### Monday, May 29, 2023

Pre-Conference Education

#### 08:00 AM - 04:00 PM

#### Best Practices for Reporting and Using IPEDS Data to Improve Office Efficiencies (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) *Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 13*

This workshop provides intermediate-level keyholder training, and is specifically designed for individuals who have led IPEDS data submissions at their institutions for at least one full reporting cycle.

Presenter(s): Eric Atchison; Sandra Kinney; Nancy Dugan

### Beyond Compliance: How to Use IPEDS Data to Examine Student and Institutional Success (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 14

This workshop is designed for individuals interested in utilizing IPEDS data to examine and measure student and institutional success. The first half of the workshop explores the five IPEDS surveys that contain academic performance metrics (Completions, Graduation Rates, 200% Graduation Rates, Fall Enrollment, and Outcome Measures). Through group discussion, activities, and lectures, participants will learn what the measurements can—and cannot—tell us about student and institutional performance. The second half of the workshop will involve hands-on activities to work through a series of case studies based on real-life scenarios. Participants will identify the question being asked in each case study; determine the best metric(s) to use to answer the question; extract data using the IPEDS tools; perform analyses; and present the data to answer the question. Participants will gain the knowledge needed to explore and answer questions at their institutions or organizations.

Presenter(s): Carrie Mata; Mary Ann Coughlin; John Ingram

### IR Bootcamp: Foundation for any IR Professional (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE);Multi-Day Bootcamp | Meeting Room 3

Institutional research professionals are subject matter experts who help stakeholders answer questions in pursuit of data-informed decision making. IR professionals are more than just curators of information—we are partners in discovery, which requires helping institutional colleagues clarify goals and refine questions in addition to the analysis of data, making sense of results, communicating findings, and generating insights. This workshop is an intensive exploration of IR's agency in data-informed decision cultures and highlights the skills required to be effective in this field. It is an extension of AIR's highly successful virtual Foundations series and an essential experience for any IR professional. This highly interactive workshop starts with a question and sees an IR project through to its

culmination. Workshop elements include principles of research design, survey design, descriptive statistics, effective reporting and communication, and translating findings into recommendations.

Presenter(s): Bethany Miller

#### 12:30 PM - 04:00 PM

### Assessment 101: A Step by Step Guide for Non-Academic Unit Assessment (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 5

Although student learning is directly affected by instruction in the classroom, it is indirectly affected by the processes, services, and resources of the operational/administrative support units of an institution. Because these units have great impact on the environment and tools of the classrooms, the goals/objectives of these units must be assessed on a continuous basis. However, many institutions struggle to create a culture of non-academic unit assessment that is systematic, organized, and sustainable. Misconceptions about what assessment is and how administrative unit assessment is relevant to the overarching effectiveness institutional mission, goals, and objectives are the principal barriers to this. This workshop will provide step-by-step guidelines to create a framework for developing and successfully implementing an organized, systematic and sustainable non-academic unit assessment geared to improve institutional effectiveness.

#### Presenter(s): Nasrin Fatima

#### How to Effectively Manage Your Office (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) Multi-Day Workshop;Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 6

Many IR/IE professionals are promoted into managerial positions because they are good at their job. But in many cases, these newly minted office leaders are not provided with training to effectively manage their office. In this workshop, we share common managerial and operational strategies needed to direct the activities of an IR/IE office. We will discuss the mindset shift needed to move from an individual contributor to being a team or office leader and provide strategies related to managing direct reports, overseeing staff work, staff retention, hiring, and budgeting. Come to this workshop if you are a new office leader, or have recently grown the size of your office, so you can get off to a great start!

#### Presenter(s): Jim Lenio; Darlena Jones

#### Show Me the Numbers: Sharing Data With Stakeholders (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 10

Any person working with research data should understand how to share that data. From formal reports to college websites to dashboards, data visualizations help to tell our story. However, when data visualizations don't follow specific design rules there can be confusion in the communication of and interpretation of the underlying data. Additionally, the wrong choice of visual can manipulate and

skew the data in unethical ways. This session will look at various reporting tools for data while discussing data visualization design rules, universal design, rules of accessibility for data reporting and website visualizations, and UX (user-experience design).

#### Presenter(s): Amy Pilcher

# Using Concept Mapping to Build an Interface to Institutional Knowledge (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 12

During this workshop participants will learn the basics of concept mapping and how it can be used to create a powerful yet intuitive interface to comprehensive information about their institutions and to back-end data systems. A community developed, open-source and creative commons licensed template (Sentient) will be provided, demonstrated, and used to begin construction of each participant's institutional model. These models empower the ability to conceptualize and appraise the complex, intertwined operations of the institution (the view from the balcony): Support informed decision making, institutional research, effective assessment, and strategic planning: Enable transparent evolution management and access to huge libraries of inter-institutionally shared metrics and tactics: and easily and effectively integrate all existing browser accessible sources of data into a single comprehensive institutional knowledgebase.

Presenter(s): Graham Glynn

### Tuesday, May 30, 2023

#### 08:00 AM - 11:30 AM

# Creating Data Visualizations to Tell Your Cost and Productivity Story (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 10

Do your senior leaders know how much it costs to deliver instruction? Are your deans looking for datainformed ways to provide more instructional support to academic programs? Are you tasked with including visualizations and peer data in academic program reviews? Having access to your institution's data is only the first step in understanding your program-level instructional costs and productivity. The next step is transforming that data into thought-provoking, informative data visualizations. This workshop reviews key principles of effective visualizations, explains how The Cost Study helps answer the above questions, and shows how other institutions use Cost Study reports. Participants will also practice quickly creating visualizations that tell the data story for your institution. Past participation in The Cost Study is not necessary. Join us to learn some best practices of data communication and improve your ability to create visualizations that will engage and inform stakeholders!

