TAIR 2023 Concurrent Sessions

Concurrent Sessions: A	Monday, February 27	2:00 pm – 2:45 pm

Session: A1	**Room:** Cedar I	**Level:** Intermediate	**Audience:** 2 Year, Public

Title: Getting and using Texas Workforce Commission data to analyze labor market outcomes

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Douglas Walcerz, Lee College

Description: The most popular reason that freshmen give for why they are going to college is that they want a good job, so labor market outcomes are one of the most important outcomes of a college education. The Texas Workforce Commission collects data on employee wages for the entire state, so it has the data that are needed to assess labor market outcomes. This session will describe the process of getting access to TWC data and some examples of how the data can be used.

Session Facilitator: Jane Haas, Del Mar College

Session: A2	**Room:** Cedar II	**Level:** Beginner	**Audience:** All

Title: Leading with inquiry and institutional knowledge: A collaborative approach to program review

Track: Stewards Of Data and Info

Presenter(s): April Whalen & Laurie Dillon, Austin Community College

Description: In 2019 and 2020, members of Austin Community College's Institutional Researcher team identified disparities in the composition of student populations in our nursing programs. These programs require students to apply, presumably some of the disparities were informed by student choice. With the support of an Equity Council grant, our IR team established a collaborative project with Nursing Department leaders in an effort to identify the primary factors influencing students' decisions to apply for one program versus another. We will share our process, our findings, and the actions ACC's Nursing Department have embraces in an effort to diversify our departments.

Session Facilitator: Tom Martin, Collin College

Session: A3	**Room:** Springwoods I	**Level:** Intermediate	**Audience:** All

Title: COREQUISITE WORKS- Student Success Models at the Lone Star College

Track: Current Issues and Research In Higher Ed

Presenter(s): Jae Hak Jung & D. Diego Torres, Lone Star College

Description: The University of Georgia and Complete College America completed research for corequisite success models and published their findings in December 2021. The Institutional research team at Lone Star College analyzed LSC Institutional data to replicate their report for Lone Star College. Using Lone Star College institutional data, the results to be replicated in this analysis are as follow: Through Power BI visualization, Chi-Square, and Logistic regression, we have examined that more LSC students at the Developmental level could complete gateway ENGL and MATH courses when they received corequisite support, even though the average completion and success rates were lower than those of non-corequisite college level ENGL and MATH. We also found that corequisite students received the most benefit from having the same instructor for both the corequisite support and college-level courses. For ENGL, corequisite students also benefited from having only corequisite students in the college-level courses.

Session Facilitator: Laura Wichman, McLennan Community College

Session: A4	**Room:** Springwoods II	**Level:** Intermediate	**Audience:** All

Title: Data Warehousing & Analytics for Peer Benchmarking Data

Track: Operations and Leadership

Presenter(s): Allen Dominguez Anzo & Daniel Hubbard, University of North Texas

Description: Peer benchmarking data is tremendously valuable to higher education institutions as we seek to measure ourselves against others, better understand how we rank on various high-level metrics, and seek information for strategic institutional decision-making. Various sources of external data are available, but a common theme is that the user interfaces and presentation methods housed within those sources may leave a bit to be desired and aren't tailored to the needs of one institution. Join UNT in a discussion about the types of external data source we've converted into internal dashboards, data management and modeling methods used to automate data preparation of external datasets, efforts to document business terms used in peer comparison dashboards, and dissemination and training efforts to increase adoption of the new tools.

Session Facilitator: Emily Rhodes, University of Texas Health Science Center-San Antonio

Session: A5	**Room:** Springwoods III	**Level:** Intermediate	**Audience:** All

Title: Using Tableau to Create Interactive Student Profile Infographics

Track: Collect, Analyze, Interpret & Report

Presenter(s): Regina Gonzales & Xiqian Liu, Texas A&M University-Corpus Christi

Description: Infographics are a visual representation of information and data. Combined elements of text image, chart and diagram, are an effective tool to present data and explain complex issues. Creating profiles for students helps to identify the characteristics of students, reflects on admission policies and links retention with students' profile. However, creating static Adobe generated infographics is not ideal due to the immense effort of manual data entry updates. To solve this issue, we turned to Tableau to create a visually interactive and dynamic dashboard design. This allows for data refreshment and streamlines the updating process. This presentation will highlight how this product allowed the collaboration between the analytics and research units at Texas A&M University-Corpus Christi PAIRS unit.

