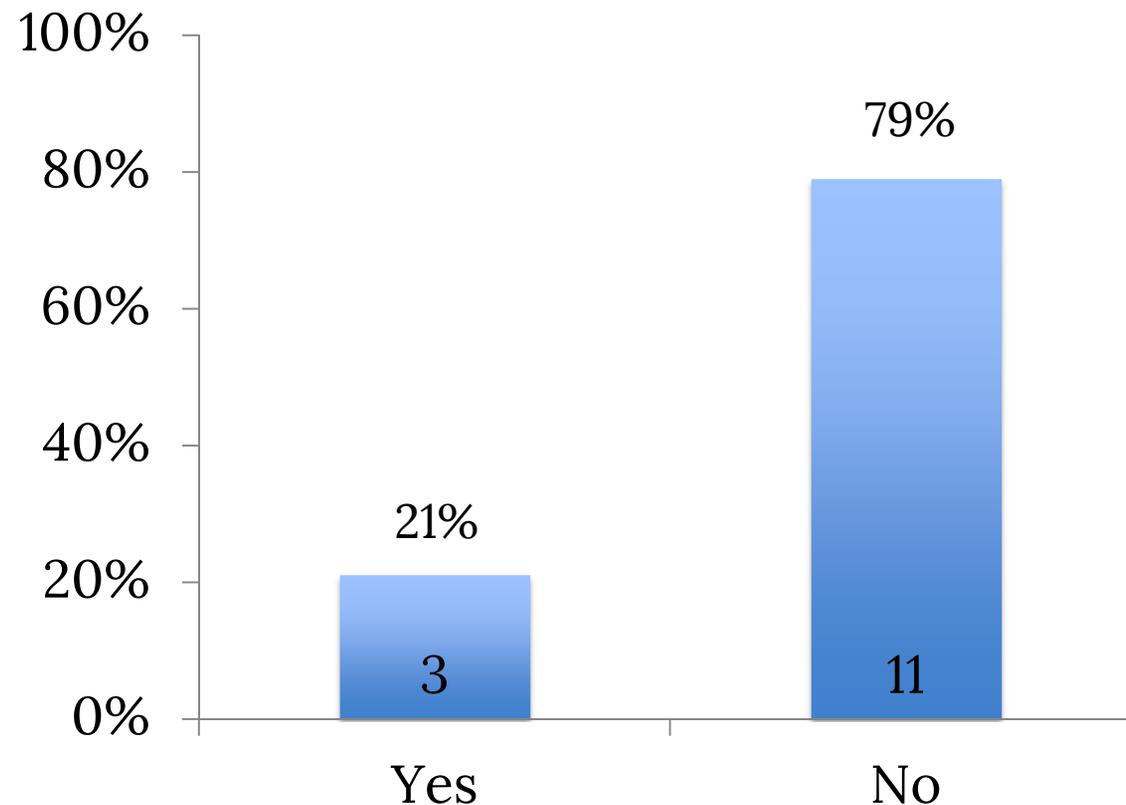
How does your institution disaggregate unit instructional cost expenditures (Please select all that apply)