#### Presenter(s): Marcia Preston; Jennifer Snyder

## Data and Analytic Literacy: Your Role Leading the Institution to Success (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE);SOLD OUT | Meeting Room 9

The joint statement by AIR, Educause, & NACUBO lays forth a clear challenge to act now. One major challenge in maturing analytic landscapes is the gap between IR methods and tools and the knowledge and data literacy of decision makers to harness and trust these approaches. This gap can lead to lost opportunities, and distrust of analytic/data approaches. Using a theoretical framework of executive data literacy, this workshop provides attendees with an understanding of the core concepts of data literacy, analytic maturity, and analytic culture. Attendees will also learn how to address common pitfalls and how to navigate these for success. After assessing their own campus data maturity, attendees will use these concepts to build an action plan of short-term and long-term strategies to begin to impact student and institutional success.

Presenter(s): Jason Simon; Loralyn Taylor

#### How to Effectively Manage Your Office (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) Pre-Conference Education (ADDITIONAL FEE);Multi-Day Workshop | Meeting Room 6

Many IR/IE professionals are promoted into managerial positions because they are good at their job. But in many cases, these newly minted office leaders are not provided with training to effectively manage their office. In this workshop, we share common managerial and operational strategies needed to direct the activities of an IR/IE office. We will discuss the mindset shift needed to move from an individual

contributor to being a team or office leader and provide strategies related to managing direct reports, overseeing staff work, staff retention, hiring, and budgeting. Come to this workshop if you are a new office leader, or have recently grown the size of your office, so you can get off to a great start!

Presenter(s): Jim Lenio; Darlena Jones

#### I Have a New Job in Institutional Research...Now What? (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) *Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 11*

This informative and interactive workshop is designed for individuals who are new to the field of institutional research. We review the typical roles and responsibilities associated with IR, highlight useful resources, and learn how to develop connections with others in the field.

Presenter(s): Jessica Shedd; Shama Akhtar

#### IPEDS Data and Benchmarking: Supporting Decision Making and Institutional Effectiveness (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) *Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 4*

This workshop introduces the fundamentals of benchmarking as a way to demonstrate institutional effectiveness. It is designed for individuals with little to no experience in benchmarking studies. Participants use data from the IPEDS Surveys, Data Feedback Reports, and the "Use the Data" center at the NCES website to learn about the types of comparison groups that can be constructed. Exercises demonstrate establishment of key performance indicators (KPIs) and identification of variables to refine comparison groups.

Presenter(s): Raj Malhotra; Sandra Kinney

#### IPEDS Student Financial Aid Training (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 13

This workshop provides foundational training for completing the IPEDS Student Financial Aid Survey using an integrated approach to managing, storing, and extracting financial aid data required for survey completion.

Presenter(s): John Ingram; Nancy Dugan

# IR Bootcamp: Foundation for any IR Professional (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Multi-Day Bootcamp;Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 3

Institutional research professionals are subject matter experts who help stakeholders answer questions in pursuit of data-informed decision making. IR professionals are more than just curators of information—we are partners in discovery, which requires helping institutional colleagues clarify goals and refine questions in addition to the analysis of data, making sense of results, communicating findings,

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and generating insights. This workshop is an intensive exploration of IR's agency in data-informed decision cultures and highlights the skills required to be effective in this field. It is an extension of AIR's highly successful virtual Foundations series and an essential experience for any IR professional. This highly interactive workshop starts with a question and sees an IR project through to its culmination. Workshop elements include principles of research design, survey design, descriptive statistics, effective reporting and communication, and translating findings into recommendations.

#### Presenter(s): Bethany Miller

#### Telling Student Stories: Qualitative Data and Mixed Methods in IR (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 7

This workshop provides an overview and introduction to qualitative and mixed methods approaches that incorporate student voice in IR/IE and assessment. To better tell student stories, the workshop provides context, methods, and resources along with opportunities to practice and plan for local implementation for those interested in finding ways to include more student voice and perspective into the IR process. Together, we will explore the importance of qualitative research in data storytelling and outline easy ways to incorporate qualitative research into your own IR/IE and assessment work.

#### Presenter(s): Natasha Jankowski

# The Art and Science of Enrollment Forecasting (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED)

Pre-Conference Education (ADDITIONAL FEE);SOLD OUT | Meeting Room 5

In this workshop, participants will be introduced to an enrollment forecasting model used to project enrollments at a large (20,000+) public university for almost 20 years. Adaptable to institutions of any size, the model, which is based in Excel, can help institutions forecast future enrollments using historical data and sound reasoning. The model is not designed to project how many new students will attend an institution, but rather, how they progress, hopefully to graduation. Attendees will receive a template to use with their institution's data and receive examples of how results are shared across campus.