Session Facilitator: John Carroll, Texas A&M University Central Texas

Concurrent Sessions: B | Monday, February 27 | 3:15 pm – 4:00 pm

Session: B1	**Room:** Cedar I	**Level:** Intermediate	**Audience:** All

Title: Assessing Peer Groups

Track: Plan and Evaluate

Presenter(s): Amon Seagull, Austin College

Description: Peer grouping is a common activity at IR offices and a popular topic at IR conferences. Yet how are peer groups assessed? In this session, we'll look at how they've been assessed by institutional researchers---and how they haven't. Are there limits to the assessment? What does that mean for IR? We'll look at how one small college has tried to assess. There will be ample time for participants to share their own strategies.

Session Facilitator: Laura Wichman, McLennan Community College

Session: B2	**Room:** Cedar II	**Level:** Beginner	**Audience:** All

Title: How IR offices can partner with academic departments to benefit students and the university

Track: Operations and Leadership

Presenter(s): Morgan Carter & Dennis Jones, Tarleton State University

Description: Institutional Research offices are faced with staffing shortages and increased demands for data and analytics. Learn how one university partnered with an academic department to provide students real-world problem solving opportunities while assisting the IR office in various projects.

Session Facilitator: Michele Hancock, Tarleton State University

Session: B3	**Room:** Springwoods I	**Level:** Intermediate	**Audience:** All

Title: Predicting College Student Success Using a Classification Tree Model

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Jae Hak Jung, Lone Star College; Kwanghee Jung & Terrance Youngblood, Texas Tech University

Description: This research project demonstrates how to build a predictive model to identify college student success using educational data mining. This research specifically aims to address the application of a classification tree technique on Lone Star College's institutional research database to understand student course success data and gain insights into the critical factors that influence the student's course success. As predictors of students success, we consider prior academic success, cumulative GPA, prior drops or failures, demographic, credit attainment history, and student online activity. Based on this predictive model, our research team will develop an early alert interactive dashboard using Power BI. This presentation will include a sample of this Power BI dashboard.

Session Facilitator: Jiashi Zhao, Texas A&M University Corpus Christi

Session: B4	**Room:** Springwoods II	**Level:** Intermediate	**Audience:** All

Title: Using Predictive Modeling to Increase Six-Year Graduation

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Caroline Neary & Jorge Martinez, University of Houston

Description: Six-year graduation rates are a critical benchmark for student success and an important metric for university administrators. Conducted at a large, public, 4-year university with a current six-year graduation rate of 62%, this study generated a predictive model that identified ten statistically significant predictors for six-year graduation. These predictors were conceptualized into four actionable takeaways to improve the six-year graduation rate. Researchers also used the collected data to complete a survival analysis modeling time to graduation (or stop-out). This term-to-term analysis provides meaningful information for understanding variables like major changes and credit hour progression and identifying when (not just where) critical interventions can make an impact.

Session Facilitator: Emily Rhodes, University of Texas Health Science Center-San Antonio

Session: B5	**Room:** Springwoods III	**Level:** Beginner	**Audience:** All

Title: Removing Barriers: How to Assess DEI Effectiveness Through Workforce Data

Track: Stewards Of Data and Info

Presenter(s): Erin Baird & Michelle Rodriguez, Lightcast

Description: Higher education is a necessity for social mobility and economic prosperity. Research supports that diversity, equity, and inclusion issues negatively impact students' access to education and earnings potential. At Lightcast, our labor market data can help with these challenges. By assessing

socioeconomic and demographic data in your region, you can identify opportunities to improve outcomes for underrepresented and economically disadvantaged students, while identifying high-wage, high-growth occupations strategies and expanding access to those pathways.