** Categories are not mutually exclusive*

Delaware Study & NCCBP Survey

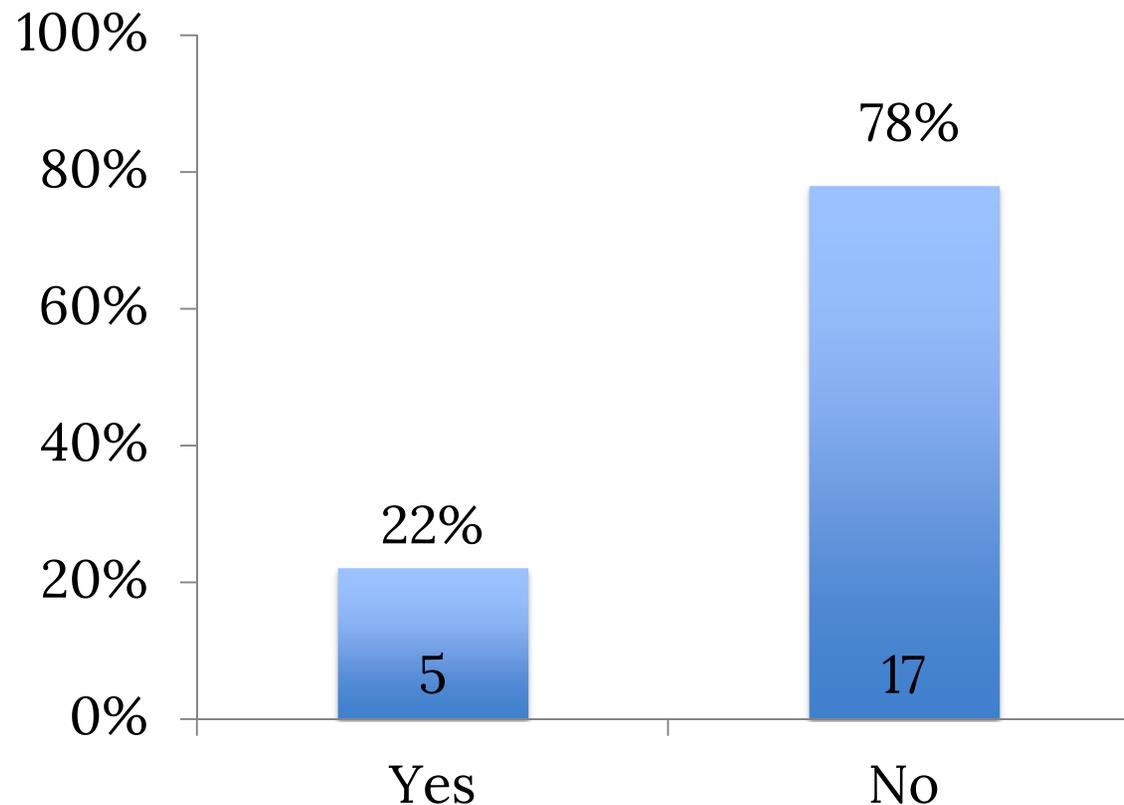
Utilizing unit instructional cost expenditure measures for accreditation purposes



n = 14

Delaware Study & NCCBP Survey

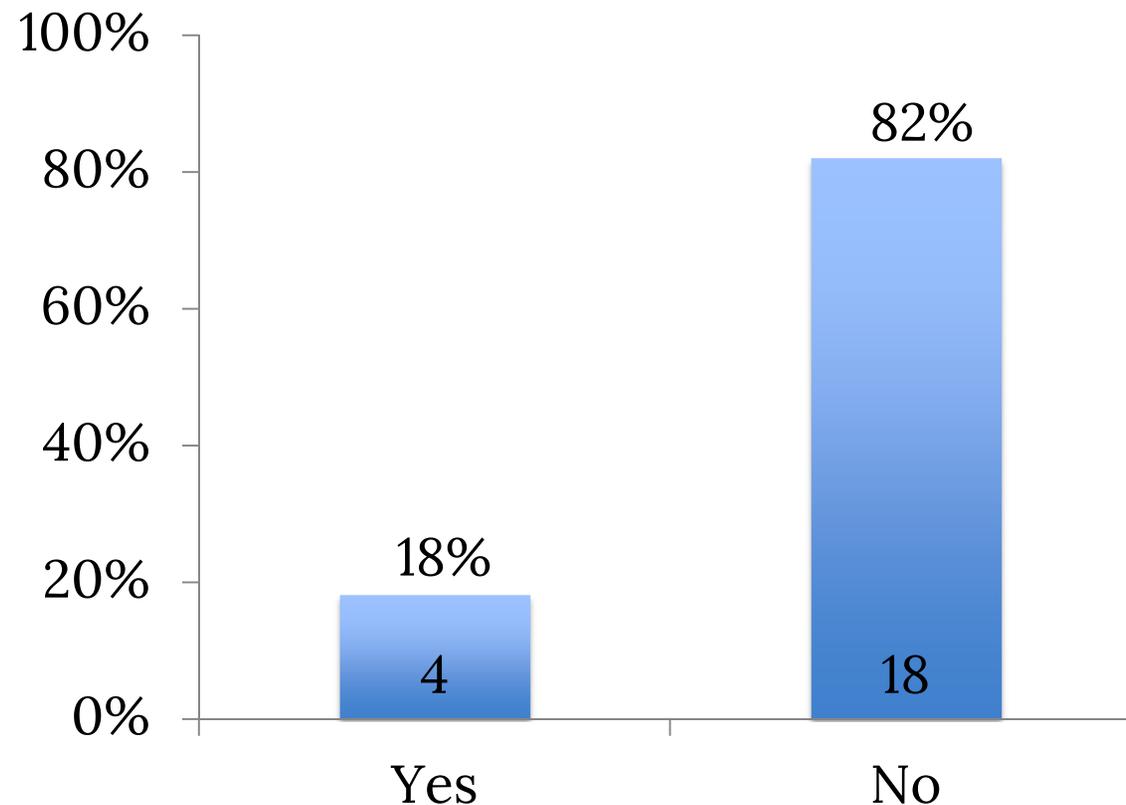
Utilizing unit instructional cost expenditure measures as a part of the budget allocation process



