

## Wednesday, Feb 26 at 2:30pm

**Session:** A

**Level:** Beginner

**Audience:** All

**Title:** Data Literacy at Dallas College

**Track:** Educate Information Producers, Users, & Consumers

**Presenter(s):** Amber Raley & Arthurine Wade - Dallas College

**Abstract:**

This session shares the progress and lessons learned from a data literacy training program implemented at Dallas College. Aimed at equipping staff, faculty, and administrators with essential data skills to support college operations and, ultimately, student success, the program combines theoretical knowledge with practical applications across domains. The training emphasizes the importance of data-driven decision-making connected to individual and organizational goals. Our cross-functional team identified competencies, built a curriculum, and developed interactive, on-demand training accessible to all employees. This initiative not only provides individual professional development but also strengthens organizational effectiveness through foundational skills development. We propose that such programs can serve as a model for other institutions aiming to promote data literacy in their context.

**Description:**

This interactive session shares the development process as well as the training itself for a college-wide data literacy training to equip staff, faculty, and administrators with essential data literacy skills to enhance decision-making and improve institutional effectiveness. Participants will explore the team composition, competency framework and learning outcomes, curriculum and course development for the employee data literacy project at Dallas College. Then we'll take a look at the first module of the course which covers fundamental concepts of data literacy and share pilot results and lessons learned during development and implementation.

**Learning Outcomes:**

Participants will be able to...

Explain the rationale behind developing a college-wide employee data literacy course and its intended impact on organizational effectiveness, including application to their institution.

Compare and contrast different approaches to data literacy training, assessing the effectiveness and applicability of the Dallas College approach to their institution based on pilot participant feedback and implementation outcomes.

Critique the implementation process of the course, discussing strengths and areas for improvement and leaving with promising practices and lessons learned for their institution.

## Wednesday, Feb 26 at 2:30pm

**Session:** A

**Level:** Beginner

**Audience:** 2-Year Public/Private

**Title:** Identify Potential Graduates - Some tricks

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Cara Hogan & Patick Sanger - Alvin Community College

**Abstract:**

This session will provide some tricks and ideas on how to identify potential graduates as you enter a semester and how to find missed graduates after the semester ends. We will show how our data warehouse assists with this, but also provide tips and tricks for people with all types of data support systems to identify potential grads and any missed ones.

**Description:**

This session will provide a demo of our datawarehouse and how we can identify upcoming graduates and find graduates who might have been missed in the awards process. We will also discuss how to identify students who may have opportunities to graduate with a different award, if eligible, if they complete those requirements instead.

**Learning Outcomes:**

The participant learning outcomes that participants will gain from the session are:

1. Understand the challenges associated with identifying potential graduates and recognize the limitations of existing systems and staffing.
2. Explore the benefits of using simple searches to build a process to identify the students.
3. Gain insights into strategies like identifying alternate degree options and off-path courses and learn how these interventions can effectively assist students in completing their educational programs.

**Wednesday, Feb 26 at 2:30pm**

**Session:** A

**Level:** Intermediate

**Audience:** All

**Title:** Challenges to Leading and Framing Digital Strategy and Data Governance for Institutional Research and Analytics

**Track:** Stewards of Data & Information

**Presenter(s):** R. Joel Farrell - Texas Tech University Health Sciences Center

**Abstract:**

Digital strategy and data governance are crucial components for institutions aiming to leverage data analytics for enhancing decision-making, promoting innovation, and maintaining a competitive edge. However, leaders in institutional research and analytics face numerous challenges in leading, framing and leveraging and framing aligning technology with strategic goals, ensuring data integrity and security, managing stakeholder expectations, and fostering a culture of data literacy. This presentation will explore these challenges and offer insights into effective strategies for overcoming them, thereby enhancing the overall impact of institutional analytics.

**Description:**

Digital strategy and data governance are crucial components for institutions aiming to leverage data analytics for enhancing decision-making, promoting innovation, and maintaining a competitive edge. However, leaders in institutional research and analytics face numerous challenges in leading, framing and leveraging digital strategy and data governance to support strategic and operational goals. This presentation will explore these challenges and offer insights into strategies for overcoming them to enhance the overall impact of institutional research and analytics.

**Learning Outcomes**

**Understanding Key Challenges:** Participants will gain a comprehensive understanding of the primary challenges in leading digital strategy and implementing data governance frameworks, including technological, cultural, and ethical issues.

**Strategic Alignment:** Learn how to align digital strategies with the institution's overall vision and strategic goals to ensure coherence and maximize impact.

**Improving Data Governance:** Discover best practices for establishing robust data governance policies that ensure data quality, privacy, and compliance with legal regulations.

**Stakeholder Engagement:** Acquire techniques for effectively communicating and engaging with various stakeholders to foster collaboration and support for digital and data initiatives.

**Building a Data-Driven Culture:** Explore methods to cultivate a data-driven culture within institutions, including enhancing data literacy among staff and encouraging data-informed decision-making.

**Innovation in Analytics:** Identify opportunities for innovation in institutional research through the adoption of advanced analytics tools and methodologies.

**Overcoming Resistance:** Learn strategies to manage resistance to change and address concerns related to digital transformation and data governance.

By the end of this presentation, participants will be better equipped to lead and frame digital strategies and data governance efforts, ultimately advancing their institution's analytics capabilities and research initiatives.

**Learning Outcomes:**

**Understanding Key Challenges:** Participants will gain a comprehensive understanding of the primary challenges in leading digital strategy and implementing data governance frameworks, including technological, cultural, and ethical issues.

**Strategic Alignment:** Learn how to align digital strategies with the institution's overall vision and strategic goals to ensure coherence and maximize impact.

**Improving Data Governance:** Discover best practices for establishing robust data governance policies that ensure data quality, privacy, and compliance with legal regulations.

**Stakeholder Engagement:** Acquire techniques for effectively communicating and engaging with various stakeholders to foster collaboration and support for digital and data initiatives.

**Building a Data-Driven Culture:** Explore methods to cultivate a data-driven culture within institutions, including enhancing data literacy among staff and encouraging data-informed decision-making.

**Innovation in Analytics:** Identify opportunities for innovation in institutional research through the adoption of advanced analytics tools and methodologies.

**Overcoming Resistance:** Learn strategies to manage resistance to change and address concerns related to digital transformation and data governance.

By the end of this presentation, participants will be better equipped to lead and frame digital strategies and data governance efforts, ultimately advancing their institution's research and analytics capabilities and initiatives.

**Wednesday, Feb 26 at 2:30pm**

**Session:** A

**Level:** Intermediate

**Audience:** 4-Year Public

**Title:** Demystifying Weighted Semester Credit Hours: Applications and Implications at UTSA

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Jorge Aviles - The University of Texas at San Antonio

**Abstract:**

This session provides an intermediate-level overview of Weighted Semester Credit Hours (WSCH) and their various applications. Attendees will gain insights into how The University of Texas at San Antonio (UTSA) utilizes the Texas Public General Academic Institutions Expenditure Study to calculate WSCH. Additionally, the session will explore the role of WSCH in the Incentivized Resource Management (IRM) budget model at UTSA, discuss the use of business intelligence tools to relay WSCH data to campus stakeholders, and highlight its significance in financial planning and resource allocation.

**Description:**

Weighted Semester Credit Hours are a crucial metric in higher education, influencing funding, resource allocation, and institutional planning. This session aims to demystify WSCH by explaining their calculation, potential uses, and specific applications at UTSA. We will delve into the Texas Public General Academic Institutions Expenditure Study and how its findings can be used to determine WSCH. This includes demonstrating the use of the Texas Higher Education Coordinating Board Course Inventory to extract funding codes and walking through the logic to determine the relative weight used in calculating WSCH for course enrollments. Furthermore, the session will discuss the integration of WSCH into UTSA's IRM budget model, demonstrating its impact on financial decision-making and strategic planning. To enhance understanding, the presenter will show how Power BI is used to relay data to campus stakeholders at various levels (institutional, college, and departmental). Through this session, participants will develop a comprehensive understanding of WSCH and their importance in the context of institutional research.

**Learning Outcomes:**

In attending this session, participants will have a comprehensive understanding of the concept of Weighted Semester Credit Hours and their significance in higher education. They will learn about the Texas Public General Academic Institutions Expenditure Study and its crucial role in determining WSCH at The University of Texas at San Antonio. Additionally, attendees will gain valuable insights into how WSCH are applied within the Incentivized Resource Management (IRM) budget model at UTSA, demonstrating its impact on financial decision-making and strategic planning. Participants will be equipped to apply the knowledge gained to enhance financial planning and resource allocation at their own institutions utilizing business intelligence tools like Power BI to effectively relay data to various campus stakeholders.

**Wednesday, Feb 26 at 2:30pm**

**Session:** A

**Level:** Intermediate

**Audience:** All

**Title:** Enhancing Enrollment and Tuition Revenue Forecasting with Data Visualization

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** John Stanley - University of Hawaii - West Oahu; David Mongold - University of Hawaii System - Retired

**Abstract:**

Demonstration linking tuition revenue modeling to enrollment forecasting, followed by a presentation of an interactive data visualization tool in Power BI. Session will highlight the importance of taking the next step beyond forecasting to make data more readily accessible to stakeholders. Attendees should come away with a firm concept on how to create a tuition forecast from an enrollment forecast as well as an understanding of the importance of data visualizations in making those forecasts accessible.

**Description:**

As institutions continue to focus on enrollment and financial management, the ability to understand and project patterns of change becomes imperative. Providing timely and accurate forecasts to campus stakeholders can assist in the planning and development of physical, academic and human resources. Brinkman and McIntyre stated: "Enrollment forecasts are fundamental elements of planning and budgeting at any higher education institution that depends on student enrollments or at any agency or organization

that has responsibilities for supporting those institutions" (New Directions for Institutional Research, 1997). More than two decades later, with resources constrained and enrollments declining in many sectors, enrollment management is taking on increased importance for many institutions. In turn, enrollment and tuition revenue forecasting are becoming increasingly important topics within institutional research, analysis and planning.

The first part of this session will show how an enrollment forecast can be linked to tuition and fee data to create a tuition revenue model. The second part of the session will demonstrate how those forecasts can be used to create an interactive data visualization tool using Power BI. The presenters will demonstrate how this easy-to-use tool assists in performing scenario analysis to gauge the impact of policy proposals on student enrollment and tuition revenues.

**Learning Outcomes:**

Participants in this session will learn how to link an enrollment forecast to tuition data to create a tuition revenue model.

Participants in this session will see a demonstration of an interactive data visualization tool in Power BI that enables senior administrators to gauge the impact of policy decisions on enrollment and tuition revenue.

**Wednesday, Feb 26 at 2:30pm**

**Session:** A

**Level:** Intermediate

**Audience:** All

**Title:** Understanding Graduate Student Completion Rates and Student Success

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Moumita Mukherjee & Susan Moreno - University of Houston

**Abstract:**

Using certified longitudinal student data, this presentation will discuss the trends over-time in 5-year and 10-year graduation rates for master's and doctoral/professional levels respectively. In this session, we will take a deeper dive into understanding and analyzing the trends in graduation rates and focus on understanding the differences in graduate student success as an outcome of students' background characteristics and program level. We will share the research and analytical methodology that was utilized in analyzing the data, the key lessons from those analyses, and discuss future implications.

**Description:**

Graduate completion rates have increased over the years (Council of Graduate Schools, 2017); however, research shows that there are differences in graduation and completion rates for underrepresented and racial/ethnic sub-groups. For instance, Solinas-Saunders et al. (2024) found that overtime there has been a significant increase in graduation rates for Hispanic students. In this context, it is important to understand how graduation rates and timely completion serve as important student success measures. The proposed presentation utilizes the Texas Higher Education Coordinating Board (THECB) definition of graduation rates to examine the 5-year graduation rates for master's and 10-year graduation rates for doctoral and professional students. Using certified longitudinal data for graduate students who started in 2012 and/or in later cohorts at the institution, we will analyze graduate student graduation rate trends as an outcome of students' background characteristics and their program level. In this proposed session, the presenter(s) will share the statistical analyses that were utilized and the key results from such analyses. Future implications and limitations for graduate student graduation and completion rates will be discussed. This presentation is a continuation to the study that was presented last year at TAIR that showcased the graduate student graduation rates data model and an interactive dashboard.