Session Facilitator:

Concurrent Sessions: C	Monday, February 27	4:15 pm – 5:00 pm

Session: C1	**Room:** Cedar I	**Level:** Beginner	**Audience:** All

Title: Building a Data Institute

Track: Educate Information Producers, Users, and Consumers

Presenter(s): Christopher Reid, Lone Star College

Description: In 2018, Lone Star College launched the Data Institute, a year-long training opportunity for faculty and staff throughout the system. Participating in tailored workshops on research design, data sources, and reporting tools, 16 fellows went on to complete guided research studies. The Institute has recently welcomed its fourth cohort, now 20 fellows, and continues to enhance the research and data analytics knowledge and skills of its participants. We will outline how our institution has cultivated a "data culture" through tailored workshops on research design, data sources, data manipulation and visualization, basic statistical methods, and analytical and reporting tools. We highlight both the challenges and promises of such an ambitious program. The aim is to stimulate others to think about creating a data culture that works in the context of their respective institutions.

Session Facilitator: John Carroll, Texas A&M University Central Texas

Session: C2	**Room:** Cedar II	**Level:** Intermediate	**Audience:** All

Title: The Poetry of Data

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Michelle Byrne & Frances Frey, Trinity University

Description: Data narratives are common ways we talk about the need for data to be more than a set of numbers or a series of visuals. Storytelling transforms the data, making it accessible and meaningful to decision-makers. But what happens if the story reads like a Russian novel with multiple plot lines and ever-changing names for the same character? This session will describe an alternative approach to storytelling– the data poem. Data poems begin with the intent to focus, the desire for clarity, and the need for human connection. This session will describe steps to create better reporting and improve data use by using elements of poetry: focus, precision, brevity, and speed. Attendees will learn how to apply a poetry framework to the typical process of data collection, analysis, and reporting. The goal of the framework is to develop a focused, useful, and ultimately less stressful approach to working with data.

Session Facilitator: Carol Tucker, University of Houston-Downtown

Session: C3	**Room:** Springwoods I	**Level:** Intermediate	**Audience:** 4 Year, Public

Title: Time to Degree for Graduate Students: An understudied population

Track: Current Issues and Research In Higher Ed

Presenter(s): Moumita Mukherjee, University of Houston

Description: Using certified longitudinal data for students who earned their doctorate or master's degrees from academic years Fall 2018 to Summer 2021, this study examines the differences in time-to-degree completion as an outcome of students' background characteristics. The broad research question that the

study will examine is what are the differences in time-to-degree completion and how long does it take for doctoral and master's students to complete their degrees at a public four-year research institution in south-east Texas?

Session Facilitator: Emily Rhodes, University of Texas Health Science Center-San Antonio

Session: C4	**Room:** Springwoods II	**Level:** Beginner	**Audience:** All

Title: The Enrollment Cliff - Is it doom and gloom or can the trend be reversed?

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Cindy Ullrich, Brazosport College

Description: With community college enrollment down 7% the first fall semester after COVID, college campuses across the nation shifted to an all-hands-on-deck strategy to reverse the downward enrollment trend. COVID forced higher education to do business differently, and Brazosport College used innovative and creative strategies to help boost enrollment. By Fall 2021 Brazosport's enrollment was up by 2% and Fall 2022 was up 5% when compared to Fall 2020. In addition to COVID, there are many other looming factors that analysts say will negatively impact enrollment such as the decline in birthrates starting in 2008 and the growing skepticism of the value of higher education.

