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Benchmarks for efficiency and sustainability: A research study on the cost of delivery

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Abstract

With changing student demographics and widespread resistance to rising college costs, colleges and universities need research to guide strategic changes that result in financial sustainability. For this reason, the New American Colleges and Universities (NACU), which has a long history of benchmarking among its campuses, conducted a two-phase study in 2020 on the cost of delivery and financial health. In phase one of this study, NACU created multiple benchmarking dashboards using IPEDS data from 2008 to 2018. The return-on- investment (ROI) dashboard identified high-performing campuses with annual ROI ratio values of 2.0 or higher. In phase two, NACU interviewed leaders at these high-performing institutions to understand their strategies for creating financial health. Key findings suggest that leadership at financially solvent institutions maintains a philosophy that originated in the health care sector of “No margin, no mission.” Armed with performance metrics and market research, these campuses are committed to cost containment, data- driven decision making, and calculated program growth for financial sustainability.

Motivation for the research

In 2019, I conducted a listening tour, visiting each of the 22 institutions, at the time, that belong to the New American Colleges and Universities (NACU). The NACU campuses are dedicated to sustaining an integrated liberal, professional, and civic education, including two Historically Black Colleges and Universities and two Hispanic-Serving Institutions. Collectively, NACU campuses educate more than 100,000 undergraduate and graduate students each year. The campuses include: Belmont University, California Lutheran University, Calvin University, Chatham University, Drury University, Florida Southern College, Hamline University, Hampton University, John Carroll University, Manhattan College, Merrimack College, Moravian College, Nazareth College, North Central College, Ohio Northern University, Queens University of Charlotte, Roger Williams University, Russell Sage College, Tuskegee University, University of La Verne, University of New Haven, and Wagner College.

During the visits, I met with the leadership team: president, provost, chief financial officer, and vice presidents of enrollment management and student affairs. Also, I met with faculty members assigned as the liaisons from the campus to NACU. During my year-long campus listening tour, I took copious notes, capturing the priorities of each campus, suggestions for improvements to NACU, and other insights and observations about higher education and higher ed consortia.

Leaders noted the importance of benchmarking among the NACU campuses and expressed a desire for more effective approaches to data sharing. NACU had already conducted benchmark research, including a net tuition research study and a monthly enrollment metrics dashboard. However, since NACU campuses wrestled with operating more efficiently, these institutions challenged one another to think more strategically about benchmark dashboards. The data sets would create additional opportunities to learn from one another and discuss strategies that result in a stronger financial position. This became the motivation for developing the *Benchmarks for Efficiency and Sustainability* research project.

The goal of the project was three-fold: 1) develop a set of dashboards with key metrics that would provide insight into our campuses and their financial sustainability; 2) identify strategies for financial health at campuses with higher return-on-investment trendlines; and 3) share findings and key strategies with NACU campuses and higher education more broadly to improve decision making for financial sustainability. In essence, the results of the project would provide guidance and counsel for financial health based on measured success at peer institutions.

This study is of particular importance right now considering the numerous pressures straining the business model in higher education, a business model that was not established with the contemporary demographic and financial challenges in mind. Plus, the onset of COVID-19 brought additional and unexpected difficulties, accelerating the need for efficiencies to help sustain independent colleges and universities.

Methodology

Part of NACU's value to its campuses is its ability to create a trusted space for confidential discussions and information sharing. This trust is established by building connections and collaborations among leaders of like-minded institutions with similar missions and academic priorities, yet which do not compete directly against one another. Due to the established trust, the methodology for this particular project includes an action research approach to gathering a variety of perspectives to inform the study design, develop benchmark dashboards, and investigate responses to the data trendlines portrayed in the dashboards.

In the first phase of the study, the research team created benchmark dashboards using ten years of data, 2008-18, from the Integrated Postsecondary Education Data System (IPEDS). By working in a visualization tool called Tableau, the team designed four interactive benchmark dashboards: 1) IPEDS Trendlines Benchmark Report; 2) ROI Benchmarking by Institution; 3) IPEDS Correlation Scatterplot; and 4) Financial Health Comparison Benchmark Dashboard.