#### Presenter(s): Chris Orem

# The Integrated Postsecondary Education Data System (IPEDS): Leveraging IPEDS data for insights and action (ADDITIONAL FEE/PRE-REGISTRATION REQUIRED) *Pre-Conference Education (ADDITIONAL FEE) | Meeting Room 12*

Understanding how to use IPEDS data tools is one way institutional researchers and others can create data reports about their institution(s), as well as compare their institution(s) to other institutions. This session is appropriate for anyone with a basic understanding of IPEDS and an interest in using the webbased data tools developed by the National Center for Education Statistics (NCES). IPEDS team members will demonstrate the functionality of IPEDS data tools using real-world higher education use cases. The presentation will focus specifically on newly improved tools including Summary Tables, Trend Generator, and others. In addition, participants will learn how to create, upload, and save institution groups and variables for future use, including how to take an existing institution group (e.g., custom comparison group) and incorporate it in IPEDS data tools. Participants will have a hands-on opportunity, under the direct support of IPEDS staff, to apply their learning about IPEDS data tools to investigate provided use cases or their own problems of practice specific to their institutions.

Presenter(s): Aida Ali Akreyi; Christopher Cody; Roman Ruiz

#### 12:00 PM - 12:45 PM

#### First Time at Forum

Speaker Session;Leadership | Meeting Room 1

Meet other newcomers and learn from volunteer leaders who will share tips about making the most of the conference experience; including networking tips, an insider's guide to the AIR Forum schedule, and insight on using the conference app to stay in-the-know, streamline your schedule, and make lasting connections.

#### Presenter(s): Karen Webber

#### 1:00 PM - 02:30 PM

#### Equity, Collaboration, Big Institutional Issues and the Role of IR Impact Session;Leadership | Meeting Room 26 A-B

Higher Education is facing several large issues that are forcing us to rethink what we do and the way we do it. Demands for accountability from the public, declining enrollment, staff turnover, reduced budgets combined with social issues of justice, equity and human rights are changing the context of our work. Institutional research plays a significant role in addressing these issues from contextualizing the data to leading discussions and solution-oriented collaborations. Higher education cannot address these massive issues without the participation of institutional research, be it a Vice President for Institutional Effectiveness or an entry-level analyst.

#### Presenter(s): Ellen Peters; Bethany Miller

#### Hub, Spoke, Fabric? CDOs' Perspectives on the Role of IR in Data Strategy Impact Session;Leadership | Meeting Room 1

Chief Data Officers are becoming increasingly common on college campuses. As individuals tasked with developing and implementing a campuswide data strategy, CDOs have to rightfully understand the role of institutional research, and its place in the broader strategy. In order to fully realize the AIR/EDUCAUSE/NACUBO call to create " Change with Analytics finding the proper alignments and getting feedback from the IR community will be necessary for success. This session will discuss that very tension and highlight some lack of agreement among CDOs on this very issue. The goal is to help IR

leaders and practitioners see their work in the context of a broader analytic strategy, and to begin a roadmap for CDOs facing a similar task on their own campuses.

Presenter(s): Brad Weiner; Ravneet Chadna; Olivia Kew-Fickus; Benjamin Wiles; Katie Wilkinson

#### **IPEDS Update 2023**

Educate;Impact Session | Meeting Room 25 A-C

This session provides a general update on the Integrated Postsecondary Education Data System (IPEDS), annual survey collected by the National Center for Education Statistics (NCES) of the U.S. Department of Education. The following information will be presented: changes to the upcoming 2023-24 and 2024-25 collections, a brief overview of Research and Development, and a brief overview of major updates to IPEDS Tools and the IPEDS website. Note: an abbreviated encore presentation will be featured in the regular concurrent session line-up, as well as a separate session which focuses on the tools.

#### Presenter(s): Aida Ali Akreyi

#### 03:00 PM - 04:30 PM

#### **Collaboratively Propelling Analytics**

Data and Technology;Impact Session | Meeting Room 26 A-B

AIR, in collaboration with EDUCAUSE and NACUBO, received a grant from the Bill & Melinda Gates Foundation to develop a guide to help colleges and universities achieve the call to action issued in the Joint Statement of Analytics (changewithanalytics.com). Many institutional leaders want to build cultures of student-focused analytics, but they often aren't sure what steps to take. Our emerging guide is designed as a collection of resources to assist in scaffolding institutions for data-informed decisions to be made at every level. Join us to hear from institutional business, IR, and IT professionals about how they are embedding analytics in their institutional cultures, and how the guide can assist in this work. Session participants will be encouraged to offer feedback based on their institutions' needs, to inform the guide, which will be released in 2024.

Presenter(s): Tait Kellogg, PhD; Bridget Miller; Rashmi Radhakrishnan; Joan Singleton

### Education Data in Federal Policy: A Look at 2023 and Beyond

Impact Session; Policy | Meeting Room 25 A-C

This interactive session will provide an overview and assessment of the current federal policy landscape in Congress and the Department of Education, with a focus on data, equity, and student success. Panelists will discuss as well as respond to audience questions on the potential impact of the regulatory agenda, current and prospective legislative proposals impacting today's students, and intersections with the work of states and postsecondary institutions. The expert presenters represent organizations that serve a broad array of constituencies, all of which play a crucial role in policy development.