n = 22

Delaware Study & NCCBP Survey

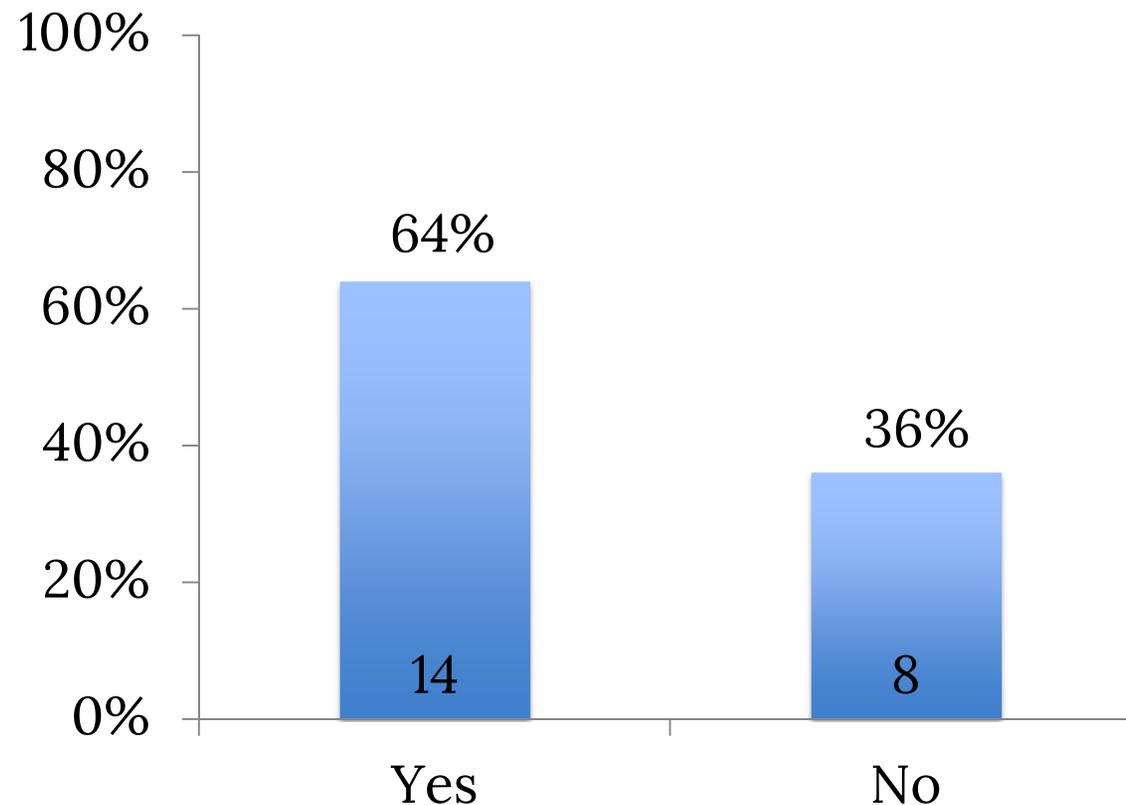
Utilizing unit instructional cost expenditure measures when setting tuition