**Learning Outcomes:**

Attendees will be able to:

1. Understand the analytical method that was utilized to examine graduation rates for graduate students.

2. Understand the future implications and importance of graduate completion rates.

Wednesday, Feb 26 at 3:45pm

**Session:** B

**Level:** Intermediate

**Audience:** 2/4-Year Public

**Title:** What predict North Star Completion at ACC

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Xiaoling Liang & Susan Burkhauser - Austin Community College

**Abstract:**

In academic year 2023-2024, the Office of Institutional Research & Analytics (OIRA) at Austin Community College (ACC) developed statistical models to identify factors that predict whether a student completes an award or transfers (i.e., ACC's North Star Completion) to provide decision support to enhance student success, operational efficiency, and strategic planning. This report presents an analysis of what predicts first-time-in-college (FTIC) students' three-year North Star completion and two components of North Star completion: graduation and transfer. The study used logistic regression and included data from six FTIC cohorts spanning from fall 2015 to fall 2020. It considered factors related to student demographic information, high school performance, residency, socioeconomic status, academic details at entry (e.g., dual credits, educational intent, college readiness, area of study, and enrollment intensity), where they took ACC courses and financial aid information.

**Description:**

This session will introduce background of this project, methodology used, descriptive and regression analysis results, and discuss some key findings.

**Learning Outcomes:**

1. Understand the Impact of Various Predictive Factors: Attendees will gain insights into how different factors predict three-year completion.
2. Apply Statistical Models to Institutional Data: Participants will learn about the application of logistic regression models in educational settings, specifically how these models can be utilized to analyze and predict student outcomes.
3. Strategize Interventions Based on Analytical Insights: The session will equip attendees with the knowledge to interpret statistical data and implement evidence-based strategies.

Wednesday, Feb 26 at 3:45pm

**Session:** B

**Level:** Intermediate

**Audience:** All

**Title:** Program Evaluation: Assessing Programs with HB8 and Unlocking Opportunity in mind

**Track:** Plan & Evaluate

**Presenter(s):** Savithra Eratne & Kristina Lopez - San Antonio College

**Abstract:**

Program evaluation is a crucial process for assessing the effectiveness and efficiency of academic programs. This examination should measure the quality of educational offerings and ensure that they align with institutional goals and meet the evolving needs of students and society. With the goal of social upliftment for students, we should not restrict our assessment to mere enrollment numbers and program costs. In this discussion, we will discuss how San Antonio College is adopting to HB8 and new ideas for unlocking opportunities.



**Description:**

This session will discuss how San Antonio College evaluates its programs and how to develop a rubric that covers the critical components of a student success-focused program evaluation.

**Learning Outcomes:**

Participants will gain knowledge in developing a framework to enhance the program evaluation at their institute.

Wednesday, Feb 26 at 3:45pm

**Session:** B

**Level:** Beginner

**Audience:** All

**Title:** Creating a starting point for institutions with machine learning predictors

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Raul Belmontes Jr - Alamo Colleges District

**Abstract:**

We are looking for collaboration! The plan is to create a foundation for institutions to get started using machine learning methods to predict student behavior.

**Description:**

The goal of this project is to set up a starting point for institutions looking into machine learning. For institutions that may not have the resources to start research on this project.

**Learning Outcomes:**

Attendees will learn about upcoming resources in machine learning for higher education.

Institutions will be able to contribute to the starting methodologies for approved machine learning methods.

Wednesday, Feb 26 at 3:45pm

**Session:** B

**Level:** Beginner

**Audience:** All

**Title:** Academic Scheduling Dashboard Warehouse

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Daniel Le - Dallas College

**Abstract:**

As a part of higher education institutions, scheduling departments focus on creating an optimized class schedule for current and future semesters. The department's main barriers when creating these schedules include balancing room availability, time blocks, faculty shortages, credit hours, etc. One tool that is used to ensure a successful schedule is by providing section and faculty information through interactive dashboards. Within Dallas College, the Academic Scheduling & Data Analytics team has established a comprehensive SharePoint site that provides section-level data dashboards for school leadership. These dynamic dashboards assist in supporting data-driven decisions in the areas of schedule readiness, enrollment trends, book adoptions, and faculty load. These reports were built in Power BI Desktop and refreshed daily on the Power BI web service to accurately share with the academic scheduling community. This presentation will go through the various dashboards the department has created to showcase the effective uses of these tools.

### **Description:**

Dallas College has established a centralized department - Academic Scheduling & Data Analytics - to assist and control all scheduling aspects such as offering classes, assigning teaching assignments, book adoptions, etc. with the cooperation and approval from school and department leadership. In order to create an optimized student-centric schedule for current and future terms, our department has established a comprehensive SharePoint site that houses around 30 scheduling related dashboards. These dashboards are used by school leadership to gain insight into what decisions need to be made based off of historical and current enrollment trends. The dashboards cover three main areas, including:

1. **Schedule Readiness:** Semester readiness and vice provost (VP) overview dashboards provide academic leadership with information regarding termed faculty information, course assignment statuses, pending or cancelled sections and semester number comparisons.
2. **Enrollment Data:** Enrollment data dashboards provide insight into course section numbers, section utilization, and enrollment comparisons between semesters.
3. **Faculty Data:** Faculty-centric dashboards provide data to support faculty-related processes, including load percentages, compliance training, and semester book adoptions.

The goal of this talk is to showcase the different dashboards the department has built to see how school leadership can effectively use these tools.

### **Learning Outcomes:**

- The audience will learn the different reports and dashboards that the Academic Scheduling & Data Analytics department has created to inform school leadership about enrollment, faculty data, and readiness of the schedule.
- By the end of the presentation, participants will walk away with knowledge of how interactive dashboards can be applied to their own data-related communication objectives.

**Wednesday, Feb 26 at 3:45pm**

**Session:** B

**Level:** Intermediate

**Audience:** All

**Title:** Islands of Data: Connecting Student Retention to the National Student Clearinghouse

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Whitney Kessinger & Nicholas Ullrich & Jiashi Zhao & Farazuddin Mohammed - Texas A&M University - Corpus Christi

### **Abstract:**

Texas A&M University - Corpus Christi is a public, four-year institution that is part of the Texas A&M System. Within the system, there is a transfer program available to students to transfer to Texas A&M University after their first year. TAMU-CC has one of the largest populations of these students within the system. To better understand this population and any other student who transfers out, the PAIRS department developed a database to track students' paths using National Student Clearinghouse data. The database tracks all students for 24 semesters, both undergraduate and graduate. The goal is to use the data to help inform administration on the movements of our students and better serve them, whether that be through academic offerings or student support. Our presentation will focus on the development of our National Student Clearinghouse retention database, the plans for utilization, and the limitations we found throughout the process.

### **Description:**

Join us for an insightful session as we explore the development of the National Student Clearinghouse Retention Database at Texas A&M University-Corpus Christi (TAMU-CC). We'll begin with a brief introduction to the university and its PAIRS department, setting the stage for the discussion.



We will dive into the motivating factors behind the creation of this database, outlining the key challenges and needs that led to its development. Attendees will gain an inside look at the strategic decisions made during the planning phase-what data was

included, what was left out, and the criteria established for managing complex student records, such as handling multiple enrollments within a single term.

Next, we'll take you through the technical journey of building the database, step-by-step. You'll learn about the tools, methodologies, and historical data employed to create this powerful retention resource, along with the validation processes that ensured its accuracy.

The session will conclude with a reflection on the hurdles faced, lessons learned, and future applications of the database. With opportunities for Q&A throughout, this session promises to offer valuable takeaways for institutions looking to strengthen their data-driven retention strategies.

**Learning Outcomes:**

- Apply our strategies and contribute to community knowledge of National Student Clearinghouse database development methodologies.
- Engage in discussions on best practices for National Student Clearinghouse database with attendees.

Wednesday, Feb 26 at 3:45pm

**Session:** B

**Level:** Intermediate

**Audience:** 4-Year Public

**Title:** Organizing the Process: UT Austin's Modernization Journey for Documenting and Training New Employees for CBM Reporting

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Erin Cowart & Megan Kidd - University of Texas at Austin

**Abstract:**

In 2019, our institution's CBM processes consisted of a set of inter-connected Word documents detailing manual processes of editing text and Excel files that were often obsolete. This made training employees on CBM reporting a challenge. Over the past 5 years, we have focused on modernizing our reporting processes. This included developing automated SPSS scripts and creating robust, flexible documentation using Confluence's online wiki workspace to build a training manual for CBM reporting. While this modernization is still in progress, the changes we have made have not only improved our reporting but have also provided the much-needed foundation to begin training additional staff in CBM reporting.

**Description:**

At the 2024 TAIR Annual Conference, a question was asked - 'How many of you received training for CBM reporting?' □ The room full of IR professionals remained silent. Clearly, with the constant shift in reporting requirements on top of an ever-changing software and technology landscape, training others on the CBM reporting process continues to be a challenge at many institutions. In this presentation, we will discuss our discovery that flexible, yet robust documentation is the first step in training others for CBM reporting, UT Austin's journey to modernize our processes, and the successes and failures we've encountered along the way.

**Learning Outcomes:**

Attendees will get an inside look at how UT Austin has organized and modernized CBM reporting for UT Austin (GAI) and UT Austin Dell Medical School (HRI)

Attendees will learn about how we document, track, and automate edits made to individual reports

Attendees will learn what training strategies did and did not work when training employees on CBM reporting

Wednesday, Feb 26 at 4:45pm

**Session:** C

**Level:** Beginner

**Audience:** All

**Title:** Using the Economic Hardship Index to Drive Student Success

**Track:** Plan & Evaluate

**Presenter(s):** Douglas Walcerz - Lee College

**Abstract:**

Colleges and universities are required to disaggregate student success data by race/ethnicity and gender, but they cannot design or implement programs to address student success gaps based on those characteristics because SB17, a.k.a. the Anti-DEI bill, prohibits colleges from "conducting trainings, programs, or activities designed or implemented in reference to race, color, ethnicity, gender identity, or sexual orientation." The Economic Hardship Index provides a useful alternative and leverages data that are already in the Student Information System. The components of the Economic Hardship Index and the process for implementing it to support student success initiatives will be described.

**Description:**

Virtually all colleges and universities in Texas used to have student success goals based on race/ethnicity and gender in part because SACSCOC guidance for Standard 8.1 states:

'In order to maximize institutional effectiveness in the area of student achievement goals, member institutions should also disaggregate graduation rates by appropriate demographics. Those demographic characteristics typically include gender, race, ethnicity, and Pell/Non Pell status. Institutions may also disaggregate graduation rate data by other student population characteristics. If any categories that are not standard are used, the institution should include definitions. For the various types of disaggregation the institution should provide a rationale for their use. Institutions should, as a result of the analysis of such disaggregated data, report any ongoing institutional strategies to seek improvement in closing completion gaps among student populations when addressing compliance with this standard.' □

The passage of the Anti-DEI bill in the 88th Legislative Session prohibits colleges and universities from designing or implementing programs based on race/ethnicity or gender, and also prohibits colleges and universities from setting goals or targets for student success based on race/ethnicity or gender according to legal interpretations from TASB and others.

This session presents the Economic Hardship Index as a practical and useful characteristic for setting goals and driving student success initiatives. The Economic Hardship Index also helps institutions meet SACSCOC Standard 8.1 because guidance from SACSCOC allows institutions to use 'other student population characteristics' □ as long as they provide a definition and rationale.