Session Facilitator: Douglas Walcerz, Lee College

Session: C5	**Room:** Springwoods III	**Level:** Beginner	**Audience:** All

Title: The Intersection of Data Quality, Data Stewardship and Data Governance

Track: Stewards Of Data and Info

Presenter(s): Mary Anne Hopper, SAS

Description: Data Quality is a top-of-mind issue for most organizations. As data assets and usage needs grow, so do the realities of needing to better utilize that data as a trusted and reusable asset. A solid Data Governance organization provides the discipline and methodology to do just that. This class will explore common Data Quality challenges and their associated misconceptions and give participants a clear definition of the different types of Data Quality. After discussing how Data Governance and the role of Data Stewardship support Data Quality efforts, participants will be left with a plan to execute or extend Data Governance to solve for their unique situations. Attendees will learn: common misconceptions about Data Quality, organizational reasons for poor Data Quality, the types and scope of Data Quality, the role of Data Stewards, and how to organize a Data Governance program to support improvement and measurement of Data Quality.

Session Facilitator: Amanda Moske, University of North Dakota

Concurrent Sessions: D | Tuesday, February 28 | 9:00 am – 9:45 am

Session: D1	**Room:** Cedar I	**Level:** Intermediate	**Audience:** 4 Year, Public

Title: Graduate Student Success Tableau Visualization

Track: Collect, Analyze, Interpret, and Report

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

Description: This session details how TAMU-CC PAIRS department developed a graduate retention database including the data map structure and SQL query examples. After developing the graduate retention database, TAMU-CC PAIRS collaborated with the College of Graduate Studies to build Tableau visualizations that show the graduate retention and graduation rates. We will share a visualization that shows the

retention and graduation rates as a staircase view with data from Fall 2017 cohorts moving forward that is visualized in a staircase. The Graduate Staircase dashboard contains visualizations data from Fall 2017 moving forward.

Session Facilitator: Douglas Walcerz, Lee College

Session: D2	**Room:** Cedar II	**Level:** Intermediate	**Audience:** 4 Year, Public

Title: Out With The Old, In With The New- A Path to Modernizing a University Reporting Tool

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Jamie Wood, Simon Smith, Randy Price, & Toni Floyd; Tarleton State University

Description: Tarleton State University is modernizing our data visualization and reporting tool. This session will take you through our journey from software identification and testing to implementation and the release of our first, modern, interactive dashboards in 15 years. We will share our lessons learned and provide an interactive demonstration of what we have been able to deliver to our university.

Session Facilitator: Michele Hancock, Tarleton State University

Session: D3	**Room:** Springwood I	**Level:** Intermediate	**Audience:** All

Title: Expanding Data-Informed Decision Making Capabilities at our New Frisco Campus

Track: Stewards Of Data and Info

Presenter(s): Rita (Su-Chuan) He & Mary Barton, University of North Texas

Description: The Data, Analytics, & Institutional Research (DAIR) team collaborated with the UNT Frisco administration and proposed a development of an interactive dashboard strategically designed to ensure the critical data needs of the new campus were available. The dashboard replaces an Excel worksheet that was distributed on a weekly basis. The dashboard updates daily and provides an expanded view of student course and SCH behaviors, a novel analysis of the percent of time students are spending at Frisco or the Main Campus, and the geographic location of the students.

Session Facilitator: Amanda Moske, University of North Dakota

Session: D4	**Room:** Springwood II	**Level:** Intermediate	**Audience:** 2 Year, Public

Title: Using SPSS to Build a Data Warehouse of CBM Reports

Track: Stewards Of Data and Info

Presenter(s): Jane Haas & Newman Wong, Del Mar College

Description: We will show how to import raw data text files of CBM0C1 and 0CS (along with side-by-side match up of layout and variables changes over the years) to create uniform data warehouse files in SPSS. We will share our syntax to produce tables needed for multiple reports from IPEDS to Instructional Program Review to Fact Book.