Presenter(s): Diane Cheng; Bryan Cook; Jonathan Fansmith; Christine Keller

### How to Utilize Data to Become a Better Change Agent: A Case Study on FYE Assessment and Evaluation; Impact Session | Meeting Room 1

Higher education must take notice and act on national discussions college value and improved student success rates. Storytelling through data to improve the student experience can be used by institutions to change the narrative and create an undergraduate experience that will benefit all students. Think back to your first-year experience (FYE). How did it make you feel? How would you characterize it? Evidence-based best practices and foundational components that can be utilized and applied in the development of a comprehensive FYE will be synthesized. A case study will illustrate how to leverage data to elevate and inform the creation of a FYE, focusing on the process by which institutional research (IR) can become involved in developing a FYE. We will demonstrate how to engage others with data, advocate for students in transition, nudge second-order organizational change, and enhance student success and outcomes. Learn to be a better change agent!

Presenter(s): Kristin McKinley; Jillian Kinzie; Brent Drake

#### 4:45 P.M. – 6:30 P.M.

Opening reception in the Exhibit Hall Reception | Exhibit Hall C

Join us for the Opening reception in the Exhibit Hall and be sure to visit sponsor booths while you're there!

### Wednesday, May 31, 2023

#### 07:45 AM - 10:00 AM

#### **Opening Keynote**

Keynote | Grand Ballroom

7:45 a.m. - 8:45 a.m. Breakfast buffet and seating (meal function included with conference registration). 8:45 a.m. -10:00 a.m. Opening ceremonies and keynote.

Presenter(s): Kwame Christian, Esq., M.A.,

#### 10:15 AM - 11:00 AM

#### 2022 NCES Data Institute Research Reports

Speaker Session | Meeting Room 10

Join participants from the 2022 NCES Data Institute as they present findings from their research. Learn about the research process that participants used to answer specific questions. Take away key insights from their research that could be applied to your own work.

Presenter(s): Samantha Greenwood; Faye Jones; Kristen Lindsay; Shannon Tinney Lichtinger

#### Across Borders and Audiences: Conducting International Program Evaluations Speaker Session; Assessment and Evaluation | Meeting Room 9

Higher education institutions are increasingly expanding their programs to new markets, and program evaluation is vital to maintaining quality, particularly when receiving external offices. IR offices can be a great resource in these programs evaluations, as we can provide a relatively independent evaluation when compared to program staff and administrators. In this regard, our IR office at Carnegie Mellon University has been conducting program evaluations of the Master's programs we offer in Rwanda and programming related to a private external funding source. This presentation will illustrate the process we have used to conduct these annual evaluations using both quantitative and qualitative data from surveys and interviews; how this process has evolved over time both before and after the emergence of COVID-19; and how evaluation information has been presented to internal and external stakeholders over time.

Presenter(s): Mark Chimel

### Building a Sense of Purpose in a Time of Inflation, Low Morale & Turnover Speaker Session;Leadership | Meeting Room 16

COVID. Remote work. The Great Resignation. Quiet quitting. Inflation. It has been a challenging couple of years for higher education. Yet, institutional research and data analyst roles continue to be the highest growth positions at our institutions. How do we as IR managers and professionals reconcile institutional

stresses with our own occupational and departmental needs? This presentation will focus on managing an IR office through the turbulence of the 2020s. The framework is divided into two sections with three topics for each section. The first section is about organizational design, focusing on setting up the infrastructure to make sure the right people are in the right positions. This includes topics involving hybrid/remote work, market salary benchmarking, and the hiring process. The second section is about organizational processes, focusing on office procedures, team building, and IR budgets. Success requires people, processes, and resources.

#### Presenter(s): Justin Shepherd

#### Building on Tradition: Approaches to More Inclusive Data Analysis Speaker Session; Assessment and Evaluation | Meeting Room 5

Institutional research and assessment depends heavily on our ability to characterize the students we study into categories and on our inclination to generalize the results. Although this work is necessary for understanding student experiences, it does present challenges for critical and inclusive approaches to data analysis. In this session, we will discuss common issues and solutions associated with inclusive data analysis by investigating a series of data analysis examples that feature small sample sizes for marginalized students. We will discuss traditional variable-centered versus person-centered methodological approaches; strategies for creating groups to use in comparative analyses; challenges in quantitatively capturing aspects of identity; and tips for communicating the results, validity, and data quality of such analyses to broad audiences.

#### Presenter(s): Allison BrckaLorenz; Tien-Ling Hu

#### College Writing Grade: Its Relation to SAT and Student Retention

Assessment and Evaluation; Discussion Group | Meeting Room 15

General education courses, often labeled as core courses, are typically designed to teach a variety of skills that students should master in order to lead a productive life. Critical thinking has been regarded as an important component of these skills, and creative writing has been recognized as an effective course to develop critical thinking skills. This study, with a sample of students from five colleges, is designed to investigate the following: the relationship of SAT to student performance in college writing courses; the relationship of college writing to student first-year retention; and if there is a link among the three things, how strong the link is.

Presenter(s): Ye Ji; Yuxiang Liu; Jasmine Yang

### Disparities in Racialized Experiences: Five Themes Emerging From the NACCC *Speaker Session;Decision Support;Featured Session | Meeting Room 23*

Diversity and equity issues are prominent in most liberal arts colleges in the United States. The majority of institutions have been predominantly White with increasing enrollment for students of color. The increase in diversity of students on campus reminds institutional researchers to delve further into equity issues with institutional data. Research from the National Assessment of Collegiate Campus Climates (NACCC) Student Survey has indicated that students of color and White students live different racial

realities. In this session, we present five themes that emerged from the NACCC results of 51 liberal arts colleges across the U.S. and their implications for the field of institutional research.