This session will provide a complete definition of the Economic Hardship Index, show how it is calculated using data that are already in the Student Information System combined with US Census data, and provide examples of how it is being used at Lee College to drive student success initiatives.

**Learning Outcomes:**

Participants will be able to:

Define the Economic Hardship Index and identify the five components that comprise it;

Describe how the Economic Hardship Index is calculated;

Describe how to use existing data in the Student Information System combined with US Census Data to calculate an Economic Hardship Index for each student.

Explain how to use the Economic Hardship Index to set goals, track progress, and produce reports on the effectiveness of Student Success initiatives.

Wednesday, Feb 26 at 4:45pm

**Session:** C

**Level:** Beginner

**Audience:** All

**Title:** Mitigating Early Student Loss Through Internal and External Collaborations

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Sayeeda Jamilah & Dillon Lu & David Mahan - Dallas College

**Abstract:**

As postsecondary enrollment continues a downward trend, higher education leaders are tasked with creating an infrastructure of early interventions during the admissions process to ensure students who apply and register, persist past census day in their program of study. Too often, technology systems holding student information are not integrated between college divisions, creating a disjointed enrollment process. Therefore, many institutions struggle with the timeliness and quality of academic, financial aid, and documentation-related advising during the onboarding experience, which leads to student withdrawal before, or soon after, the semester begins. Presenters will show how the Research Institute at Dallas College has developed a two-prong approach to address this challenge-through building a predictive Admission model in-house to help Admissions and Success Coaches identify applicants who are most likely to enroll, and with the RAND Corporation using qualitative and survey methods to understand factors driving students to withdraw before the census date.

**Description:**

The presenters will highlight the design and implementation of the Admission model to calculate probability scores for each Dallas College applicant, predicting one's likelihood of enrollment based on a robust set of time-dependent required indicators and student characteristics. Steps to operationalize the model via Rapid Insight's Construct and Predict platforms for use across the College will also be demonstrated. Presenters will also discuss collaborations with RAND and Graduation Alliance (outreach firm specializing in dropout recovery and re-enrollment) to implement the collection of data from enrolled students who withdrew before census date and from college staff supporting students during the registration process. The session will end with a 10 to 15-minute discussion of next steps and the application of the research and Q&A.

**Learning Outcomes:**

By the end of this session, attendees will be able to:

- Understand and apply a similar predictive model to improve enrollment outcomes at their institutions
- Plan and implement a sustainable process of feedback from withdrawn students to inform strategies and improve services and programs

**Wednesday, Feb 26 at 4:45pm**

**Session:** C

**Level:** Intermediate

**Audience:** 2-Year Public

**Title:** Maximizing the Value of Portable Data in Higher Education

**Track:** Educate Information Producers, Users, & Consumers

**Presenter(s):** Richard Plott - Kilgore College

**Abstract:**

In this engaging presentation, we will delve into the vital role of portable data in transforming decision-making processes for both producers and consumers within higher education. Participants will learn how to effectively produce and utilize key information, including enrollment figures, retention rates, completion statistics, and employment outcomes. By leveraging this data, institutions can make informed decisions that enhance student experiences and drive overall success.

We will cover best practices for data sharing and discuss innovative tools for analysis that enable stakeholders to access and interpret data effectively. Additionally, we will explore strategies for fostering a

data-driven culture that empowers educators and administrators alike. Join us to discover how to unlock the potential of portable data and position your institution for growth and excellence in an increasingly competitive landscape. This session promises actionable insights to enhance the impact of your data initiatives.

**Description:**

In today's data-driven landscape, understanding and leveraging portable data is essential for both producers and consumers in higher education. This session will provide attendees with actionable insights into how to effectively produce and utilize critical information-such as enrollment statistics, retention rates, completion outcomes, and employment data-to inform strategic decisions.

Participants will explore best practices for data sharing and discover innovative tools that facilitate analysis and interpretation of key metrics. We will also discuss how to foster a culture of data-driven decision-making within institutions, empowering educators and administrators to enhance student experiences and drive institutional success.

Join us to learn how to harness the power of portable data, enabling your institution to navigate challenges and seize opportunities in an increasingly competitive environment. Whether you're a seasoned data user or just beginning your journey, this session will equip you with the knowledge to maximize the impact of your data initiatives.

**Learning Outcomes:**

Here are three major outcomes for the session:

**Enhanced Data Literacy:** Attendees will gain a deeper understanding of key data concepts and metrics, such as enrollment, retention, completion, and employment statistics, enabling them to interpret and utilize data effectively in their decision-making processes.

**Practical Tools and Strategies:** Participants will leave with actionable strategies and innovative tools for data production and analysis, allowing them to improve data sharing practices and foster collaboration among stakeholders within their institutions.

**Culture of Data-Driven Decision-Making:** By exploring best practices for implementing a data-driven culture, attendees will be equipped to champion data initiatives in their institutions, leading to more informed decisions that enhance student outcomes and institutional performance.

**Wednesday, Feb 26 at 4:45pm**

**Session:** C

**Level:** Intermediate

**Audience:** All

**Title:** Projecting Incoming Cohort Size, Characteristics, and Course Enrollments via Machine Learning

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Scott Cook & Morgan Carter - Tarleton State University

**Abstract:**

The Admitted Matriculation Projection (AMP) is a supervised machine learning model (LightGBM), that predicts the size, characteristics, and course enrollments of the incoming Fall cohort up to eight months in advance. Using weekly snapshots of historical application activity, AMP compares each student admitted for the Fall term to contemporaneous data on prior cohorts to generate individualized probabilities to enroll in approximately 75 lower-level courses. This granular approach at the level of student-course pairs yields greater accuracy and flexibility than traditional methods based on extrapolating historical aggregate

enrollments. AMP also accounts for fluctuations in application activity and projects cohort characteristics, such as demographic composition, academic background, and geographic distribution. We highlight AMP's use of advanced, free, open-source Python packages like FLAML (automated machine learning), MiceForest (missing data imputation), and SHAP (model explainability) that could assist a wide range of predictive IR tasks.

**Description:**

Powerpoint-based talk with integrated open-floor for questions & discussion

**Learning Outcomes:**

Illustrate machine learning techniques to forecast enrollments

**Wednesday, Feb 26 at 4:45pm**

**Session:** C

**Level:** Intermediate

**Audience:** All

**Title:** Trends in Student Debt and Financial Aid

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Chrys Dougherty & Christina Zavala & Ken Pon - Texas Higher Education Coordinating Board

**Abstract:**

Every year the Texas Higher Education Coordinating Board publishes the Report on Student Financial Aid in Texas Higher Education with a wealth of statistical information. In recent years, the report has also contained information on student debt based on the requirements of SB1019. In this presentation, we show results from 15 years of these reports and other agency sources, disaggregated by program and student population. The goal is to highlight important trends in the evolution of financial aid programs and student debt over time.

**Description:**

The session will present trend statistics on student debt and financial aid over a 15-year period. We will reserve at least 20 minutes for discussion of how these trends should be interpreted, what additional analysis should be done, and what messages should be conveyed to policymakers from these data.

**Learning Outcomes:**

Session participants may recommend ideas for further analysis of the statistics statewide and for their own. They may recommend other analyses to us and our audience.

**Thursday, Feb 27 at 10:30am**

**Session:** D

**Level:** Beginner

**Audience:** All

**Title:** From Application to Aid: Data Dashboards Driving Financial Decisions

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Chun Du & Taylor Souryachak - Dallas College

**Abstract:**

This session showcases how Dallas College's Financial Aid Dashboards, including the "FA FAFSA & TASFA Processing Report," the "Financial Aid Dashboard," and the "Deregistration Dashboard," improve work efficiency and decision-making within the Financial Aid Office. Attendees will explore real-time dashboards that streamline application tracking, monitor aid disbursement, and provide insights into student enrollment, financial aid trends, and deregistration risk. The session emphasizes the collaboration between



Institutional Research/Data Management & Reporting (IR/DMR) and financial aid professionals in designing dashboards that optimize data usage, automate processes, and support data-driven decisions for student success. The Deregistration Dashboard is particularly valuable for identifying students at risk of deregistration, allowing for timely intervention. Together, these dashboards empower staff to make quicker, better-informed decisions that positively impact student outcomes.

### **Description:**

In today's data-driven landscape, the ability to leverage real-time insights is crucial for the operational success of financial aid departments. The Data Management & Reporting Department at Dallas College has developed a series of Financial Aid Dashboards that enable the Financial Aid Office to work more efficiently and make informed decisions that directly impact students' success. This session will focus on three key dashboards: the FA - FAFSA & TASFA Processing Report, the Financial Aid Dashboard, and the Deregistration Dashboard, each playing a vital role in streamlining financial aid operations.

1. **FA - FAFSA & TASFA Processing Report:**

This dashboard consolidates financial aid application data, making it easy for staff to track FAFSA and TASFA application submissions by financial year and categorize applicants based on verification status. By monitoring trends month-by-month, the Financial Aid Office can anticipate processing loads, identify gaps, and develop targeted outreach strategies for students at risk of missing aid opportunities. This report provides key insights into the completion status of aid applications and helps streamline communication with students who need to submit additional documentation.

2. **Financial Aid Dashboard:**

The Financial Aid Dashboard is designed to provide a detailed view of aid disbursement across different categories, such as PELL grants, loans, and state grants. By tracking the amounts awarded and disbursed, the dashboard enables staff to address bottlenecks and ensure timely aid distribution. The tool offers demographic and enrollment insights, helping align financial aid with broader student retention and success strategies. By giving a clear, real-time picture of aid flow, this dashboard plays a key role in supporting decision-making for institutional planning.

3. **Deregistration Dashboard:**

The Deregistration Dashboard focuses on identifying students at risk of deregistration due to outstanding financial balances. With this tool, the Financial Aid Office can proactively identify at-risk students and intervene to help them resolve their financial obligations before they are deregistered from their courses. This dashboard integrates course-section data to offer detailed information about students' enrollment status and financial holds, helping staff prioritize outreach efforts and prevent disruptions in students' academic progress.

Throughout the session, we will emphasize the collaborative process between the Institutional Research/Data Management & Reporting (IR/DMR) team and the Financial Aid Office. This partnership ensures that the dashboards are both user-friendly and responsive to the specific needs of financial aid professionals. IR/DMR's role in the design, data integration, and ongoing maintenance of these dashboards ensures data accuracy and relevance for all users.

### **Learning Outcomes:**

Participants in this session will:

1. Understand how dashboards can streamline financial aid processes and improve decision-making.
2. Learn how to collaborate effectively between IR/DMR and Financial Aid Offices to build data-driven tools.
3. Gain insight into the tools and techniques used to build robust financial aid dashboards, from design to implementation

**Thursday, Feb 27 at 10:30am**

**Session:** D

**Level:** Intermediate

**Audience:** 4-Year Public

**Title:** Developing a Tool to Predict First-Time Freshmen Academic Success



**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Tristan Young & Nicholas Hudzinski & Glenn Harris & Brandon Cooper - Sam Houston State University

**Abstract:**

Sam Houston State University (SHSU) is trying to improve academic outcomes by closing gaps in its existing early alert system. In 2023, 36.4% of First-Time Freshmen (FTF) who ended the term in poor academic standing were not flagged by instructors through progress reporting - the process that triggers early intervention for the Academic Success Center (ASC). Using historical data from 9,903 FTF records, SHSU trained classification and regression models to predict the academic standing for Fall 2024 FTF students. These models were used to create a tool that helps case managers in the ASC identify at-risk students and provides details about each student's risk factors. ASC staff leverage these insights to run targeted outreach campaigns, to route cases to the appropriate manager, and to inform intervention. The models are run, the tool updated, and the outreach campaigns initiated at the conclusion of weeks four and seven.