Session Facilitator: Hongxia Fu, Dallas College

Session: D5	**Room:** Springwoods III	**Level:** Intermediate	**Audience:** 2 & 4 Year, Public

Title: The Value Proposition to our Students: Creating New ROI Analysis Tools from Multiple Data Sources

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Navi Dhaliwal, David Mahan, McKenna Griffin, & Sayeeda Jamilah; Research Institute at Dallas College

Description: As discourse on the return on investment (ROI) of college continues, higher education leaders are increasingly charged with measuring, enhancing, and conveying the economic value that their

institutions provide to students. While existing approaches often report ROI as a single metric for a particular college or field of study, student experiences vary and returns may differ by race or ethnicity, gender, and family income level, among many other factors. Closing equity gaps is a challenging but critical task, especially for public institutions with diverse populations. Institutions must award postsecondary credentials of value and ensure that the earnings potential of those credentials is realized by graduates in an equitable way. This session provides institutional researchers and administrators with innovative tools that integrate multiple data sources to lessen the pressures of oversimplified rankings and to create a more accurate and granular assessment of the value of their programs and credentials.

Session Facilitator: Amon Seagull, Austin College

Concurrent Sessions: E	**Tuesday, February 28**	**10:00 am – 10:45 am**

Session: E1	**Room:** Cedar I	**Level:** Intermediate	**Audience:** Public

Title: Building a Talent Strong Texas: Leveraging TST Metrics

Track: Current Issues and Research In Higher Ed

Presenter(s): Ginger Gossman, Texas Higher Education Coordinating Board

Description: The new strategic plan for Texas higher education, Building a Talent Strong Texas (TST), includes goals and metrics that are new for the state and for higher education: credentials of value and manageable debt. Building on the recent webinars on TST metrics hosted by THECB, this discussion will focus on points in each methodology where institutions can leverage data to advocate for and enact change to improve outcomes for these goals.

Session Facilitator: Trey Buchanan, Texas Lutheran University

Session: E2	**Room:** Cedar II	**Level:** Intermediate	**Audience:** All

Title: Complexity of classifying and presenting race and ethnicity date. The Zero-sum game and Non-zero-sum Game representations supports the reclassification of certain underrepresented UNT race/ethnicity groups.

Track: Stewards Of Data and Info

Presenter(s): Reynaldo Quiroz & Daniel Hubbard, University of North Texas

Description: Presenting ethnicity and race data remains complex, and it could drive other implications, such as misinterpretations or generating biases. Zero-sum game theory, a situation where one's win does mean another's loss, a net improvement, could help understand the dynamics of the classification of the race data according to educations agencies' request. Compliance with federal guidelines to report and publish race and ethnicity/race data inevitably may drive to hide or suppress the presence of some minority groups. This apparent zero-net effect in the whole population seems unharmful; however it generates a risk for data bias. However, reclassifying entries with multiple race categories can reach an ulterior optimum, known as a non-zero-sum game-a win-win situation that can benefit both or more race categories or push to a lose-lose situation. The UNT's methodology for grouping students and faculty ethnicity and race can help understand a scenario for a win-win situation.

Session Facilitator: Amanda Moske, University of North Dakota

Session: E3	**Room:** Springwood I	**Level:** Intermediate	**Audience:** All

Title: Giving Voice to Adult Learners

Track: Current Issues and Research In Higher Ed

Presenter(s): Sayeeda Jamilah, McKenna Griffin, Navi Dhaliwal, & David Mahan; Research Institute at Dallas College

Description: Adult learners have unique and complex needs that are under-researched but critical for institutions to address. This population represents possible enrollment growth and is key to fulfilling the college mission and enhancing education attainment so more low-income families can earn livable wages. Adult students are more than simply older than those coming directly from high school; they are also diverse in terms of race/ethnicity, income level, college readiness, family obligations, career objectives, work experience, and academic pathways. Quantitative research of data sets alone cannot capture these nuances. The Research Institute at Dallas College offers a model to integrate quantitative and qualitative research to bring voice to adult learners.

Session Facilitator: Carol Tucker, University of Houston-Downtown

Session: E4	**Room:** Springwood II	**Level:** Intermediate	**Audience:** All

Title: Reporting for SACS and Other Pleasures: Faculty Employment Status and Classroom Contact with Students

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Thomas Martin, Collin College

Description: Years ago, a session at a SACSCOC conference prompted the development of a new Excel report, generated every fall semester since, to address the accreditor's concerns about reasonably equitable student access to full-time instructors overall and at various locations, times-of-day, and delivery modalities. Over time the report has come to serve additional purposes, and it is one of the IR reports that academic administrators most eagerly await, because it drives a number of subsequent decisions.