Presenter(s): Ya-Chi Hung; RodolfoJr Andy Núñez; Kaitlyn Lange; Jenise; Jihye Kwon

### Ghosts of Tasks Past, Present & Future: Strategies to Manage IR Workflow *Leadership;Speaker Session | Meeting Room 11*

As the official source of information about our institutions, IR shops must simultaneously manage a variety of recurring and one-time tasks. Doing so effectively depends on procedures that facilitate accuracy and efficiency. We will discuss relevant best practices and provide examples of implementation at our institution. The strategies we will consider include documenting key information about tasks, organizing archival records, and managing workflow (including a software application we use to track progress on active tasks, coordinate collaboration, plan for future iterations of recurring tasks, etc.). The practices discussed will support IR teams' ability to efficiently provide accurate information to internal and external stakeholders.

Presenter(s): Wyntre Stout

# Got Data Literacy? How AIR's Data Literacy Institute Can Provide Professional Development for Your Institution *Educate;Speaker Session | Meeting Room 3*

Data literacy is quickly becoming a hot topic on most campuses as the need for data-informed decision making continues to expand. But how does an institution provide this specialized training in addition to all the other work it does? For the past several years, AIR has been carefully developing the Data Literacy Institute (DLI) to help meet the specific needs of higher education. The DLI provides data literacy training to a cohort of up to 30 individuals from across the institution, including faculty, advisors, administrators, and other staff directly involved with student learning, development, or support engaging in a 12-week learning experience. A team-based approach is used to apply what is learned through a group activity that explores an institutional challenge. The curriculum is delivered through a combination of virtual seminars, individual and group readings, activities, and exercises, culminating in a collaborative research project. In this session, we will discuss the components of the DLI and how it can improve data literacy at your institution.

#### Presenter(s): Darlena Jones

#### How Can Community Colleges Use Forecasting to Achieve Performance Goals? Speaker Session; Data and Technology; Featured Session | Meeting Room 20

Colleges have an ever-growing need to monitor and drive towards realistic goals supported by strategies that yield measurable improvement. Without achievable goals, colleges fumble in the dark to come up with meaningful performance targets. By using analytics and forecasting, Reynolds Community College was able to set goals in three areas critical to student success and the college's mission: (1) student enrollment, (2) student applications, and (3) credentials earned by students. This presentation will underscore the pivotal role that forecasting has in goal setting and resource planning and will discuss how institutions with limited institutional resources can make forecasting scalable for their college.

#### Presenter(s): Melanie Boynton

### How to Measure Institutional Support for Student Well-Being on Your Campus Speaker Session; Decision Support | Meeting Room 21

Student well-being is critical now more than ever. Using the Student Well-being Institutional Support Survey, Butler University's Bridget Yuhas shares how she is leveraging Qualtrics to collect, segment, and drill into results to disaggregate information for key stakeholders to support student well-being. Join us to explore how Qualtrics dashboards can be used to efficiently and quickly create data visualizations and meaningful analysis for campuses to understand, measure, and improve student well-being.

#### Presenter(s): Bridget Yuhas; Joshua Sine

#### Let's Chat: Chatbot Nudging for Improved Course Performance

Speaker Session; Policy | Meeting Room 6

Students face many challenges to successfully completing a postsecondary education program, including administrative barriers to matriculate and continually having to re-register for a program as well as successfully completing courses. Text-based nudging utilizing an AI-enhanced chatbot has been a particularly effective tool when targeting specific administrative tasks. This study builds on this research to show a positive impact on using text nudges at the course level to improve student outcomes. Using a randomized control trial of an "academic chatbot," we show that texting students about course reminders, feedback, and review of course content significantly shifted students' final grades, increasing the likelihood students received a B or higher by eight percentage points with an even higher impact on first-generation students in particular. The chatbot remained popular with the students throughout the semester, as well. We present an analysis of these results and how they can impact policy.

Presenter(s): B. Tyler Walsh; Lindsey Fifield

#### Leveraging "DataOps" in the Small IR Shop

Speaker Session; Data and Technology | Meeting Room 4

"DataOps," a term coined in 2014, is an approach that seeks to improve the quality and speed of data analytics by combining an integrated, process-oriented perspective on data with automation and methods from agile software engineering. Though conceived in the context of "Big Data," the author will argue for the relevance of the approach to institutional research and in particular IR offices with a small (or single-person) staff. The work presented here will demonstrate how DataOps can be leveraged as a "force multiplier," allowing individual researchers or small teams to reduce labor costs and the risk of error. Three dimensions of the analytic enterprise—revision control, batching processing, and automated validation—will provide illustrative cases of DataOps application in the context of a four-year liberal arts college with 36 academic departments and an undergraduate enrollment of roughly 5,000.

Presenter(s): Lane DeNicola

### Now Is the Time: Faculty Use of Analytics for Equitable Student Success Assessment and Evaluation; Speaker Session | Meeting Room 13

The integration of analytical data within educational ecosystems affords many new opportunities for IR professionals. This includes how they share data with faculty and bridge silos to sustain a data-informed culture at their institution. We make this claim based upon the evaluation of a faculty Fellows program designed for exactly that purpose. The 6-year-old program provides faculty of all ranks the opportunity to use warehouse data to improve teaching, learning, and student success at the course, program, and institutional levels. Using a mixed-method evaluation of the program, we surveyed 70 Fellows, conducted a series of focus groups, and analyzed 63 individual Fellows' project reports. Participants will be given time to discuss the opportunities and challenges associated with this type of initiative, identify the relevant theories that can shape collaborations across institutional silos, and reflect upon various ways IR offices can be involved in similar efforts.

