

Applying Data Science to Business Decisions at Tarleton State University

Leveraging IPEDS Data and Other Data Sources for Strategic Insights

Tarleton State University, located in Stephenville, Texas, is a vibrant institution known for its commitment to academic excellence, personal growth, and community engagement. Founded in 1899, Tarleton is a member of the Texas A&M University system and has other campus locations in Fort Worth, Waco, and Bryan. With a current enrollment of nearly 17,000 students, the university prides itself on its supportive and inclusive environment, fostering a sense of belonging among its diverse student body.

Establishment of the IPEDS Data Evaluation Task Force

In 2021-2022, Tarleton State University initiated a strategic effort to improve its benchmarking capabilities by establishing an IPEDS (Integrated Postsecondary Education Data System) Data Evaluation Task Force. Comprising members from the Enterprise Data Team, chief data scientist, vice president of university strategy and marketing, and vice president of enrollment management, the task force aimed to evaluate IPEDS data to inform the university's peer and aspirant lists for benchmarking. The task force utilized a combination of national data and a longitudinal study to create a comprehensive and data-informed benchmarking framework.

Collaboration with NACUBO and Tool Development

Following the task force's recommendations, Tarleton State University leveraged the IPEDS Peer Benchmarking Dashboards. Tarleton customized this tool to focus solely on the institution and its selected peer and aspirant groups. The selection criteria for these groups prioritized variables related to student success, academic distinction, research, institutional prominence, and financial impact, ensuring alignment with Tarleton's strategic priorities.

Improvement Project

Strategic Measures to Inform Future Funding Decisions Through an Equity Lens

Toolkit Used

IPEDS Peer Benchmarking Dashboards

Results

- Through collaboration with NACUBO, Tarleton adopted and customized the IPEDS Peer Benchmarking Dashboards, expanding its Power BI capabilities to include tailored visualizations focused on key variables related to student success, academic distinction, and institutional prominence.
- The adoption of the customized Power BI dashboards has facilitated enhanced data literacy, supported data storytelling, and promoted data-informed decision-making across the university, fostering critical conversations around student success and strategic finance efforts.



“The IPEDS dashboards provide Tarleton with standardized data that enables our leadership to visually compare Tarleton to our peers and aspirants. Tarleton is rapidly growing. Therefore, it is very helpful to compare staffing and expense data for different enrollment levels and different Carnegie Classifications.”

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*Jo Ann Kern,
Director, Office of Transformation Realization*

Customization and Expansion of Power BI Dashboards

Tarleton leveraged the starter Power BI template provided with the IPEDS Peer Benchmarking Dashboards and tailored it to meet the institution’s specific needs. The customized dashboards featured key metrics related to Tarleton’s mission and strategic priorities, providing stakeholders with relevant and actionable insights. Additionally, the institution expanded the dataset to include additional years of IPEDS data and incorporated data from other sources, enhancing the depth and breadth of the benchmarking analysis.

Enhancing Data Literacy and Decision-Making

Prior to adopting the IPEDS Peer Benchmarking Dashboards, Tarleton had yet to fully utilize its instance of Power BI. However, the user-friendly starter template facilitated a smooth transition, minimizing the learning curve for staff and stakeholders. Moving forward, Tarleton plans to leverage these data visualizations to enhance data literacy, promote data storytelling, and support decision-making for strategic finance efforts. Using the dashboards as a tool for critical conversations around student success and institutional performance, Tarleton aims to enhance its culture of data-informed decision-making and continuous improvement across the university.