$n = 22$

Delaware Study & NCCBP Survey

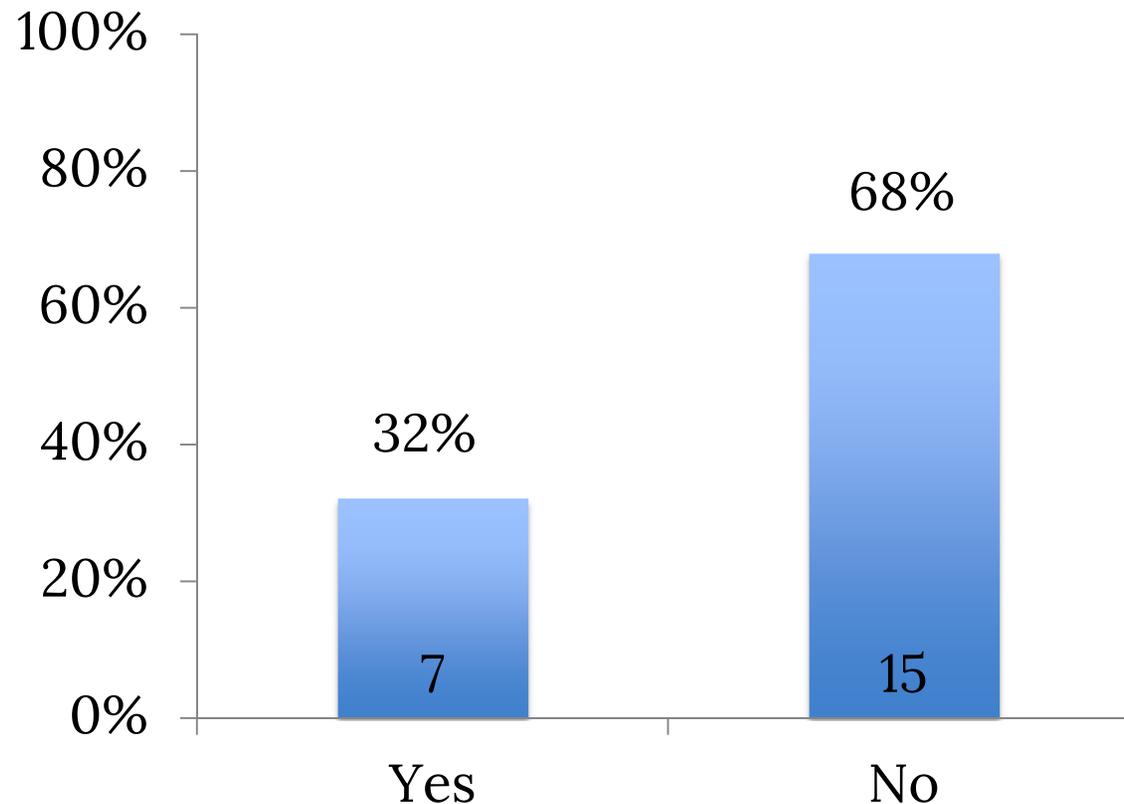
Utilizing unit instructional cost expenditure measures for benchmarking against peers.



n = 22

Delaware Study & NCCBP Survey

**Utilizing unit instructional cost expenditure
measures for program
continuation/elimination decisions**



n = 22

Delaware Study & NCCBP Interviews

- Four research institutions interviewed.
- Chosen because their use of unit instructional costs expenditure measures was progressive, unique, or necessitated further clarification.

Delaware Study & NCCBP Interviews: Selected Comments

One interviewee stated that he was concerned about using unit instructional cost expenditure measures to benchmark against other institutions:

“I was making reference to the current state of public higher ed. As external pressures and scrutiny continues to rise, there is a danger that the pendulum swings too far to the side of accountability and the bottom line with too little focus on educational quality. Our current and future business model forces us to be constantly aware of the bottom-line, but let’s not let the tail wag the dog.”

Delaware Study & NCCBP Interviews: Selected Comments

How this data is currently being utilized and how it may be utilized in the future:

“The State Governing Board does not require unit instructional cost data. We do provide monthly budget and expenditure data to various state agencies, but this information is aggregated at the NACUBO function code level. While we have been involved in the Delaware Study for several years, we have not utilized this data for management purposes. Recently, we had a board member to ask how much does it cost to produce a degree in each specific discipline. This was not an official board request. While the budgets ...are not kept by specific program of study, we were able to review the cost per degree from each academic department and see how this had changed over time. I expect this information to be used in the future to determine which programs will provide a greater return on investment...”

Comments? Questions?