Session Facilitator: Jane Haas, Del Mar College

Session: E5	**Room:** Springwoods III	**Level:** Beginner	**Audience:** 4 Year, Public

Title: The Fast & The Studious: Comparative Methodological Approaches to 15-to-Finish Messaging at UTSA

Track: Current Issues and Research In Higher Ed

Presenter(s): Kelsey Mattingly, University of Texas-San Antonio

Description: Complete College America's 15-to-finish campaign encourages students to enroll in 15+ concurrent hours to graduate in four years. However, a deceptively simple phrase, "15-to-Finish," is methodologically complex to measure and evaluate. This study explores how definitional approaches focus on 15+ semester hours or 30+ average yearly credit hour accumulation may impact reporting, and whether enrollment-cohort or graduation-cohort produce substantially different results, and if so, which results may be more impactful for students decision making. From an initial study of five first-time, full-time, freshman cohorts, we found that continuous enrollment in 15+ hours in the fall and spring associated with increased GPA, higher retention rates, and quicker time to degree. This presentation expands our original analysis of enrollment cohorts to graduation cohorts and compares definitional approaches.

Session Facilitator: April Whalen, Austin Community College

Concurrent Sessions: F	Tuesday, February 28	3:15 pm – 4:00 pm

Session: F1	Room: Cedar I	Level: Intermediate	Audience: All

Title: Tableau Tips & Tricks

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Joseph Lynch & Katie Stephenson, Rice University

Description: A session over tips, tricks, and workarounds in Tableau that may assist analysts in developing effective and valuable reports for end users. A basic knowledge of Tableau Desktop is needed for this session, as we will be discussing how to accomplish certain tasks, enable higher-level functionalities, and work around some of the limitations currently present in Tableau Desktop when building reports and interactive dashboards. Some examples of these methods involve using parameters dynamically, allowing users to switch between multiple measures on a single visual, including an "invisible" worksheet to allow for more intuitive filter values, as well as other useful tips.

Session Facilitator: Adele D James, Rice University

Session: F2	Room: Cedar II	Level: Advanced	Audience: 4 Year, Public

Title: How money works? Estimating the influence of financial aid on student retention with different socio-economic status.

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Mahdi Ahmadi & Rohini Patankar, University of North Texas

Description: A countless number of theoretical and empirical studies on have shown socio-economic status of college students has a great role in shaping their academic success. Retention of the first-time in college (FTIC) undergrad student is one of the most important metrics of institutional effectiveness and it has been shown that financial aid is one of the determining factors of students retention. Several empirical studies have shown students with different socio-economic background, performs differently with the same financial aid type and amount. In this study, we are using two different approaches to investigate and quantify the influence of financial aid on students retention across different groups of ethnicity, gender, and family income. In the first method (mode-driven), we use propensity score-matching method to compare the effect of financial aid on different strata of students. In the second approach (data-driven) first we develop a gradient boosting trees classification to predict retention, and then we applied SHAPELY value approach to quantify the effect of financial aid on the prediction outcome across different groups of race, gender, and family income level. We performed comparison on the data before and during the COVID-19 pandemic to understand how different socio-economic groups performed under the pandemic condition.

Session Facilitator: Amon Seagull, Austin College

Session: F3	Room: Springwood I	Level: Intermediate	Audience: 2 Year, 4 Year, Public

Title: Using Spatial Analysis to Build a Student Profile

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Tiffany Enriquez, Lone Star College

Description: Understanding the socioeconomic context from which students hail is a perennially important matter among both postsecondary education researchers, institutional leadership and other personnel. Given that much individual-level data is hard to obtain from the college attendee, creative means must be employed to identify them accurately. We show how, using GIS software like ArcGIS, students' home addresses can be geocoded and mapped, and then merged with U.S.Census or other federal or state data to produce a profile of a college's student body. Whereas administrative data can provide basic information on

demographic factors such as race and gender, external data can allow for greater contextualization with information on neighborhood factors such as median household income, racial/ethnic diversity, crime rate, number and types of businesses, access to public transportation, and so on.