**Description:**

This session will focus on how Sam Houston State University (SHSU) integrates predictive analytics into its academic support framework to deliver targeted interventions for at-risk first-time freshmen (FTF). Presenters will demonstrate how the predictive models' outputs are used within a practical tool, enabling care units to identify students who are not already flagged by the early alert system. Care units can view key risk factors and route cases effectively. Attendees will learn how these insights drive more precise interventions through sheltered campaigns and inform strategies for improving first-term GPA outcomes. The session will also highlight SHSU's approach to model recalibration after the seventh week of the term, ensuring timely and adaptive interventions that enhance student success. Participants will leave with actionable strategies for implementing similar predictive models and tools at their own institutions.

**Learning Outcomes:**

Attendees will gain valuable insights into how analysts:

Constructed models to predict the first-term academic standing of its Fall 2024 FTF.

Assembled and managed a cross-divisional team to design and deploy the predictive tool.

Assessed the accuracy of the predictions and effectiveness of interventions associated with it.

**Thursday, Feb 27 at 10:30am**

**Session:** D

**Level:** Intermediate

**Audience:** All

**Title:** Strategies for Using Student Progress Grades to Promote Student Engagement in Support of Successful Final Course Grade Performance

**Track:** Stewards of Data & Information

**Presenter(s):** Rick Leyva - Dallas College- Richland Campus; Thomas Lackey - Dallas College- El Centro Campus

**Abstract:**

This presentation will share how Dallas College's progress grade reporting process was established in support of the Dallas County Promise effort and how this process has evolved through current state. Success stories and issues that have been encountered along the way while establishing ways to utilize the data to promote faculty progress grade reporting, students use of the progress grade information for engaging with student support services to improve grade performance, college-wide progress grade reporting and the use of technology to send students progress grade notifications in support of successful course completion initiatives.

**Description:**

Since 2018, Dallas College (formerly Dallas County Community College District) provides students with progress grade information for selected course sections that include faculty comments related to current performance and suggestions that may lead to final course grade success. This presentation will share how Dallas College's progress grade reporting process was established in support of the Dallas County Promise effort and how this process has evolved through current state. Success stories and issues that have been encountered along the way while establishing ways to utilize the data to promote faculty progress grade reporting, students use of the progress grade information for engaging with student support services to improve grade performance, college-wide progress grade reporting and the use of technology to send students progress grade notifications in support of successful course completion initiatives. The student progress grades initiative has not only provided students with a formal process for understanding their midterm grade course performance but has also provided the college with the faculty perspective- the only opportunity for college-wide assessment based on midterm student grades through the lens of faculty who provide students with the recipe to achieve course learning outcomes through successful course completion.

**Learning Outcomes:**

Attendees will be able to justify the role of faculty in identifying barriers to successful course completion  
Attendees will learn about some common barriers specific to student support services at Dallas College  
Attendees will be able to utilize the information in the session to propose Progress Grade collection at their colleges or universities

Thursday, Feb 27 at 10:30am

**Session:** D

**Level:** Intermediate

**Audience:** 2/4-Year

**Title:** AIRES: A Specialized STEM Internship Program

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Perla Echeverria & Arturo Villarreal & Claudia San Miguel & Marcus Ynalvez - Texas A&M International University

**Abstract:**

In this project evaluation report, we present findings from the activities of the Academic and Industry Readiness in Engineering and Science (AIRES) grant project at Texas A&M International University (TAMIU), specifically focusing on the specialized STEM internship program. Unlike conventional internships, the AIRES model or version integrates proactive academic and career advising while partnering with local STEM industry leaders to provide TAMIU students with work-based learning experiences directly related to their fields of study and career interests. We assess how this innovative model enhances student engagement (curricular and non-curricular) and professional development. Additionally, we evaluate the impact of the AIRES internship program on fostering a sense of belonging among the sampled upper-level undergraduate STEM students. Our results have implications on how to better undergraduate STEM students' training in Hispanic Serving Institutions.

**Description:**

This presentation within this speaker session will provide an overview of the strategies used to design and manage an innovative STEM internship program tailored for upper-level undergraduate students at a Hispanic Serving Institution. We will outline the detailed process for recruiting, screening, interviewing, and selecting candidates, as well as how to align internship opportunities with students' academic and professional goals. Additionally, the session will present findings on the AIRES internship program's impact on psychosocial outcomes, including students' sense of belonging, self-efficacy, and sense of identity within STEM disciplines.

**Learning Outcomes:**

Attendees will be able to understand the process of identifying impactful, discipline-specific internship experiences that foster student growth and career readiness. Attendees will learn the effectiveness of academic and career advising to help STEM students align their academics with their professional career goals.

**Thursday, Feb 27 at 10:30am**

**Session:** D

**Level:** Beginner

**Audience:** 2/4-Year Public

**Title:** Going with the Flow: Using the THECB Texas Talent Trajectory Dashboard to Understand High School Students' Path to Higher Education

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Sharon Wong & Alyssa Ibarra & Amy McCurdy - Texas Higher Education Coordinating Board

**Abstract:**

It is crucial that Texas high school students have equitable access to higher education, as data indicate that 60% of jobs will require a postsecondary credential by 2030. The Texas Talent Trajectory (T3) dashboard is an innovative tool that leverages national and statewide data (the Texas Education Agency, the Texas Higher Education Coordinating Board, and the National Student Clearinghouse) to provide comprehensive insights into Texas' educational landscape. T3 includes data from Texas 8th grade public school students whose educational trajectories are tracked for 11 years. Users can disaggregate educational pathways by location (region, county, district), and demographic characteristics (gender, ethnicity, and economic disadvantage) to illuminate trends and disparities. The purpose of this session includes: 1) showcasing the T3 dashboard, 2) discussing how varied audiences can leverage the T3 dashboard to support their work, and 3) discussing technical aspects of the data and data visualization in Power BI.

**Description:**

This session will introduce the T3 dashboard and discuss the purpose and key questions that the dashboard addresses. We will provide a walk-through demonstration of the dashboard and discuss several use cases in which the dashboard may be used to provide insights. In this session, we will also address some unique benefits and challenges associated with the data used in this dashboard and the technical aspects of setting up a public-facing, FERPA-compliant dashboard in Power BI. We will encourage audience members to ask questions and provide feedback on the dashboard, with the intention of addressing these questions in future dashboard updates.

**Learning Outcomes:**

Session attendees will be able to describe the origin and purpose of the T3 dashboard and key questions addressed. Attendees will be equipped to access and navigate through the T3 dashboard and will be able to locate information relevant to their work. Lastly, attendees will have an intermediate understanding of the data leveraged in the T3 dashboard, including data sources, timeframes, and limitations.

**Thursday, Feb 27 at 10:30am**

**Session:** D

**Level:** Intermediate

**Audience:** All

**Title:** COACHE Faculty Satisfaction Survey Analytics and Reporting

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Jessica Pamplin & Reynaldo Quiroz & Dan Hubbard - University of North Texas

**Abstract:**

The Collaborative on Academic Careers in Higher Education (COACHE) faculty satisfaction survey, administered by the Harvard Graduate School of Education, is a comprehensive survey of faculty sentiment regarding teaching, service and research, tenure and promotion, departmental engagement and collegiality, and other aspects of the academic experience. The University of North Texas has participated in the survey since 2006, with the latest administration occurring in 2024. Our team, known as Data, Analytics, and Institutional Research (DAIR) at UNT, is tasked with data management, analysis, reporting and visualization for the survey, and utilization of the results has led to significant positive changes within the Division of Academic Affairs. In this session we will discuss our methodology for data analysis, reporting, and dissemination of results. Our partnership with the University of Missouri (another COACHE partner), new techniques of analyzing the data, and methods to automate reporting and visualization will be presented.

**Description:**

Participants will engage in a discussion about analysis, reporting, timeline, and methods of improving the faculty experience through the COACHE satisfaction survey.

**Learning Outcomes:**

Participants will learn about the function of the COACHE survey in relation to our institution, our experience with the steering committee and reporting, and discuss methods of analyzing and reporting the data extracted from the survey results.

**Thursday, Feb 27 at 11:30am**

**Session:** E

**Level:** Beginner

**Audience:** All

**Title:** Utilizing predictive model to project the student-centric schedule

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Gayathri Krishnamoorthy & Daniel Le - Dallas College

**Abstract:**

All institutions focus on creating a student-centric schedule for promoting student success and growth. In addition, each institution strategically plans to increase the number of student enrollments by implementing course schedules that align with student demand. For every institution, the number of sections needed for each course is important for allocating resources, offering the right scheduling, and serving students for their success. Over/underestimating the number of course sections can lead to wastage of resource utilization and affect students' success outcomes. The researchers from the Academic Scheduling Department at Dallas College applied predictive analytics to mine the historical enrollment trend data and identify some key factors to better project the number of course sections required for the academic semester. The expected outcome of this research will be beneficial for student success and potentially increase the percentage of course enrollment.

**Description:**

The Academic Scheduling Department is responsible for creating course sections' schedules for all students enrolled at Dallas College. To support the goal of increasing students' enrollment while strategically maintaining resource utilization, the researchers of this department would like to apply both prescriptive statistics and predictive analytics to better project the number of course sections required for the future academic semesters. Both historical and current enrollment trends are collected and monitored carefully. In addition, the researchers also collect course section level data as well as other students' enrollment behavior level data to identify any potential impacted factors on the enrollment trend. This study is preliminary and will be improved every semester to better assist with the daily operations of the scheduling work.

**Learning Outcomes:**

- The audience will learn the how to utilize the prescriptive statistics and advanced predictive analytics to capture meaningful insights from the enrollment data.
- Highlight the needs of advanced analytics work to support data - driven decisions and institution research/effectiveness in higher ed.

**Thursday, Feb 27 at 11:30am**

**Session:** E

**Level:** Advanced

**Audience:** 2-Year Public

**Title:** The Impacts of Texas Educational Opportunity Grants on Student's Outcomes

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Xiqian Liu - Texas Higher Education Coordinating Board

**Abstract:**

This presentation explores the impact of the Texas Educational Opportunity Grant (TEOG) on student outcomes at Texas two-year public institutions. Using data from TEA, TWC, CBM and FADS, the study applies quasi-experimental methods to assess the effects of TEOG on student persistence, degree attainment, and employment during the first year post-college. Additionally, it will present findings on the patterns of TEOG disbursements across two-year public institutions in Texas, examining how these disbursements may influence student outcomes. The results provide a detailed understanding of TEOG's effectiveness in supporting low-income students, offering insights for researchers on enhancing educational grant programs.

**Description:**

This session will be led by Power Point Slides and it's a study on the impact of the Texas Educational Opportunity Grant (TEOG) on student outcomes at Texas two-year public institutions. I will begin by introducing the TEOG program and its policy background, followed by a K-means clustering analysis that shows how TEOG funding is distributed differently across institutions and the impacts of these differences on student outcomes. Next, I will explore the research questions focused on how the grant affects student persistence, degree attainment, and workforce participation. The session will conclude with a discussion of the findings, offering policy implications and recommendations for improving financial aid distribution and student success.

**Learning Outcomes:**

Understanding TEOG Distribution Patterns: Attendees will gain insights into how Texas Equal Opportunity Grant (TEOG) funding is distributed across different two-year public institutions and how these patterns influence student outcomes, based on K-means clustering analysis.

Evaluating the Impact of TEOG: Attendees will learn about the quasi-experimental methods used to estimate the impact of TEOG on key student outcomes, including persistence, degree attainment, and workforce participation in the first year.

Applying Research to Policy: Attendees will be able to apply the findings from the study to inform discussions about policy improvements for financial aid programs and their role in supporting student success at two-year institutions.