Presenter(s): George Rehrey; Michael Sauer

### Qualitative Approach to Re-Envision University Student Assessment Calendars Speaker Session; Assessment and Evaluation | Meeting Room 14

Carnegie Mellon's Office of Institutional Research and Analysis maintains oversight of university-wide assessment efforts for students; however, due to the pandemic, most projects were either delayed or canceled for 2020 and 2021. In returning to normal operations, leadership felt it was time to re-envision assessment strategies by updating its university-wide assessment calendar. Our key charges were to listen to our constituents in order to develop an assessment portfolio that would meet their needs, consider assessment efforts that include comparative perspectives and benchmarking, and take a fresh look at how assessment data are shared and used effectively for organizational change. This session will highlight our goals, the steps we took, what we learned, and how we incorporated that information into next steps. We will share our process and end products of a university-wide assessment calendar and an assessment responsibility matrix.

Presenter(s): Shannon Foster; Melissa Baker

### Reporting Faculty Data to NSF: Institutional Capacities and Possibilities

Discussion Group;Educate;Featured Session | Meeting Room 24

This discussion session will describe a new federal data collection initiative on reporting faculty demographic and career progression data in STEM disciplines, which is under consideration to be added to the NSF-NIH Survey of Graduate Students and Postdoctorates in Science and Engineering (GSS). The dialogue will explore the ways institutions maintain administrative data related to faculty and the ways in which these data would be of assistance for institutional benchmarking and strategic planning. Participants will have the opportunity to share with others their data definition and reporting challenges and provide input to NSF on how to define and measure the science, engineering, and health faculty workforce employed by institutions.

#### Presenter(s): Jonathan Gordon; Chris Davies

#### The Past, Present, and Future of Enrolment Projections at TRU

Affiliated Organization Best Presentation; Decision Support | Meeting Room 19

Thompson Rivers University spans three campuses and offers a variety of undergraduate and graduate programs. Enrolment projections are produced for all campuses several times a year using different modelling strategies and incorporating consultation with stakeholders. Over the past decade, the projections process has evolved from a simple model of accepted applications to student headcounts by program and enrolments by course. Here, we provide an overview of the individual models and the process of incorporating stakeholder feedback. We describe how the projections are used for institutional planning at TRU, and how their next evolution can contribute to an enrolment planning framework.

Presenter(s): Dominique Cook; Matthew Kennedy

### Unlocking IPEDS Data to Understand Residence and Migration to College Data and Technology;Speaker Session | Meeting Room 22

IPEDS is a novel data source for understanding the residence and migration of first-time college students. State residency holds many critical implications for an institution's enrollment strategy and recruitment practices. For instance, some colleges leverage nonresident enrollment to maximize academic prestige, offset stagnant or dwindling in-state enrollments, or generate tuition revenue at the higher out-of-state rate. At this session, you will learn how to unlock the power of IPEDS residence data to answer critical state policy and enrollment management questions including how well each state retains its recent high school graduates to attend college in-state and which competitor institutions are recruiting your state's students to migrate out of state to attend college. Attendees will receive expert guidance from IPEDS Survey Directors on how to access, process, analyze, and visualize IPEDS spatial data elements including institution location and student state of residence.

#### Presenter(s): Roman Ruiz

### Using NPSAS for State-Level Comparisons and Benchmarking

Speaker Session; Decision Support | Meeting Room 12

Have you ever wondered what percentage of undergraduates in your state received institution, state, and federal aid or a Pell Grant? How much aid did they receive? Did those figures differ by gender, race/ethnicity, and level of institution attended? Wonder no more! The 2018 and 2020 administrations of the National Postsecondary Student Aid Study (NPSAS:18-AC and NPSAS:20) can be used to answer these exact questions. In this session, you will learn what NPSAS:18-AC and NPSAS:20 are capable of so you can produce your own estimates to inform discussions among your stakeholders at the institution, system, or state level.

#### Presenter(s): Joshua Pretlow; Austin Caperton

#### 11:15 AM - 11:35 AM

#### Data Cookbook- a Full-featured, Affordable Data Intelligence Solution Data and Technology; Sponsor Product Demonstration | Expo Theater 1

Improve data governance and data intelligence at your higher education institution with the Data Cookbook by IData. In this 20 minute session, we will quickly cover how the Data Cookbook solution: 1) helps document your business definitions of data as well as the technical details, 2) provides a collaborative framework for gathering important requirements for your reports, 3) enables all data users to see and understand the meaning of the data that is used by your institution, 4) tracks and governs the lineage and quality of your data across the institution, and 5) integrates with data systems to automatically monitor for quality issues and unplanned changes in your data structures and codes. Join us to get a feel for what the Data Cookbook can do for your institution.