Session Facilitator: Laura Wichman, McLennan Community College

Session: F4	**Room:** Springwood II	**Level:** Intermediate	**Audience:** All

Title: Using HRIS in Public Organizations from an Institutional Research Viewpoint

Track: Operations and Leadership

Presenter(s): Nicolas Valcik, Collin College

Description: This presentation will discuss Human Resource Information Systems (HRIS) in the context of the higher education environment in terms of usage, reporting and migrations to different HRIS platforms.

Session Facilitator: Moumita Mukherjee, University of Houston

Session: F5	**Room:** Springwoods III	**Level:** Intermediate	**Audience:** 4 Year, Public

Title: Math pathways: An Analysis, Visualization of Math Courses Pass rates at a Regional University

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Xiqian Liu & Erin Mulligan-Nguyen, Texas A&M University-Corpus Christi

Description: Research has indicated that early momentum metrics such as taking and passing college-level math courses in the first year of college can predict long-term student outcomes (Jenkins & Bailey, 2017). However, few students have taken and passed the college level math courses in the first year of college, which has negative impacts on their degree completion. To address this issue, Texas A&M University-Corpus Christi formed a Math Success Task Force and the PAIRS department provided historical math sequence and pass rate data as well as further disaggregation by student, college, and course modality characteristics. In addition, we will also show how we visualized the course sequences and pass rates data in Power BI to create interactive reports that facilitated data sharing. We will also discuss the policy implications and the current progress, including implementation of recommendations of this initiative.

Session Facilitator: Amanda Moske, University of North Dakota

Concurrent Sessions: G | Tuesday, February 28 | 4:15 pm – 5:00 pm

Session: G1	**Room:** Cedar I	**Level:** Intermediate	**Audience:** All

Title: GIS Usage in Institutional Research

Track: Operations and Leadership

Presenter(s): Nicolas Valcik, Collin College

Description: This session will be to discuss the different uses of GIS in Institutional Research. Real examples will be used throughout the session to illustrate how GIS can be used in a variety of ways to address both analytical questions and operational aspects of colleges and universities.

Session Facilitator: Regina Gonzales, Texas A&M University Corpus Christi

Session: G2	**Room:** Cedar II	**Level:** Beginner	**Audience:** All

Title: Automating Graduation Rates at UNT: Multiple Perspectives on Success

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Mary Barton & Mahdi Ahmadi, University of North Texas

Description: Ad-hoc requests for graduation rates and years to degree were creating tremendous pressures on the Data, Analytics, and Institutional Research team here at UNT. We knew we needed a better way. This session will showcase the end product and present three different perspectives of the finished analytic. You will hear the IR perspective on why this mattered to the unit, you will hear the technical perspective on what it took to get us over the finish line, and you will hear an institutional perspective about how leadership is already leveraging this tool for good. The suite of tools launched this summer include separate analytics for Bachelors, Masters, and Doctoral cohorts.

Session Facilitator: Amanda Moske, University of North Dakota

Session: G3	**Room:** Springwood I	**Level:** Intermediate	**Audience:** All

Title: Exploring the impact of higher education on post-graduation income using Texas Workforce Commission (TWC) data

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Paul Kailiponi, Alamo Colleges District

Description: A mission of Alamo Colleges is to combat poverty and income inequity in San Antonio. Post-graduation employment outcomes of students are a vital measure to assess the impact of higher education (HE) awards. The Texas Workforce Commission (TWC) allows HE institutions access to employment information with Texas to systematically assess outcomes of our graduates. This presentation will explore TWC data and how it was analyzed to assess the impact of an Alamo degree on income and inequity. Data processing and comparison grouping will be shown to develop various data narratives that communicate the positive effects of higher education degrees on income and equity. These analyses were then incorporated into a narrative dashboard that combines the insights of economic mobility alongside traditional awards counts common to all HE institutions. The resulting data tool provides information to both internal institutional faculty/staff as well as those exploring higher education degrees.