In the second phase, the research team held interviews with the leaders at select institutions with a ratio value of 2.0 or higher in the ROI dashboard. There are many different ways to calculate an ROI ratio, and we decided on a simplified ROI ratio involving a revenue and cost measure using a set formula (Figure 1).

Figure 1. ROI formula

Return on Investment

$$\text{ROI} = \frac{\text{Investment Revenue - Investment Cost}}{\text{Investment Cost}}$$

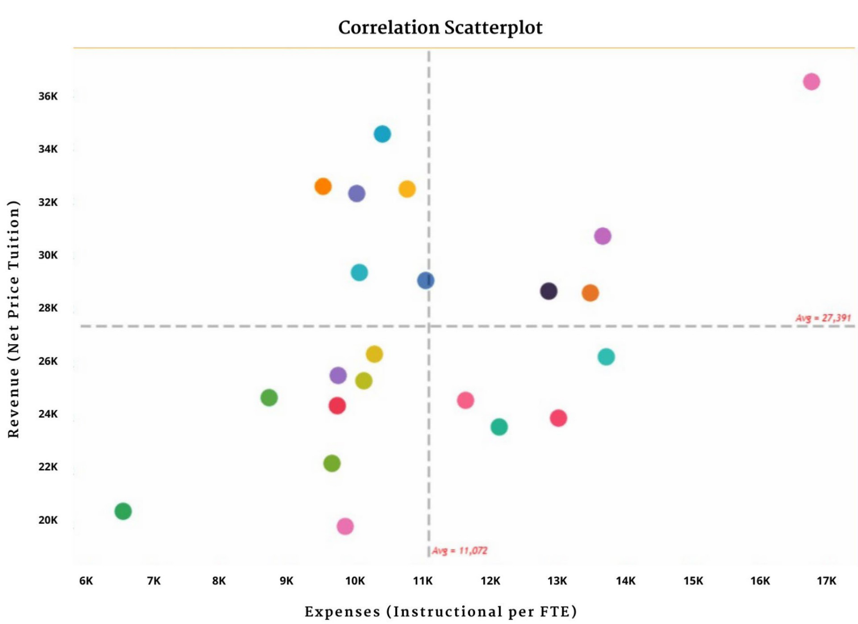
Using the formula, the study identified a select group of campuses as high-performing institutions as they outperformed their peers in the consortium (Figure 4).

The action research method enabled deeper discussion with the leaders at these high-performing institutions and opportunities for follow-up questions to unpack key findings that contributed directly to strong financial health. It also permitted discussion that revealed the mindset of campus leadership along with numerous strategies for addressing challenges that threaten financial sustainability.

Key findings

Based on analysis of the benchmark dashboards and the interviews with campus leadership, the study discovered several key findings for financial sustainability. In phase one of the project, the research team analyzed dashboards to identify opportunities for growth that would contribute to improved financial health. A few of the dashboards developed look at: a) revenue to expense correlations (Figure 2), enrollment and net-price tuition (Table 1), cost of instruction per student full-time equivalency (Figure 3), and several other key benchmarks captured in the dashboards that provided insight into growth areas.

Figure 2. IPEDS revenue to expense correlation scatterplot



Based on the data, we found several areas for potential growth that included:

1. *Enroll more part-time students.* Part-time graduate enrollment is small at most NACU institutions yet could be increased through expansion of graduate degrees, micro-degrees, professional certificates, and non-credit programs.

2. *Enroll more transfer students.* Only four NACU institutions enroll more than 200 transfer students. Institutions could work to build better partnerships and pathways to streamline enrollment of transfer students seeking four-year degrees.

3. *Enroll more male students.* NACU institutions enroll fewer male students than in the past. A more balanced mix of male/female students is key to attracting and retaining more students. While most institutions acknowledge the shift in enrollment patterns, little effort beyond athletics is being deployed to attract male students.