#### Presenter(s): Brian Parish

#### 11:15 AM - 11:35 AM

#### Faculty Insight and External Discovery Site: Showcase Faculty Excellence Data and Technology; Sponsor Product Demonstration | Expo Theater 2

Academic Analytics is partnering with institutions to better tell the story of faculty and their contributions. Institutional data (i.e. courses taught, grant data, clinical RVUs) and scholarly data, collected from publicly available sources, are integrated to create a robust core of faculty level information. Faculty are then able to view these data and augment it with additional information to provide the entire context of their contributions. Faculty are also able to manage their profiles. Additionally, these data can be highlighted in an External Discovery Site to share this story with external constituents and potential collaborators and funders.

Presenter(s): Naeem Thompson; Stephanie Faulkner

#### 11:15 AM - 12:00 PM

### A Deep Dive Into U.S. News Best Engineering Graduate Program Ranking Speaker Session; Decision Support | Meeting Room 5

In response to the leadership's inquiry of the feasibility of using ranking results in decision making, an IR office conducted an in-depth analysis of the U.S. News best engineering graduate school ranking, aiming to help the leadership develop better understanding of the ranking. The presenter will share insights on how to understand the ranking methodology and gain access to ranking data to examine the ranking results. The presenter will also demonstrate a Power BI benchmarking dashboard that allows users to explore ranking results under different scenarios. The presentation will conclude with some practical tips on helping institutions understand and use rankings data. Although this presentation uses the

engineering school as a case study, the knowledge, methods, and practice shared can be helpful to decode other college or institutional ranking results.

Presenter(s): Jennifer Wu

#### An Early Review of Test-Blind Admissions at a 4-Year Regional Public Institution Speaker Session; Policy | Meeting Room 22

Many institutions adopted a test-blind or test-optional admission policy due to the COVID pandemic. After implementation, institutions are urged to review these policy impacts and answer questions such as: What is the impact of this policy change on student outcomes? Have students gained or been harmed by this policy shift? This presentation will show how Northern Michigan University reached the decision to adopt a fully test-blind policy and how the institution continually evaluates the impact of admission policy change on its students. Attendees will see details on how NMU distinguishes between different groups affected by the policy and how to use statistical analyses to examine student performance differences when compared to counterparts in previous years.

#### Presenter(s): Jason Nicholas; Lu Zhang

### Assessing Institutional Alignment on Best Practices in Student Success

Assessment and Evaluation; Speaker Session | Meeting Room 10

The National Institute for Student Success (NISS) at Georgia State University was founded on the belief that schools inadvertently hinder their own students' success through practices that drive equity gaps and inhibit college completion. The NISS has developed and administered a Campus Stakeholder Survey to over 900 campus leaders across 27 schools to assess institutional alignment on data-proven student success best practices. This tool provides a key data point that is part of a larger diagnostic analysis the NISS conducts with clients to identify administrative processes adversely impacting retention, progression, and graduation rates. Findings indicate that while leadership support is well aligned, there are opportunities to improve practices related to Financial Wellness, First-Year Support, and other key areas. Identifying areas for improvement is a crucial step in eliminating equity gaps and improving overall student success.

#### Presenter(s): Monique Farone; Jeremy Toulon

#### Bridging the Gap: Translating Campus Concerns Into Research Questions Speaker Session; Assessment and Evaluation | Meeting Room 14

How do you take a somewhat nebulous area of concern and "find an answer"? How do you translate a question that makes several [likely unconscious] assumptions into research that first identifies and examines those assumptions, and can also be answered without collecting new data? In this session, we describe the process of translating a generalized question with a number of underlying assumptions into a focused study that tested these assumptions and framed the next steps in addressing the original question. We also discuss how we worked with stakeholders to understand this process, using an example from our own recent experience. Finally, we give the audience time to ask questions about our example or their own work.

#### Presenter(s): Pamela Peters; Laura Yahn

#### Build an Interactive Course Recommendation Tool for Academic Advising Data and Technology; Speaker Session | Meeting Room 23

While there are many studies on sequential course trajectory, few researchers focus on courses to be taken together in one semester. Students may have very different academic performance due to taking different courses in a semester. The purpose of this study is to investigate the following: when given a student's characteristics and one or more courses this student has already decided to take, what other courses should this student take in the same semester to achieve better academic performance? Market basket analysis and enumeration analysis were conducted and then compared. The presentation will demonstrate two versions of business intelligence tools based on the analysis, one programmed website and one Power BI dashboard. The tools can help both students and faculty/staff with or without data knowledge fully utilize findings from this study to improve student success through better curriculum planning.

#### Presenter(s): Yuhao Liu

#### 11:15 AM - 12:00 PM

#### Disrupted relations: How to Enhance Engagement in Blended Learning

Affiliated Organization Best Presentation; Decision Support | Meeting Room 9

The South African Survey of Student Engagement (SASSE) shows decreases in relational engagement during COVID-19, also confirmed by other studies using the National Survey of Student Engagement (NSSE). Considering the need to build more resilient systems, technology will likely continue to play a much bigger role in learning and teaching. It is therefore important to find ways of enhancing relational engagement. For this paper, we aim to use a mixed methods approach to re-analyse existing data from two national surveys conducted during 2020 and 2021, as well as conducting correlational analyses with the 2021 SASSE responses to identify which factors had a positive impact on relational engagement during COVID-19. The findings from these analyses could inform good practice to enhance relational engagement in blended learning contexts as we exit the pandemic.