Session Facilitator: Laura Wichman, McLennan Community College

Session: G4	**Room:** Springwood II	**Level:** Beginner	**Audience:** All

Title: Using DAX Efficiently and Effectively

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Kawan Jaramillo & Chris Reid, Lone Star College

Description: Power BI is an effective tool that can be used to turn data into coherent, visually immersive, and interactive insights. Some components of Power BI remain woefully underutilized by most users, however, DAX, an acronym for Data Analysis Expressions, is useful for enhancing data models, especially with calculations. To help remedy the nonuse of DAX in Power BI, and to improve how data are presented, we will provide a basic understanding of DAX's core elements, namely its syntax, functions, and context. Regarding the second of these, there are three primary functions for which DAX can be used: calculated tables, calculate columns, and measures. Finally, we show how DAX formulas can reference created measures to produce dynamic titles/fields in Power BI reports.

Session Facilitator: Emily Rhodes, University of Texas Health Science Center-San Antonio

Session: G5.1	**Room:** Springwoods III	**Level:** Beginner	**Audience:** All

Title: Geocoding applications with R

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Aaron Majek, Sul Ross State University

Description: R is an open source software that facilitates ease of use in altering, adjusting, and managing student record information. It may also be used to bring additional data sources into university data pipelines and attain greater understandings of our service populations- not just students but also staff and faculty.
In this report, we assess applications for census data files in the university data pipelines process. We accomplish this by executing geocoding procedures in R and merging census block .shp files into our university data files.

Session Facilitator: Vanessa McMahan, Texas State University

Session: G5.2	**Room:** Springwoods III	**Level:** Advanced	**Audience:** All

Title: The Relationship between Early Momentum Factors and Transfer and Bachelor's Degree Attainment

Track: Collect, Analyze, Interpret, and Report

Presenter(s): D. Diego Torres & Jae Hak Jung, Lone Star College

Description: Using a combination of Lone Star College's administrative data and data from the National Student Clearinghouse, this study replicates a portion of a working paper of the Community College Research Center (CCRC) at Teachers College, Colombia University. Focusing on credential-seeking, fall-entering, first-time-in-college student cohorts, and controlling for demographic and other factors, we use discrete-time survivor analyses to examine the relationship between early momentum factors (e.g. completion of gateway English courses, completion of gateway math courses, and accumulation of 24 or more credit hours in the first academic year) and racial disparities in the odds of 1) transfer to a four-year university and 2) attaining a baccalaureate degree. We also examine the degree to which the relationship between momentum factors and the outcomes above depend on race/ethnicity and vice versa.

Session Facilitator: Erin Mulligan-Nguyen, Texas A&M University Corpus Christi

Concurrent Sessions: H	**Wednesday, March 1**	**9:00 am – 9:45 am**

Session: H1	**Room:** Cedar I	**Level:** Intermediate	**Audience:** All

Title: Minding the Grades: Lessons Learned from Building a Class Performance Dashboard

Track: Collect, Analyze, Interpret, and Report

Presenter(s): Susan Moreno & Hanlong Fu, University of Houston

Description: Understanding class performance is of great importance to universities because class performance has a direct impact on graduation and retention. For that reason, the IR Office at the University of Houston built a comprehensive dashboard that could track the overall trends as well as lower levels of detail in class performance. This session presents the lessons learned, along with valuable tips and tricks, from building a comprehensive class performance dashboard.

Session Facilitator: John Carroll, Texas A&M University Central Texas

Session: H2	**Room:** Cedar II	**Level:** Beginner	**Audience:** All

Title: Just What is Retention Anyway?

Track: Educate Information Producers, Users, & Consumers

Presenter(s): Faron Kincheloe, Baylor University

Description: Questions frequently arise concerning the complexities involved in calculating and reporting retention. This presentation will review these issues and how they have been addressed at Baylor University.

Session Facilitator: Kate Proff, Texas State University