

Strengthening Financial Analysis at Cincinnati State Technical and Community College

Assessing Impact and Expanding Awareness of Student Outcomes to Support Resource Allocation Decision-Making

Cincinnati State Technical and Community College is a public institution with four locations in Cincinnati, Ohio. The college serves approximately 5,500 students annually, with 130 program offerings across four campus locations. Operating one of the largest cooperative learning programs among U.S. two-year colleges, Cincinnati State works with over 600 business and industry partners. With a strong focus on transfer pathways, the school maintains transfer agreements with more than 20 four-year institutions.

Strengthening Financial Analysis with Power BI

Diverse revenue streams support Cincinnati State's offerings and operations. Designated funds or grant funds are frequently received by the college to underwrite student-facing programs linked to specific student outcomes that are expected to improve. The college wanted to strengthen its capacity to assess both the short-term and long-term benefit of distinct investments in student success initiatives.

A specific grant-funded project was used to pilot Cincinnati State's use of the Financial Impact Analysis toolkit. Grant funding for the project was sunset, and determining the merit of future investment in the program was required. For the program to continue, the college would need to shift resources from other operational areas, or outside funding would need to be sourced. By leveraging and modifying the Microsoft Power BI tables and templates provided in the toolkit, a mechanism to measure student outcomes as a function of financial requirements could be developed and consistently used.

Leveraging NACUBO's Financial Impact Analysis Resources

The college's chief business officer (CBO) used the toolkit data tables and dashboard template as a starting point for analysis. The review of the tools available in the toolkit, followed by a material effort to organize data and use the resource provided, surfaced opportunities and areas of additional effort that would be required to generate meaningful visualizations.

Improvement Project

Develop a Replicable Model to Analyze and Assess Student Outcomes of Grant Funded Initiatives

Toolkit Used

Financial Impact Analysis

Results

- The Power BI data tables and templates available in the Financial Impact Analysis toolkit advanced the college's understanding of improved student outcomes resulting from designated funds invested.
- Outcomes of student success initiatives and the resources required to achieve those specific outcomes can be better assessed and understood.
- Data literacy and people's capacity to use data to tell stories and inform decisions at the college is getting stronger.



“The more specific you can be about the costs and the benefits of an initiative, and the more you can breakdown the details and show the benefits of a program, the more likely you are to make better decisions about what to fund, and how to prioritize funding.”

.....

Chris Calvert,

Former CFO and Vice President for Finance

Differences specific to the college’s naming conventions and data structures were identified in the template, and the CBO made minor modifications to field titles and a few field customizations using the Power BI editing interface to better align the dashboards with institutional needs.

Once satisfied with the modifications, the CBO populated the template with student and related financial data, for those students served by the grant-funded initiative. The tables were also populated with a random sample of students who were not engaged in the grant-funded offering. The CBO was then able to model outcomes for those students who were provided supplemental support by the grant-funded offering, compared with students who did not receive the targeted support services.

Leveraging Assessment Insights

Once duplication and irrelevant observations were removed from the dataset and linked to the Power BI templates, college leaders and board members were able to use the Power BI visualizations to better understand and discuss the measurable improvements in student outcomes achieved through the grant-funded initiative and the resources required going forward to sustain the work that led to improved outcomes.

Stakeholders who want a better understanding of student outcomes and who may have influence over budget planning and implementation can now leverage the Power BI data visualization tool populated with program-specific data. Executive leaders, board members, unit directors, and student-facing campus professionals can utilize the populated template to filter the data to see views specific to their interests or needs.

Sustaining Momentum

Across the institution, data literacy is improving. The use of data analysis to answer questions and make decisions is expanding to include consideration of financial sustainability and scalability of initiatives.

The capacity to keep datasets updated and systematize the population of dashboards is the next focus of the work. The college expects the data analysis work to be scaled and managed to ensure that data-informed decision-making becomes a standard practice.