Discipline-Specific Peer Analyses for Instructional Costs and Productivity

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Introduction to The Cost Study at UD
History of The Cost Study and HEC

The Cost Study at the University of Delaware

- National Study of Instructional Costs and Productivity
- A leader in the analysis and benchmarking of discipline-level instructional costs and productivity since 1996
- Available to all 4-year, non-profit colleges and Universities (U.S. and International)

The Higher Education Consortia (HEC)

- Established in 2015 to promote consortium relationships and research using Cost Study data
- Based out of an Institutional Research Office
History of The Cost Study and HEC
The National Study of Instructional Costs and Productivity

Who...
T/TE, other regular, supplemental faculty, TAs

...is teaching what to whom...
Student credit hours, organized class sections, online, undergrad/grad

And at what cost...
Instructional, research, public service expense
Context for examining instructional expense - longitudinal findings

Across all academic disciplines

Weighted average Direct Instructional Expenditures per Student Credit Hour

2000-2015
2012 – 2015 Average Cost Per Student Credit Hour
(2015 dollars)

“Why Is Math Cheaper Than English? Understanding Cost Differences In Higher Education”
(2018 NBER Working Paper)
Types of Reports Available

Institutional Reports
Comparative Reports
• 3-year-averages
• Norms
• Peer analyses
• Special Data Requests
National Norm Reporting

Institutional Carnegie Classification

Research (R1&R2), Doctorate/Professional (R3), Comprehensive (M1,M2,M3), Baccalaureate (B1,B2)

Highest Degree Awarded

Doctorate, Master’s, Bachelor’s, Non-Degree

Proportion of Undergraduate Degrees

0-24% Undergrad, 25-49% Undergrad, 50-74% Undergrad, 75-100% Undergrad
What are Discipline Specific Peers
**What institutional needs drove you to request a discipline-specific peer analysis?**

<table>
<thead>
<tr>
<th>Miami University (OH)</th>
<th>Boise State</th>
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<tbody>
<tr>
<td>In 2020, the IR Office developed the bandwidth to conduct a longitudinal analysis of peer results</td>
<td>Currently involved in a program prioritization process, which includes peer comparisons of instructional expenditure data</td>
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<td>OIRE worked with Department Chairs to make adjustments to the standard peer list; this resulted in buy-in/understanding of the impact and importance of a discipline-specific analysis</td>
<td>Carnegie Classification changed twice over the last decade</td>
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<tr>
<td></td>
<td>Institution-level peers do not always translate to department or discipline-level peers</td>
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Selecting Discipline Specific Peers
## Methods of selecting discipline specific peer groups

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<td>Used a conceptual approach</td>
<td>Used a data-informed approach</td>
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<td>Reached out to our Department Chairs to gain their inside knowledge of unknown peers and programs to adjust the peer grouping or expand them</td>
<td>The comparison group is a nuanced peer analysis starting with research universities (R1/R2/R3 Carnegie classification) that offer the same highest degree as Boise State’s related program</td>
</tr>
<tr>
<td>This approach also allowed Miami to find better comparisons across CIPs</td>
<td>The criteria were expanded in instances where the N threshold could not be met with Research universities</td>
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Benefits of Using Discipline-Specific Approach

Engaging department / college level administrators

Unique Programs
  • Standard Peers don’t offer comparison
  • e.g., a small liberal arts school with an equine program

When norms are not available for a specific CIP

Interdisciplinary Programs: not easily represented by a single CIP
Unique Programs

Educational Psychology
(42.28)

Clinical, Counseling and Applied Psychology

- Error Bars show standard deviation
- No values available from Standard Peer Group
- R1/R2 norms have high variability.
- Discipline Specific Group is peers more similar to our sample institution.
Norms not available for specific CIP

Commerce (52.0703)

*Entrepreneurial and Small Business Operations* (52.07)

- New program for our sample institution in 2019
- Infrequently used CIP by other participating institutions
- No norms available (none of the norm groups meet the threshold of 5)
- Can use discipline specific analysis to obtain a comparison
Interdisciplinary Programs: e.g. Kinesiology and Health (31.05)

30.19 - Nutrition Sciences
31.05 - Sports, Kinesiology, and Physical Education / Fitness
51.22 - Public Health
How have the peer analyses been used thus far for decision-making?

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<td>Built sophisticated self-service visualizations in Tableau for Department Chairs</td>
<td>The instructional cost peer comparison was weighted as part of the overall program prioritization calculation and quintiles</td>
</tr>
<tr>
<td>Used peer averages to benchmark, which helped to identify unexpected fluctuations in the data</td>
<td>The analyses are part of an overall diagnostic and served as a conversation starter</td>
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<tr>
<td>Used for Nursing program accreditation evaluation annual report</td>
<td></td>
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What’s Next from The Cost Study

Automated Discipline Specific Peer Requests in the Portal

**Discipline Specific Peer Analysis Options for Study Year 2019**

**View All Refined Means**

Choose Table(s):
- Select multiple items using Ctrl on PC or CMD on Mac

1A  
1B  
1C  
1D

Get Refined Means

**View Ratio Tables for a CIP**

Choose CIP:
- 4.02 - Architecture

Choose Table(s):
- Select multiple items using Ctrl on PC or CMD on Mac

1A  
1B  
1C  
1D

Get Analysis

**Peers in Group**
- Ball State University (1786)
- Clemson University (3425)
- Kent State University (3051)
- Montana State University - Bozeman (2532)
- North Carolina State University at Raleigh (2972)
- SUNY - University at Buffalo (2837)
- University of Kansas (1948)
- University of New Mexico (2663)
- University of South Florida (1537)
- University of Texas - Austin (3658)
- University of Washington in Seattle (3796)
What does this type of research offer to our understanding of instructional costs and productivity at 4-year colleges and universities?

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<td>Dialogue has been opened between the IR office and the department chairs directly related to costs and CIP codes</td>
<td>Resulted in a closer review of the data and improved data quality; working with colleagues around campus to correct misclassified data</td>
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<td>Collaborating and involving the leadership in this process has also benefitted the Budget Office</td>
<td>Improved conversations with Departments around instructional costs; beginning to build out a strategy for enhanced discussion/guided use of the data</td>
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<td>Can very easily identify bottlenecks or anything amiss in the data, which can result in actionable change</td>
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