**Thursday, Feb 27 at 11:30am**

**Session:** E

**Level:** Beginner

**Audience:** All

**Title:** Make a Dashboard in minutes with Tableau and Power BI

**Track:** Collect, Analyze, Interpret & Report



**Presenter(s):** Cara Hogan & Patrick Sanger - Alvin Community College

**Abstract:**

This session will show you how to create a simple dashboard using Tableau or Power BI with a data warehouse like Zogotech or just a simple excel file. Dashboards can be created for each semester that will drill down to course level daily enrollment to assist your administration and faculty in their course decisions. Additionally, course level enrollment patterns are identified and analyzed to provide answers to key course enrollment questions before the semester

**Description:**

This session will provide a step by step, live demonstrations of both Tableau and Power BI and how they can create a course level enrollment dashboard ready for publication and use. Course level enrollment patterns are a key way to identify and analyzed to provide answers to key enrollment questions before the semester starts. A dashboard can provide a quick overview for decision makers and this session will show how quickly data can be explored in Tableau or Power BI.

**Learning Outcomes:**

Outcomes for this session:

- 1) Demonstrate how a visual daily enrollment dashboard can help inform decisions
- 2) Demonstrate how to create a simple daily enrollment dashboard with Tableau and Power BI

**Thursday, Feb 27 at 11:30am**

**Session:** E

**Level:** Intermediate

**Audience:** All

**Title:** A Coherent Data Model for Learning Assessment

**Track:** Plan & Evaluate

**Presenter(s):** Douglas Walcerz - Lee College

**Abstract:**

A radically new data model for learning outcomes assessment will be described that is flexible enough for undergraduate and graduate programs as well as CTE programs like cosmetology and welding. The new model standardizes and automates the processing and presentation of assessment data, so faculty do not have to aggregate or calculate scores and can focus on interpreting and responding to the results with recommendations for continuous improvement. The model does not require standardized assessments, signature assignments, end-of-program testing, or any other externally imposed assessment instrument. The model provides both longitudinal and cross-sectional analyses. The implementation and scale-up process will be described, and recent results will be presented.

**Description:**

Insufficient evidence of assessment and continuous improvement remains the most frequent problem during SACSCOC reaffirmation, with about one out of ten schools being required to submit follow-up reports. Despite over twenty years of focusing on outcomes assessment, many colleges and universities still struggle to scale and sustain a meaningful assessment system. The new data model being presented in this session is very different from the systems that have been promoted in the past and overcomes many of the obstacles that cause other systems to fail.

**Learning Outcomes:**

Participants will be able to:

- Describe key differences between the new data model and traditional approaches to assessment;
- Describe the new data model in conceptual terms;
- Explain how the new data model overcomes traditional barriers to adoption and scaling;



Explain how the new data model addresses criticisms of assessment including issues of validity, reliability, burden on faculty, and ambiguous results;  
Describe key features of the standardized reports produced by the new data model.

**Thursday, Feb 27 at 11:30am**

**Session:** E

**Level:** Intermediate

**Audience:** All

**Title:** Building Student Personas with a Focus on Energizing Data Driven Decision Making

**Track:** Educate Information Producers, Users, & Consumers

**Presenter(s):** Tom Glenn & Heather Lindley - Midland College

**Abstract:**

Midland College's student persona project is focused on determining shared struggles, barriers, and successes of our students. This has provided insights to the college in several areas. We are utilizing our personas in three primary ways across campus.

As an empathy tool to inject student voice into raw data to make connections with stakeholders across campus and grow their understanding related to the impact of 'moving the needle' □.

We have started to think about our personas as a standard practice in all major campus decision-making to ensure we are thinking about the impact our decisions have for our entire student body.

As a new disaggregate, better suited to provide actionable data.

In our session we would love to share the processes we utilized and lessons we learned in developing these personas and discuss how we have started to embed them into our IE/IR related work.

**Description:**

Please join us as we discuss how Midland College developed student personas with a focus on not only understanding our students better but also ensuring we came out of the process with a valuable tool to provide actionable data. We will discuss our development process, lessons learned, and how we have started to utilize our personas across the campus.

**Learning Outcomes:**

Understand Midland College's process and lessons learned in developing these focused personas.

Understand the primary ways that personas can be utilized effectively to engage stakeholders and provide actionable data.

**Thursday, Feb 27 at 11:30am**

**Session:** E

**Level:** Intermediate

**Audience:** All

**Title:** Market Research and Strategic Planning with BLS and IPEDS Data

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Sarah Gallimore - University of North Texas, Health Science Center

**Abstract:**

Academic leaders often face the challenge of making data-informed strategic program decisions. Questions such as, "Do we need more graduates in this program within my region?", "Should this program be online or residential?", "How are my current programs performing?", "How should I allocate resources to my existing programs?", and "What marketing advantages do my existing programs offer?" are common considerations. This presentation will demonstrate how BLS and IPEDS data can address these academic program planning questions and guide attendees in effectively extracting relevant data from the BLS website and IPEDS database. Participants will learn how to make meaningful recommendations for decision-making and develop similar tools for use at their institutions.

### **Description:**

In today's rapidly evolving educational landscape, institutional researchers and academic leaders are tasked with making strategic, data-informed decisions to guide academic program planning and resource allocation. Leaders in higher education often face complex questions, such as, 'Do we need more graduates in a particular program within our region to meet local workforce demands?', 'Should this program be offered online, in a traditional residential format, or a blend of both?', 'How do my programs perform in relation to institutional goals?', and 'How can we best allocate resources to maximize program impact?'. Addressing these questions requires a robust understanding of available data sources, such as the Integrated Postsecondary Education Data System (IPEDS) and Bureau of Labor Statistics (BLS) data.

This 45-minute presentation is designed to empower institutional researchers at all levels and academic leaders with practical tools and strategies for harnessing IPEDS and BLS data in academic program planning. Participants will see how to retrieve relevant information from IPEDS and BLS databases. They will also see how to utilize this data to address specific program planning questions, such as aligning graduate output with labor market needs or comparing program demand across modalities (online vs. residential). By learning how to synthesize these datasets into actionable insights, participants will be able to deliver impactful recommendations to institutional stakeholders, helping their institutions stay competitive and responsive to evolving educational and economic landscapes.

### **Learning Outcomes:**

By the conclusion of this session, attendees will leave not only with practical knowledge to replicate similar tools at their own institutions but also with the confidence to make data-driven recommendations that foster institutional growth and alignment with regional workforce needs. This session promises to be an essential resource for any institutional researcher or academic leader looking to deepen their impact on program planning and strategic decision-making through data.

**Thursday, Feb 27 at 1:15pm**

**Session:** F

**Level:** Intermediate

**Audience:** All

**Title:** Factors Impacting Community College Students' Transfer and Baccalaureate Completions

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Hongxia Fu & Paula Guidry-Zeba & Zhiwei Zhen - Dallas College

### **Abstract:**

Community colleges are vital for preparing students to transfer to four-year institutions and complete baccalaureate degrees. This session, part of a larger research project, uses data from the National Student Clearinghouse and a metropolitan community college district to explore factors affecting transfer likelihood and degree completion. It examines the roles of educational aspirations, pre-transfer performance, demographics, financial aid, and transfer destinations. Participants will learn about the research design, model development, and key predictors of transfer success. The findings offer insights for optimizing resource allocation and support services, aiming to enhance policies and practices that improve degree completion rates.

### **Description:**

Student transfer is a key goal of community college education, while Texas public universities continuously engage in outreach to recruit these students. Transfer outcomes are also critical to state funding formulas for institutions. Understanding the factors affecting community college transfer students is essential to enhancing operational effectiveness on both sides of the transfer process.

According to the Texas Higher Education Coordinating Board (THECB), 76.3% of community college transfer students were accepted and enrolled in public universities in fall 2022, significantly higher than the 53.5% acceptance rate for new freshmen across Texas. However, THECB data shows that, for the junior cohort of 2018, community college transfer students took two more years to complete their degrees than

non-transfer students (7.3 years vs. 5.2 years), and their degree completion rate was 18% lower (68% vs. 86%). This highlights an urgent need to better understand the unique characteristics of this population to support their academic success.

This study addresses two key research questions:

1. What types of students are more likely to transfer to a 4-year university?
2. What types of transfer students are more likely to succeed or face challenges?

The answers to these questions can help both community colleges and universities better allocate resources and provide tailored support services to foster student success.

Key findings of the study include:

- Students transferring in the fall have completed the highest number of credit hours, while those transferring in the summer have the fewest.
- Only 28% of students who transferred had initially indicated that transferring was their primary reason for attending community college.
- Among transfer students, 20% had engaged in "swirling" between multiple institutions.

Regarding baccalaureate degree completion:

- Students who earned a credential at a community college had a 14% higher completion rate at 4-year institutions compared to those who did not.
- Students who completed 6, 15, and 18 credit hours showed higher completion rates than others.
- Specific populations such as first-generation students did not show significant differences in completion rates. However, student parents, adult learners, Pell Grant recipients, and out-of-state students had lower completion rates, with student parents having the lowest.

To further refine predictions on transfer likelihood and timing, we are testing predictive models and will share findings on correlations and predictive accuracy at the conference.

### **Learning Outcomes:**

Participants in this session will:

- Learn about data management strategies and potential pitfalls that can support their own institutional data analyses.
- Discuss the findings and explore possibilities for further study, informing leadership decisions related to resource allocation, targeted support for special populations, and the design of student services.
- Gain insights into the design, development, and evaluation processes of the predictive models used in this study.
- Share their own approaches, analyses, and findings to support data-driven decision-making at their institutions.

**Thursday, Feb 27 at 1:15pm**

**Session:** F

**Level:** Beginner

**Audience:** All

**Title:** Cultivating Data Culture: Data Mindsets & Behaviors to Fuel Success

**Track:** Operations & Leadership

**Presenter(s):** Jason Simon - University of North Texas

### **Abstract:**

This presentation is designed to empower Institutional Researchers to advance and mature data ecosystems within higher education institutions. Participants will explore new mindsets that foster data-informed decision-making, analyze the impact of campus culture on data adoption, and learn to implement nine critical data-forward behaviors. These behaviors, derived from leading research, support data maturity by promoting collaboration, transparency, and innovation across institutional silos. The session will provide practical strategies for addressing common barriers, such as resistance to change and data literacy challenges, while emphasizing the importance of leadership and a growth-oriented culture. Attendees will leave with actionable insights to cultivate a thriving data ecosystem that aligns with institutional goals and

student success. This program is ideal for those seeking to elevate their campus' data capabilities and become catalysts for a more informed, adaptive higher education environment.

**Description:**

Discover how to elevate your institution's data ecosystem by embracing new mindsets and nine essential data-forward behaviors. In this session, you'll learn to navigate campus culture, overcome common barriers, and drive data maturity across your organization. Walk away with practical strategies to enhance data literacy, foster collaboration, and build a data-driven environment that promotes institutional success. Ideal for Institutional Researchers aiming to become leaders in data innovation, this session offers actionable insights for transforming how your campus uses data.

**Learning Outcomes:**

By attending this session, participants will:

- Understand how to assess and influence campus culture to support a more data-driven environment.
- Learn nine key data-forward behaviors that enhance data ecosystems and drive institutional success.
- Identify common barriers to data maturity and develop strategies to overcome resistance and promote collaboration.
- Gain practical tools to foster a culture of data literacy and innovation across institutional silos.

**Thursday, Feb 27 at 1:15pm**

**Session:** F

**Level:** Beginner

**Audience:** All

**Title:** Post-College Financial Outcomes: Am I Better Off Going to (Your) Institution?

**Track:** Plan & Evaluate

**Presenter(s):** Alexei Matveev - SACSCOC

**Abstract:**

What is the economic value of attending (your) college? This question is increasingly being used by various higher education stakeholders as one of the (multiple) perspectives to assess and evaluate the value of post-secondary education. This session will provide an overview of the new SACSCOC accreditation expectation related to identifying, monitoring, and reporting on a Key Post-College Financial Indicator (KPCFI) measure.