4. *Enroll a more diverse student population.* Given the locations of NACU institutions and their propensity toward attracting students from their own regions, they have an opportunity to increase the number of students they enroll from diverse or underrepresented backgrounds.

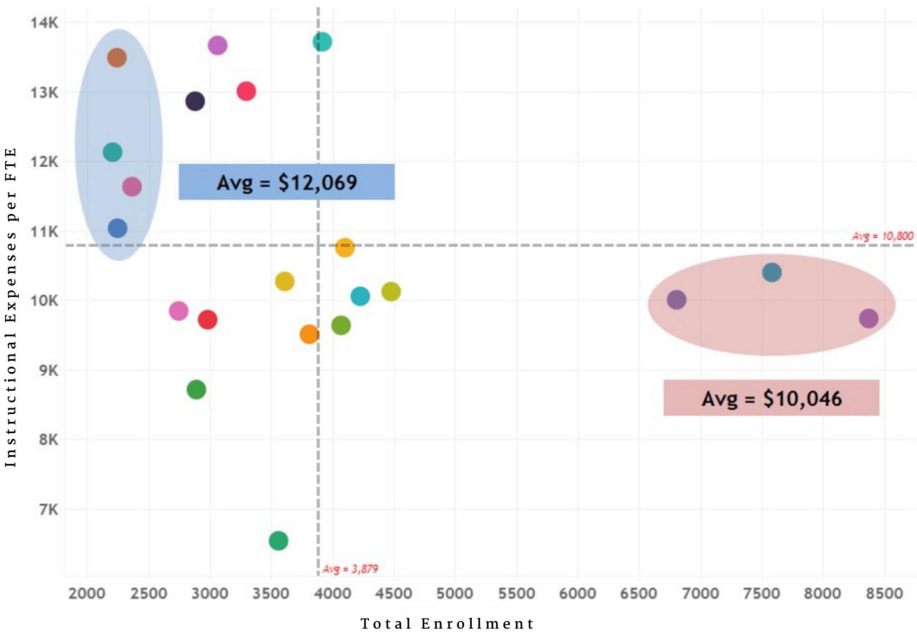
5. *Maintain a lean workforce.* Institutions need to review all faculty and staff positions to determine if they are efficiently using their resources. For underperforming areas, institutions could consider reducing the number of positions to shift funding toward areas that are in high demand. Institutions might also consider outsourcing services or sharing services with neighboring campuses to meet student needs without adding full-time employees to the payroll.

6. *Continue to improve graduation rates.* Savvy consumers want to know that their money and time will be well spent in their pursuit of a college degree. Institutions with high four-year graduation rates help raise confidence when potential students are considering their options.

While difficult for some institutions to conceptualize in light of shrinking traditional student populations, the largest takeaway from analysis of the benchmark data is the need for most institutions to grow their enrollment and their net revenue. To accomplish this growth, it will likely require elimination of costly programs that have low demand.

Another key finding from the benchmark data is that all of the high-performing campuses have been successful in keeping their annual cost of instruction lower from year-to-year in comparison to the other NACU campuses (Figure 4).

Figure 3. Cost of instruction per student FTE compared to total enrollment



The lower cost of instruction coupled with the increase in net revenues contributed to their financial growth (Table 1) and, therefore, exceptionally higher ROI.