**Description:**

The financial success of college graduates is certainly not the only or primary purpose of post-secondary education. Colleges and universities have traditionally been about enlightenment, self-actualization, the public good, and sustaining an informed citizenship. However, the financial stability and viability of college graduates are increasingly becoming an important focus of various higher education stakeholders. Students and their families are asking questions such as -- Is it financially worth it to go to college? Why is the cost of attending college so high? Will I be able to pay off my student loans? What type of living can I (and my family) expect as a result of going to college? Consequently, the same questions are asked by legislators, government officials, think tanks, and the media. For example, the federal Department of Education is now using multiple metrics related to student borrowing and post-college earnings in its evaluation and recognition reviews of institutional accreditors such as SACSCOC.

It is important to emphasize that this emerging focus on post-college financial outcomes is not replacing the traditional values - enlightenment, self-actualization, public good, and an informed citizenship are still and

will be guiding institutional missions - rather, the concept of student achievement and success is expanding to explicitly include the financial component. Thus, colleges and universities should understand post-secondary financial outcomes and their role in how to improve these outcomes for their graduates within the constraints set by individual choices (borrowing, loan repayment, career trajectories), regional differences, labor market conditions, and the state of the overall economy.

To support member institutions and student's post-matriculation financial success, in June 2024, the SACSCOC Board of Trustees approved the Interpretation of Standard 12.6 (student debt and financial literacy) to include the expectation that member institutions identify a Key Post-College Financial Indicator (KPCFI) measure. SACSCOC member institutions are expected to monitor, evaluate, and report on student post-college financial outcomes. Institutions will be asked to identify a KPCFI in early spring 2025 and the Interpretation will go into effect in September 2025 with the submission of Compliance Certifications Reports by the Reaffirmation Class of 2026, Track B institutions.

This session will identify specific KPCFI reporting expectations or compliance components embedded in the new Interpretation of Standard 12.6. In addition, an overview of various KPCFI metrics (and associated data sources) will be provided to facilitate institutional selection of the KPCFI measure for tracking, monitoring, and reporting purposes. These metrics include post-college income, education debt, ratios of earnings to education debt and costs, student earnings contextualized within the institution's state, and a bevy of other measures. The session participants will be encouraged to explore how their institutions perform on various metrics and select one that is the most appropriate given the institution's mission, the nature of the students it serves, and the kinds of educational programs offered.

### **Learning Outcomes:**

Session participants will be able to:

- Identify specific accreditation compliance components associated with the KPCFI;
- Define and compare various metrics to capture post-college financial outcomes;
- List and access data sources for post-college financial indicators; and
- Select the KPCFI that is appropriate to the institution.

**Thursday, Feb 27 at 1:15pm**

**Session:** F

**Level:** Intermediate

**Audience:** 2-Year Public

**Title:** Credentials of Value Methodology - Community College Finance

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Taylor Cox - Texas Higher Education Coordinating Board (THECB); Xiqian Liu - THECB

### **Abstract:**

The Credential of Value (CoV) metric is a way to identify high quality credentials that lead to employment and a positive return on investment. This presentation will outline the methodology and sources that create our CoV baseline outcomes for community college finance, ensuring institution stakeholders understand the steps involved in determining credentials of value. We will discuss how we calculate total student investment, earnings while enrolled, and opportunity cost of attending college. These variables are used to assess when college graduates achieve a positive return on investment after graduation, known as 'passing the threshold' - the point when a graduates' earnings surpass their total investment. We will examine some case studies, focusing on potential outcomes for different 'hypothetical' students to identify the year in which graduates from different institutions and programs pass the threshold. Additionally, we will discuss barriers encountered by those who do not pass the threshold within 10 years.

### **Description:**

Session Description



- Discuss key formulas and variables used to determine when students are passing the threshold
- Discuss how our team decided on some of the specific methodology
  - Why we look at 10 years of wages post-graduation
  - Where our 16 program areas are derived from
  - How we determine the opportunity cost and why
- Go through a few case studies of hypothetical students
- Discuss barriers we have come across in our analyses for students and institutions

**Learning Outcomes:**

Participants will understand:

- 1) Methodology and data sources used to determine which credentials are considered credentials of value
- 2) how the credential of value cohort is created (i.e., who is included in the calculation)
- 3) common barriers encountered by students' who do not achieve a positive return on investment within 10 years

**Thursday, Feb 27 at 1:15pm**

**Session:** F

**Level:** Intermediate

**Audience:** All

**Title:** Proactively Equipping Decision Makers: Tableau Dashboards for Budgeting, Salaries, and Market Research

**Track:** Educate Information Producers, Users, & Consumers

**Presenter(s):** Sarah Gallimore - The University of North Texas, Health Science Center

**Abstract:**

Provosts and other academic leaders often face the challenge of making critical decisions in areas such as budgetary analysis, faculty salary benchmarking, and market research for new academic programs. This session will feature a demonstration of three simple yet practical Tableau dashboards designed to significantly enhance the efficiency of academic leaders. The first dashboard provides insights into budgetary trends and includes 'What-if?' analysis capabilities. The second dashboard presents CUPA data in an easy-to-use format, while the third effectively showcases IPEDS data for academic program market research. Resources will be provided for the attendees to build similar customized tools for their own institutions. This session promises to be valuable for institutional researchers at all levels.

**Description:**

1. Relevance and importance of this research to the field of IR/IE/Assessment:  
Provost and other academic leaders at any higher education institution need to make budgetary decisions, determining faculty salary and make decisions about new academic programs. This presentation will demonstrate three simple, but effective dashboards to assist Provost/Academic leaders to quickly get the needed information for data-informed strategic decision making. More importantly, this session will demonstrate how IR professionals can identify leaders' needs, be proactive and build tools for leaders to use for daily decision-making.



2. Intended audience of this presentation:

The Intended audience of this presentation would be Institutional Researchers at all level and Academic Leaders.

Note:

This session was successfully presented at both the 2024 NEAIR and 2024 AIR Forum, attracting great turnout and receiving highly positive feedback.

**Learning Outcomes:**

Upon completion, participants will be able to:

- a. Understand the usage of each dashboard.
- b. Appreciate the usefulness of each dashboard.
- c. Interpret data and trends to make meaningful recommendations for decision making.
- d. Learn how IR professionals can identify leaders' needs, be proactive and build tools for leaders to use for daily decision-making.

## Thursday, Feb 27 at 1:15pm

**Session:** F

**Level:** Intermediate

**Audience:** All

**Title:** Empowering Excellence: Building an In-House Tool for Academic Program Assessment

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Tariq Aziz - University of Houston - Office of Institutional Research

**Abstract:**

The Academic Program Assessment Reports (APAR) web app is an innovative tool currently under development, designed to enhance the assessment process for university degree programs. This app effectively captures essential elements such as student and program learning outcomes, organized by reporting year, college, department, and program. In this presentation, we will delve into the key features and functionalities of the APAR, highlighting its potential to improve the quality of academic programs and elevate student outcomes.

**Description:**

In this engaging presentation, we will explore the development of the Academic Program Assessment Reports (APAR) web app, an innovative in-house tool to transform the assessment process for university degree programs. Participants will gain insight into the app's key features, user interface, and integrations with existing systems.

**Learning Outcomes:**

Understand Key Features: Attendees will grasp the core functionalities of the APAR web app.

Implement Data-Driven Strategies: Participants will learn to leverage assessment tools for informed decision-making.

## Thursday, Feb 27 at 2:15pm

**Session:** G

**Level:** Intermediate

**Audience:** Public

**Title:** Texas A&M University's transformation of IR, data strategy and governance and HelioCampus partnership

**Track:** Stewards of Data & Information

**Presenter(s):** Michelle Mitchell & Christopher Huff & Mahmut Gundogdu - Texas A&M University

### **Abstract:**

1. University Data Strategy and Governance:
  - Enhanced Data Collection: Implement advanced data collection methods to gather comprehensive and accurate information.
  - Improved Reporting Tools: Utilize sophisticated reporting tools to create detailed and accessible reports that can inform decision-making.
  - Embrace Technology: Utilize advanced tools like data visualization software (e.g., Tableau) to create interactive dashboards. This makes data more accessible and actionable for stakeholders.
  - Embark on Data Education/Literacy: Intentional about who has access to the data to build data literacy on what is being reflected in the data as opposed to users interpreting the data and incorrect conclusions drawn.
2. Leadership and Management:
  - Experienced Leadership: Ensure that IR office leaders have relevant or transferable experience, even if they come from different professional backgrounds.
  - Professional Development: Invest in continuous professional development for staff to keep up with the latest trends and technologies in data analysis and reporting.
  - Build Relationships: Develop strong relationships with key decision-makers and understand the organizational culture. Tailor data presentations to meet the specific needs of different stakeholders.
3. Flexibility and Resilience:
  - Operational Flexibility: Develop strategies that allow the IR office to operate more flexibly and resiliently, adapting to changing circumstances and challenges.
  - Long-term Planning: Focus on long-term transformation approaches that prepare the institution for future challenges and opportunities.
4. Tailored Work Functions:
  - Institution-specific Needs: Customize the work of the IR office to meet the unique needs of the institution, ensuring that data and insights are relevant and actionable.
  - CBM Reporting: Develop automated CBM reporting tools to aid team in more time, effort, and energy to be focused on strategic and proactive analysis.
  - Student Success Focus: Prioritize data-driven decisions that enhance student success and overall institutional improvement.

### **Description:**

Hear how Texas A&M University is establishing University wide Data Vision, Strategy and Governance, in sync with transforming their Institutional Research (IR) office by leveraging the Helio platforms of: Benchmarking, Assessment, Student Life Cycle, APM, Workforce Insights Financial Modeling and Data Analytics to produce a new Data Culture at Texas A&M. From this transformation, AGGIE Insights has been developed and is growing and evolving into a highly sought after strategic partner. Hear their journey of this transformation with an all access, unfiltered conversation with the team that has forever changed how data is used at Texas A&M University. The journey can be seen through several key steps to enhance its effectiveness and adaptability.

### **Learning Outcomes:**

By focusing on these areas, Texas A&M University's Academic, Business & Performance Analytics office has begun transforming into a more effective and strategic component of the institution and assisting with driving better outcomes and supporting continuous improvement.

**Thursday, Feb 27 at 2:15pm**

**Session:** G

**Level:** Intermediate

**Audience:** All

**Title:** Revolutionizing Data Access: How Our IR Office Transformed Reporting, Management, and Evaluation (Transforming Data Access)

**Track:** Educate Information Producers, Users, & Consumers

**Presenter(s):** Chun Du & Dina Sosa-Hegarty - Dallas College

**Abstract:**

"Unlock the Future of Data-Driven Excellence." Join us in this dynamic session to explore how our Institutional Research (IR) office transformed the landscape of data access and reporting, replacing costly software and saving thousands annually. We'll dive into how we developed powerful, custom-built tools that deliver live data, revolutionizing how departments manage, evaluate, and report key metrics. With intuitive interfaces and constantly updated dashboards, our solution enhances operational efficiency, empowers staff with actionable insights, and enables targeted student support services. Discover the design and development behind these game-changing tools and learn how they're driving institutions toward greater productivity and student success in an ever-evolving educational environment. Whether you're looking to streamline processes, boost accuracy, or harness the full potential of data, this session will equip you with the insights to redefine data access and elevate institutional performance. Don't miss this opportunity to unlock the future of data-driven innovation in higher education!

**Description:**

In today's higher education landscape, the need for efficient and accurate data reporting is critical. We are facing the challenge of discontinuing a software that various departments rely on for professional and federal agency reports, often on tight timelines. One department is grappling with the prospect of meeting compliance requirements without this essential tool. This is where our Institutional Research (IR) office stepped in.