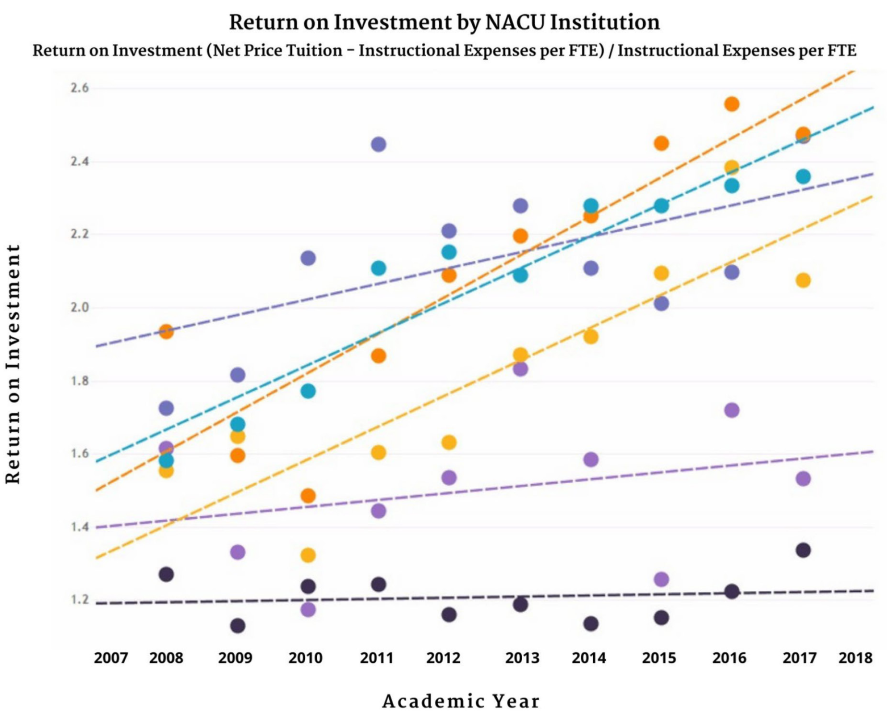
Table 1. Enrollment correlated to net tuition revenue

Changes in Full-time Undergraduate Enrollment and Net Tuition Revenue

NACU Institution	% Change FT Undergraduate Enrollment	% Change Net Tuition Revenue
1	43.9%	17.9%
2	43.5%	25.1%
3	27.8%	13.9%
4	26.2%	21.4%
5	17.3%	16.3%
6	11.1%	22.5%
7	11.0%	22.0%
8	10.6%	11.2%
9	9.9%	-1.5%
10	7.5%	14.3%
11	5.6%	6.3%
12	4.7%	3.7%
13	2.2%	16.1%
14	1.4%	10.1%
15	-0.3%	-2.7%
16	-0.8%	9.8%
17	-1.0%	22.7%
18	-2.9%	26.3%
19	-5.7%	-0.2%
20	-6.9%	5.6%
21	-12.2%	25.6%
22	-34.4%	-7.6%

The second phase of the study focused on interviewing the leadership at the high-performing campuses to learn particular strategies to improve an institution's financial sustainability and to identify trends among campuses in the high-performing group. As previously noted, the campuses that had steep ascending year-over-year trendline slopes over a period of four years (2014-2018) for those ROI values and ratio values of 2.0 or better in the benchmark. Figure 4 charts six of these institutions.

Figure 4. ROI benchmarking by institution



Based on the interviews, we found leadership at institutions with a strong ROI shared a consistent philosophy that presidents are responsible for financial oversight and employ a relentless command-and-control approach to stop institutions from outspending the bottom line. Sharing the mindset of Sister Irene Kraus of Daughters of Charity National Health Care System, they adopted a philosophy of "No margin, no mission." This philosophy manifested itself in several strategic ways when operationalized, including: 1) centralized data-driven decision making in the president's office; 2) readily accessible and current performance-based metrics; 3) publicly available and detailed academic and administrative program reviews; 4) transparent communication on budgetary matters; 5) relentless process improvement and efficiencies; 6) academic growth orientation; and 7) alignment to mission in programs. These all contributed to a healthier balance sheet and financial sustainability.