Our presentation will highlight how our IR office embarked on a mission to develop a dynamic tool to replace the software, resulting in substantial annual savings. We didn't stop at creating a reporting solution; we transformed the way the business office manages day-to-day tasks, reporting, and evaluation. This not only streamlined their reporting processes but also yielded more accurate data, user-friendly interfaces, and increased support for their everyday operations, ultimately reducing their workload and enhancing work efficiency.

We harnessed live data directly from student-submitted forms and linked students with their respective staff members. The result? A custom-designed dashboard that puts data at their fingertips. This dashboard is updated every day, ensuring the most current data is always available, and reports can be generated as needed. We extended our efforts by developing another customized dashboard, enabling different offices and department groups to monitor student progress, course enrollment, grades, retention, financial aid, and graduation outcomes, all with constantly updated data by themselves stored on their own drives. This empowers them to identify students requiring targeted support and provide customized services, ultimately enhancing student success.

**Learning Outcomes:**

- 1) Participants will learn how the IR office developed a custom reporting tool that replaced outdated software and generated substantial annual savings.
- 2) Attendees will understand the technical aspects of the dashboard system, including live data integration, user-friendly interface design, and automation of data updates every day.
- 3) The session will showcase how the dashboards improved operational efficiency, reduced workload, and enhanced decision-making for staff.
- 4) Attendees will gain insights into how the tool supports student success through real-time monitoring of progress, retention, and academic outcomes.
- 5) The presentation will provide strategies for overcoming implementation challenges and facilitating effective communication between IR offices and end-users.

**Thursday, Feb 27 at 2:15pm**

**Session:** G

**Level:** Intermediate

**Audience:** All

**Title:** IPEDS Flat file uploading

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** John Carroll - Tarleton State University

**Abstract:**

How would you like to save time entering your IPEDS data? Hand-inputting data into IPEDS takes time and is highly prone to errors. By creating a reproducible file that is easily uploaded into IPEDS and reviewed through the portal, your institution can save time inputting and reviewing your IPEDS submissions. In this session, we will locate the documentation needed to create these files and then examine the steps for creating, uploading, and reviewing this data into IPEDS. Finally, we will review some SAS code used to create these files.

**Description:**

Are you looking to save time and reduce errors when entering data into IPEDS? Join us for an informative session designed to simplify your data management processes. Manual data entry can be tedious and prone to mistakes, but by learning how to create and upload flat files, you can streamline your IPEDS submissions and improve accuracy.

In this session, you will:

- **Recognize the Benefits:** Understand the advantages of uploading files into IPEDS, including time savings and enhanced data integrity.
- **Locate Resources:** Discover where to find essential online documentation for creating flat files tailored for IPEDS uploads.
- **Create Your Files:** Follow a step-by-step guide on how to generate files ready for upload to IPEDS, ensuring you cover all necessary variables.
- **Define Key Variables:** Learn about the specific variables required in your files for successful submission to IPEDS.
- **Upload with Confidence:** Gain insights into the upload process, including best practices for ensuring your data is accurately reflected in the IPEDS portal.

We'll also delve into practical examples, including reviewing SAS code used to create these files, empowering you to implement these strategies at your institution. Don't miss this opportunity to enhance your IPEDS data management skills and make the submission process smoother and more efficient!

**Learning Outcomes:**

Upon Completion, you will be able to:

- Recognize the benefits of uploading files into IPEDS.
- Locate online supporting documentation for creating flat files to upload into IPEDS.
- Describe the steps needed to create files to upload to IPEDS.
- Define variables used in creating files for uploading into IPEDS.
- Describe the steps required to upload flat files into IPEDS.

**Thursday, Feb 27 at 2:15pm**

**Session:** G

**Level:** Intermediate

**Audience:** 4-Year Public/Private

**Title:** Changing Tides: Moving SACSCOC Standards 6.1 and 6.2b from Excel to Tableau

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Jiashi Zhao - Texas A&M University - Corpus Christi; Erin Mulligan-Nguyen - Texas A&M University-Corpus Christi

**Abstract:**

During our ten-year SACSCOC reaffirmation, the TAMU-CC PAIRS department utilized Excel for the data needs within Standards 6.1 and 6.2b. Although we were found in compliance with both standards, the process was manual and time-consuming, so we needed to pivot. For our five-year report, the PAIRS department developed a Tableau dashboard for these standards. This session will highlight why we transitioned from Excel to Tableau, who we collaborated with, and how we developed the dashboard. The session will share tables from Fall 2020 forward, highlighting the integration of institutional data into meaningful analytics.

**Description:**

Our presentation will start with a short introduction of our university and department as well as providing an overview of our role in institutional research and assessment. The main focus will be on SACSCOC Standards 6.1 and 6.2b in Tableau, which we will break down into four components:

1. Discussing why we need to move from Excel to Tableau
  2. Reviewing available data sources and custom data development
    - a. THECB CBMoo8 & CBMooS
    - b. Banner forms
    - c. Custom data development including:
      - i. PAIRS Course Inventory
      - ii. Decode Course Degree
  3. Developing the dashboard
  4. How we deployed the dashboards and to whom
- The presenters will leave time at the end of the presentation for questions and answers.

**Learning Outcomes:**

- Apply our strategies and contribute to community knowledge of dashboard methodologies.
- Engage in discussions on best practices for Tableau dashboards with attendees.

**Thursday, Feb 27 at 2:15pm**

**Session:** G

**Level:** Intermediate

**Audience:** All

**Title:** Pathways from K-12 into the Labor Market

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Chrys Dougherty & Christina Zavala - Texas Higher Education Coordinating Board

**Abstract:**

At the Texas Higher Education Coordinating Board we have embarked on a project to analyze pathways from high school graduation through various post-high-school pathways into the labor market: for example, what is the wage distribution seven years after high school graduation for students following this pathway? This will expand on this year's TAIR presentation where we showed transfer and completion probabilities of community college students based on their post-high-school academic readiness and full-time status.

**Description:**

The session will present results from analyses of the numbers of students passing through various gateways immediately after high school graduation, and the higher education completion and labor market outcomes of students following subsequent pathways.

**Learning Outcomes:**

Session participants may recommend ideas for further analysis of labor market outcomes of students in their own institutions. They may recommend other studies to us and our audience.



## Thursday, Feb 27 at 2:15pm

**Session:** G

**Level:** Intermediate

**Audience:** All

**Title:** Legitimizing Affective Learning Outcomes Assessment

**Track:** Plan & Evaluate

**Presenter(s):** Misty Song & Vince Nix - West Texas A&M University

**Abstract:**

This presentation is based on an empirical transformative mixed-methods study which examined current assessment practices to determine how effectively and extensively they are actually employed. Learning-outcome statements issued by 227 undergraduate nursing programs accredited by the Southern Association of Colleges and Schools and the Commission on Collegiate Nursing Education were evaluated for references to ALOs, in order to determine how widespread affective assessment actually is, and at what level it is implemented. A novel taxonomy was employed to categorize each school, in hopes of finding which factors can predict which institutions are most likely to implement affective learning outcomes at an exemplary level. Analyses did not reveal any significant relationships for programmatic implementation efforts with most NCES institutional characteristics nor Carnegie classifications. There was, however, a statistically significant  $F(3, 202) = 3.28, p = 0.02, \eta^2 = 0.05$  relationship between retention rate and exemplary ALO assessment practices, marking the first empirical evidence linking affective-domain learning and student retention.

**Description:**

Researchers will present and demonstrate a novel approach to evaluating efforts toward assessing affective learning outcomes. Ever since the development of Bloom's Taxonomy, educational institutions have primarily focused on the cognitive learning domain, concerned with the transmission and acquisition of knowledge and skills. Recently, educators and researchers have become more interested in the affective domain-concerned with attitudes, emotions, and values-and how it affects student learning outcomes. While it is important to address affective-domain learning in any educational setting, one discipline giving it particular attention is nursing; their accrediting bodies are increasingly incorporating affective learning outcomes (ALOs) in their criteria. Thus, examining how nursing programs assess for ALOs may give insight into how to successfully integrate affective-domain learning into all curricula.

**Learning Outcomes:**

Differentiate cognitive from affective learning outcomes.

Understand how nursing has implemented affective learning outcomes assessment.

Weigh the advantages of assessing for student outcomes in the affective learning domain.

## Thursday, Feb 27 at 3:30pm

**Session:** H

**Level:** Beginner

**Audience:** All

**Title:** Charting Our North Star: The Role of the Office of Institutional Research and Analytics in Developing Austin Community College's Theory of Change

**Track:** Educate Information Producers, Users, & Consumers

**Presenter(s):** Susan Burkhauser & Jenna Cullinane Hege - Austin Community College

**Abstract:**

In AY2023-24, Austin Community College's new Chancellor spent his first 100 days leading ACC to identify a "North Star" for improving student success, outline a theory of change (ToC) to reach the North Star, and integrate the ToC into ACC's strategic plan. ACC undertook a collaborative process of building and refining the ToC. The Office of Institutional Research (OIRA) has played a significant role in helping shape the ToC



by looking at internal and external data to identify the most impactful ways ACC can help students reach their academic and career goals. OIRA helped to identify the four pillars that set the foundation for our strategic initiatives and ensured that the strategies underneath the pillars were evidence-based. Partnering with ACC stakeholders, OIRA facilitated opportunities for employees to dive deeply into the data supporting the ToC and engage with one another on the available and still-needed data to achieve ACC's goals.

**Description:**

The presenters will first introduce the concept of a Theory of Change and its use in strategic planning. Next, they will share Austin Community College's journey to develop a Theory of Change to achieve their "North Star" for improving student success and the collaborative process the College used to build and refine it. Finally, they will share the role the Office of Institutional Research and Analytics (OIRA) played in the development of the Theory of Change, with particular attention to the data supporting it, and how OIRA partnered with College stakeholders to facilitate opportunities for employees to dive deeply into the data supporting the ToC and engage with one another in doing so. They will also discuss lessons learned in the process.

The presenters will encourage audience engagement using Mentimeter or Poll Everywhere and allow time for questions at the end of the session.

**Learning Outcomes:**

1. Understand the importance of establishing a "North Star" goal for improving student success within an educational institution.
2. Recognize the significance of integrating a theory of change into an educational institution's strategic planning process.
3. Learn about the role of Institutional Research in shaping the theory of change through data analysis and evidence-based strategies to support students' academic and career goals.
4. Learn ways that an office of Institutional Research can increase data literacy of all staff by facilitating opportunities to engage with data.

**Thursday, Feb 27 at 3:30pm**

**Session:** H

**Level:** Beginner

**Audience:** All

**Title:** Utilize SAS to support course scheduling and faculty pay data

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Daniel Le - Dallas College

**Abstract:**

In this session, we would like to share our story about how to utilize SAS in our daily operations to overcome any challenges at Dallas College (Dallas, TX). On the process to change our ERP from Colleague to Workday, the Academic Scheduling and Data Analytics department (ASDA) as well as Dallas College have been facing many obstacles when we are running parallel both systems: Colleague and Workday at the same time until Workday fully goes live in Fall 2025. The data team of ASDA utilizes SAS to create accurate pay data for adjunct faculty in a timely manner as well as assist in quality assurance process to minimize data errors in course sections build which impacts Texas State Reports.

**Description:**

Dallas College is currently running parallel two ERPs: Colleague and Workday, until Workday fully goes live in Fall 2025. In February 2022, Workday HCM went live which put Finance and HR data were maintained in

Workday while other Dallas College's functions, including course schedule data still live in Colleague. Due to the disconnection between the two systems, Dallas College needs a solution to pay Adjunct Faculty (data in Workday) based on their teaching assignments (data in Colleague).

**Learning Outcomes:**

SAS 9.4 provides the solution to tackle the obstacles that Dallas College is facing due to the transition between the current ERP - Colleague to the new ERP - Workday.

SAS 9.4 also assists in the data quality and assurance process to maintain the data error free goal in the data governance.

It is time for Higher Education to utilize advanced analytics and innovations in their daily operations and SAS is a pioneer in this journey.

**Thursday, Feb 27 at 3:30pm**

**Session:** H

**Level:** Intermediate

**Audience:** All

**Title:** Taming the Data Tides: Streamlining Database Workflows with Stored Procedures and GenAI

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Farazuddin Mohammed & Jiashi Zhao - Texas A&M University - Corpus Christi

**Abstract:**

The PAIRS department at Texas A&M University - Corpus Christi (TAMUCC) has leveraged Generative AI (GenAI) to optimize database operations, particularly in the efficient integration of historical data across academic semesters and handling various data requests. By identifying and addressing bottlenecks encountered by database administrators, the department implemented Stored Procedures to automate repetitive tasks. This approach resulted in significant time savings, increased productivity, and a reduction in human error. Throughout the process, GenAI tools played a pivotal role in enhancing data solution capabilities, helping to convert ideas into SQL queries and streamline query development. The department also emphasizes the cautious use of GenAI for knowledge sharing, ensuring the creation of efficient queries while safeguarding sensitive data. This presentation discusses the techniques used, the benefits achieved, and the practices adopted for securely integrating AI-driven tools into database management workflows.

**Description:**

Join us as we explore how the Analytics team at the PAIRS department of Texas A&M University - Corpus Christi (TAMUCC) tackled challenges in database management by streamlining workflows and implementing automation solutions. This session will cover the strategic use of Stored Procedures and Generative AI tools like ChatGPT and Perplexity to automate tasks, optimize query efficiency, and elevate overall productivity.

**Session Overview:**

**Challenges:** We'll discuss the common bottlenecks faced by database administrators, including time-consuming repetitive tasks and manual query execution that often reduced productivity and increased error rates.

**Automation Solutions:** Discover how we re-engineered workflows by using Stored Procedures and Dynamic SQL to automate processes, enabling faster query execution and significant time savings.

**Impact:** Learn how parameterizing queries and converting them into Stored Procedures has allowed us to perform data appends, updates, and validations within minutes while drastically minimizing errors.

Training with GenAI: We'll share our approach to upskilling with advanced SQL techniques and integrating Generative AI tools into our training and development, focusing on best practices for managing sensitive data securely.

Finally, we'll present statistics illustrating our improvements and discuss the transformative impact these methods have had on our workflow. Attendees will gain practical insights for enhancing their own database management strategies.

**Learning Outcomes:**

1. Learn how to optimize database workflows using Stored Procedures and Dynamic SQL.
2. Discover how to effectively integrate GenAI tools for innovative and efficient data solutions.
3. Boost productivity and reduce human errors in database operations.

**Thursday, Feb 27 at 3:30pm**

**Session:** H

**Level:** Intermediate

**Audience:** All

**Title:** Benchmarking Dallas College's Key Performance Indicators: Integrating Diverse Data Sources to Assess Institutional Success

**Track:** Plan & Evaluate

**Presenter(s):** McKenna Griffin & David Mahan - The Research Institute at Dallas College

**Abstract:**

With the availability of numerous national and state-level postsecondary data sources, colleges and universities can leverage and analyze these publicly available data in digestible ways to determine progress towards institutional goals and to close equity gaps. Designed with Dallas College's Strategic Plan in mind, the Research Institute has created an interactive dashboard using this data to benchmark its key performance indicators to inform leadership of successful areas and opportunities for growth. This presentation will highlight how leadership at Dallas College identified a need for benchmarking data and outline the process of selecting which metrics to include in its KPI assessment plan. We will show the process of combining disparate sources of data into a 'one stop shop' for our Key Performance Indicators and walk through the interactive report. Finally, we will discuss how the dashboard is being utilized within the college and the iterative updates planned for the future.

**Description:**

The presenters will explain how Dallas College leadership conceptualized a benchmarking schema to proactively identify areas of success and improvement, outlining the institution's Blue Sheet KPIs. They will show the process by which the College's KPIs were aligned to THECB and IPEDS metrics and how these datasets were merged with the institution's internal data. The visualization tool's multi-layered design will be showcased to emphasize how various data sources are connected to form a narrative of institutional progress. The session will end with a 10 to 15-minute discussion on future plans to evolve the interactive tool and Q&A.

**Learning Outcomes:**

By the end of the session, attendees will be able to:

- Understand the benefit of using public data to evaluate internal KPIs
- Learn best practices of creating an interactive KPI tool to evaluate institutional goals and implement improvements to policies and practices.

**Thursday, Feb 27 at 3:30pm**

**Session:** H

**Level:** Intermediate

**Audience:** 4-Year Public/Private

**Title:** Enhancing Research Insights: Leveraging Power BI to Empower End-User

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Bushra Tasnim Zahed - The University of Texas at San Antonio

**Abstract:**

At the University of Texas at San Antonio, we transformed research data management by automating the previously manual and error-prone Award Summary and Award Addendum reports-comprehensive tools that track awarded proposals and those pending the final approval note from the funding sponsor (Notice of Award). Previously limited to weekly access, these reports are now available in real-time, enhancing accuracy and productivity. With Power BI, decision-makers can instantly access interactive, filterable data, supporting timely insights. Additionally, keyword-based filtering across multiple columns enables targeted searches, such as for grants like the Mary Beth Maddox Award for cancer research, speeding up the data request process by eliminating the two-week processing delay. This session showcases how Power BI automation aligns with the university's strategic goals, empowering data-driven decision-making and providing leadership with immediate, accurate insights that advance mission-focused research and administration initiatives.

**Description:**

The session "Enhancing Research Insights: Leveraging Power BI to Empower End-User" offers an in-depth look at using interactive dashboards for research management. It highlights three Power BI-driven reports:

1. **Keyword-Based Award Tracking Report:** This tool allows for filtering research awards based on keywords found in titles, abstracts, and keywords of an award. For example, end users can search for key words such as 'cancer', 'AI', 'cybersecurity,' to retrieve a full list of research awards with their principal investigator(s), award timeframe, award sponsor, and project focus details.
2. **Award Summary Report:** A compilation of recent grants that emphasizes interdisciplinary collaborations and substantial funding from prestigious sponsors over selected timeline.
3. **Award Addendum Report:** This report monitors awarded projects that are awaiting an official Notice of Award, which signifies final approval and documentation from the funding sponsor. By identifying these pending projects, it helps manage timelines and prepares for upcoming grants, offering insights into waiting periods and any potential delays in receiving official notice.

**Learning Outcomes:**

In this session, attendees will discover how automating report generation with SQL and Power BI transforms efficiency by eliminating tedious manual tasks, providing immediate access to crucial data, and aligning strategies with just a few clicks. These powerful tools deliver real-time insights for proactive decision-making and dynamic trend analysis, empowering institutions to make smarter, faster decisions that drive impactful research and optimize resource allocation in line with institutional goals.

**Thursday, Feb 27 at 3:30pm**

**Session:** H

**Level:** Beginner

**Audience:** All

**Title:** CBM Reporting 101: A Newcomer's Guide to Data Reporting for Texas Higher Education Institutions

**Track:** Collect, Analyze, Interpret & Report

**Presenter(s):** Torca Bunton - Texas Higher Education Coordinating Board (THECB)

**Abstract:**

This session, CBM Reporting 101: A Newcomer’s Guide to Data Reporting for Texas Higher Education Institutions, serves as an introductory guide to reporting protocols and data analytics for higher education institutions in Texas. Attendees will explore the fundamentals of CBM reporting, gain a clearer understanding of submission requirements, and learn how to use the reported data for compliance and strategic decision-making. This session equips participants with practical knowledge to enhance institutional data management and reporting efficiency.

**Description:**

Understanding the reporting process is essential for effective data management within Texas higher education institutions. This session provides a comprehensive overview of the CBM reporting system, including key data reports, submission timelines, and common challenges. Attendees will also gain valuable insights into navigating the portal for data submission, ensuring compliance, and identifying opportunities to improve the submission and editing process.

**Learning Outcomes:**

By the end of this session, participants will be able to:

1. Identify the key components of CBM reporting and submission processes for Texas higher education institutions.
2. Recognize common reporting challenges and develop strategies to address them effectively.
3. Understand how reporting data contributes to institutional compliance and funding processes.
4. Enhance collaboration across departments to improve data quality and reporting accuracy.

**Friday, Feb 28 at 9:00am**

**Session:** I

**Level:** Advanced

**Audience:** All

**Title:** Dynamic Retention Model Deployment: Scalable, Cloud-Based Solutions for Timely Interventions

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Zhiwei Zhen - Dallas College

**Abstract:**

This session explores the development and deployment of a scalable, cloud-based student retention model that provides real-time insights for proactive interventions. Participants will learn how to integrate academic, engagement, and financial aid data, and automate daily updates using Python for dynamic risk assessments. The session will cover practical strategies for deploying retention models at scale, allowing institutions to prioritize outreach and support for at-risk students.

This session is particularly valuable for educational professionals, data scientists, and IT staff who aim to use data-driven strategies to improve student success. By the end, attendees will gain hands-on knowledge to build adaptive retention models that respond to students' evolving needs, enabling timely interventions that can improve retention rates and outcomes.

**Description:**

In this session, we will walk through the creation of a cloud-based, scalable student retention model designed to provide real-time risk assessments and insights for early interventions. Key topics include data integration, using Python for automated daily updates, and leveraging multiple data sources such as academic performance, student engagement, and financial aid. The session will outline the practical steps for deploying retention models at scale, ensuring institutions have the tools to target at-risk students effectively.

Participants will also learn how to address the challenges of integrating various data sources and ensuring model accuracy in large educational settings. Attendees will leave with an understanding of how to develop



retention models that are flexible, dynamic, and capable of improving student outcomes through data-driven strategies.

**Learning Outcomes:**

1. Integrate Multiple Data Sources: Combine academic, engagement, and financial aid data for real-time retention analysis.
2. Automate Daily Updates with Python: Implement Python-based automation for updating and scoring retention models each day.
3. Deploy Scalable Retention Models: Apply strategies for deploying retention models in a cloud environment suitable for large institutions.
4. Overcome Challenges: Identify and address key challenges in deploying and maintaining retention models at scale.

Friday, Feb 28 at 9:00am

**Session:** I

**Level:** Beginner

**Audience:** All

**Title:** Using Confluence to Stay Organized and Improve Productivity

**Track:** Current Issues & Research in Higher Education

**Presenter(s):** Liza Farrell & Erin Mulligan-Nguyen & Whitney Kessinger - Texas A&M University - Corpus Christi

**Abstract:**

Do you struggle keeping up-to-date SOPs within your department?

PAIRS has found a productive way to create a detailed living document that enables our team to reduce downtime, support continuous improvement, and learn new skills quickly.

Confluence is a centralized, shared knowledge base software that allows you to document and outline procedures and tasks that are required to successfully complete a process. It acts as a central hub where all documentation, knowledge, and information are stored, making it easy for team members to find what they need. This ensures consistency when completing tasks.

Since all the information we need is in one place, we no longer fumble between emails, notes, or messages trying to locate information on a specific report or project. Using a hierarchy system, Confluence allows us to create spaces and sections for documenting procedures for specific content. It is easily accessible to all members of our team.

**Description:**

Discuss the value of creating a living document referencing step-by-step guidelines in achieving the best quality of results while increasing the efficiency of the process.

Examine how IR utilizes Confluence as a centralized repository for easy collaboration while ensuring consistency and standardization.

Discuss how Confluence empowers team members by providing the tools and information they need to perform their jobs effectively, leading to higher job satisfaction and productivity.

**Learning Outcomes:**

Audience members will leave the session with ideas which they can take back to their offices to help improve efficiency and productivity, increase knowledge sharing, and enhance accountability and transparency.