Presidents clearly valued performance in all aspects. Institutions demonstrating revenue growth coupled with strict expense controls emphasized a performance culture on campus. Employee performance is critical to financial sustainability as labor and benefits are the largest cost drivers for campuses. During the interview process, we found several common strategies for why these campuses were high performers within their comparison group. They include:

Presidents are involved in every financial decision for the campus. Presidents personally assessed every position open for hire and required a rationale for filling them. Leadership realigned positions based on alignment to mission and student needs, shifting funding from programs with low enrollment to those in high demand. Further, we saw examples of presidents reviewing every course to ensure set minimums, say 12 or more students per course section, were met. Presidents required faculty to carry a four-four teaching load per semester and had strict parameters for release time to decrease the need for supplemental part-time faculty.

Campuses have profit and loss sheets for their programs. The presidents examined program productivity and cost at an individual faculty level, allowing them to phase out low-performing programs and reallocate funds to higher priorities.

Campuses value high performance. These presidents reward faculty and staff that work hard while actively weeding out those that do not. Leadership worked hard to increase compensation rates at their campuses, sometimes moving from below to above average compared with their peer institutions. Further, they had consistent annual increases, which helped with employee retention, therefore reducing time and expenses connected with conducting searches. Furloughs, buyouts, and early retirement served as strategies for removing underperformers from the payroll. The COVID-19 pandemic provided additional motivation to address such changes, which resulted in a leaner administration and much lower costs of instruction.

Leaders at high-performing campuses stress an entrepreneurial mindset. We found these financially sound institutions viewed smart growth as a necessity for creating margins that drive financial sustainability. They focus on growth that aligns with mission, addresses market demands, and brings quality programs, facilities, and partnerships to their campuses.

Implications of the findings

These campuses did not arrive at their success overnight. It required discipline to adhere to the method of strict oversight and accountability, and the sacrifice of personal popularity for the good of the whole. As one president put it, “If you want a friend, get a dog.” In other words, success results from difficult and unpopular decisions, at times, that can seem to pit the leadership against the faculty, other administrators, and staff.

The process of instituting a culture of performance and efficiency that lowers costs and increases revenues is more easily said than done on a college campus. The shift to a performance culture happens incrementally, with relentless financial accountability. It takes years of intentional change involving data-driven decisions that can be difficult to implement. It also requires that the leadership have the will to take risks and move the campus forward through smart, calculated endeavors, such as aggressive investment in new professional programs in allied health, medicine, executive business education, artificial intelligence, and so forth.

The leaders in this study had to build trust with internal and external stakeholders to make effective changes. They did this by being transparent and highly communicative with the campus community, taking the necessary time to educate others on the rationale for their decisions. Second, they had to build personal capital with the faculty and staff, as well as the alumni and board, by demonstrating their decisions were not only in the best interest of the campus and its mission, but also designed to produce or exceed the desired results. Lastly, they maintained a healthy ego, not letting success get the best of them. Instead, they celebrated faculty and staff, and made it clear that every person who contributes to growth shares in the success.

Conclusion

This research study found that there is no magic bullet when it comes to a healthy balance sheet and financial sustainability. In summary, financial health results when campus leaders prioritize strategies that deliver gains in faculty, staff, and student performance, and program growth. Revenue required for long-term sustainability is achieved through extensive monitoring of finances to create efficiency and leaner operations. Also, increased performance by personnel is achieved through frequent review and assessment that rewards high performers and removes underperformers. Program development is a strategic investment in the institution that contributes to its growth and, consequently, financial sustainability. In addition to a host of other strategies outlined in this study, above all is a commitment by the president to oversee all decisions that pertain to financial matters.

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Sean Creighton is the president of the New American Colleges and Universities, a select national consortium of independent campuses collaborating in the delivery of innovative ideas and championing the belief that an integrated liberal, professional, and civic education is essential to the future of our world. A dedicated public servant, Creighton currently serves on boards for the Dayton Literary Peace Prize, International Leadership Association, ThinkTV (the Dayton-Cincinnati PBS affiliate) and the Washington Internship Institute. He earned his B.A. in English at Marist College, M.A. in English and American Literature at New York University, and Ph.D. in Leadership and Change from Antioch University.

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