#### Presenter(s): Sonja Loots; Hanle Posthumus

# Evaluation of Faculty Productivity and Success: A Conceptual Model and Analytical Approaches

Decision Support; Speaker Session | Meeting Room 13

Collecting and analyzing faculty data—including demographics, productivity, success, and retention—is an important aspect of institutional research. This session presents the findings of research on faculty data and analytics related to productivity at four-year research institutions. Participants in the session will learn: (1) the types and characteristics of data and analytics related to faculty productivity; (2) the different actors in using data and analytics on faculty productivity and their roles in conceptualizing faculty productivity; and (3) how institutional researchers can facilitate the use of data and analytics on

faculty productivity across different parts of the campus and contribute to promoting faculty success and institutional planning. Contributing Author: Wen Qi (Indiana University)

#### Presenter(s): Henry Zheng

#### Introducing the Education Workforce Need Index (EWNI)

Speaker Session; Decision Support | Meeting Room 3

IR and IE staff are often asked to assist campus and state leaders with understanding economic and societal issues and to bring forth possible strategies for how the college or university can help tackle the gnarliest of problems. The "Education Workforce Needs Index" (EWNI) identifies the US Census education, economic, and workforce metrics that most influence community success. A free data resource is available to IR and IE staff to use for optimizing how their institution(s) can better serve as stewards of their communities. The EWNI was developed via collaboration with several college and university research and policy colleagues, led by the presenters. Data have been collected for all US...

communities, workforce regions, and states and is updated each year. The uses of the EWNI will be illustrated by sharing the findings from six states. Different state regions often require different strategies to optimize economic and social success.

Presenter(s): James Purcell; Patrick Kelly

#### IPEDS Update: Encore Session

Educate;Speaker Session | Meeting Room 20

This is an encore session, which is a shorter session from the impact session presented earlier this week. However, this session provides an opportunity for those who missed the impact session to receive the general update on the Integrated Postsecondary Education Data System (IPEDS), annual survey collected by the National Center for Education Statistics (NCES) of the U.S. Department of Education. The following information will be presented: changes to the upcoming 2023-24 and 2024-25 collections and a brief overview of Research and Development.

Presenter(s): Aida Ali Akreyi

#### Launching a Character-Fased Education Initiative

Speaker Session; Decision Support | Meeting Room 11

Central to the numerous challenges faced by new students entering a campus community is understanding (1) who they are and (2) how they fit into the larger community. During this session, the presenters will explore how helping students understand their relative character skills can improve academic and social engagement. A new Character Skills Assessment will be presented, and the focus of this presentation will be on the philosophy, development, and administration of the assessment. An example of implementation and learnings will be shared.

#### Presenter(s): Shalin Shah

### Postsecondary Data Partnership (PDP) Roadmap and Feedback

Auxiliary Meeting | Meeting Room 12

Hear from the National Student Clearinghouse's Postsecondary Data Partnership (PDP) staff, including the product manager, about the work done in the past year and work planned for the upcoming year to improve the PDP. Additionally, attendees will be invited to give feedback both during the session and during other times at the Forum. Given the scope and content of the presentation, current PDP users will benefit the most (those who have at least completed their initial data submission) but all folks interested in the PDP are welcome to attend.

Presenter(s): Benjamin England

### Taking the Pulse of the Campus: How to Launch and Use a Two-Item Pulse Survey *Speaker Session;Assessment and Evaluation | Meeting Room 19*

Pulse surveys—regularly asking brief questions to monitor sentiment—have become commonly used tools in user-experience research. This presentation will share our experience in conducting a pulse survey to gauge net promoter sentiment and related commentary, pairing those data with instrumental demographic information, and integrating those insights into assessment practices, leadership briefings, and institutional transformation initiatives. The presentation includes a brief history, the current status of the project, a selection of insights to date, and future directions. Session participants will learn how pulse surveys can be integrated into their assessment and decision-support practices.

Presenter(s): Ahmed Belazi; Braden Hosch; Simran Kaur

### The (Continuous) Analytics Revolution in Higher Ed: A Conversation *Discussion Group;Leadership | Meeting Room 15*

"A fad this is not; the analytics revolution is here to stay." This quote from our book, The Analytics Revolution in Higher Education, has thus far proven true. The revolution is constant, with ever more information created and, if effectively harnessed, used to improve the teaching, learning, and advising on our campuses and online. This session will engage participants in a conversation about the stage of the revolution on their campus, their participation in the revolution, and the direction they see going forward.

Presenter(s): Julia Carpenter-Hubin; Amelia Parnell; Jonathan Gagliardi

#### The Data Conundrum: Understanding Graduate Outcomes to Prove Value Data and Technology; Sponsor Speaker Session | Meeting Room 16

Educational institutions are under mounting pressure to quantify the value of a degree. And with economic uncertainty and questions around affordability, articulating the expected return on investment for current and prospective students is paramount - and challenging. Obtaining the quality data necessary to understand graduate outcomes, program effectiveness and overall value is a hurdle for

many. In this session, we'll discuss how verified income, wealth, debt and credit data from Equifax is helping institutions: - Quantify the value of academic programs - Market to current and prospective students - Monitor institutional effectiveness over time - Meet federal and state reporting requirements for program funding.

Presenter(s): Jason Berman; Brandi Recker

## The Node for IR/IE: Lessons Learned About the Current and Future State of the Field of Our Field

Discussion Group; Educate | Meeting Room 24

"The Node for IR/IE" is a free weekly e-newsletter highlighting news, reports, and updates for the fields of institutional research/effectiveness. Started in March 2020, "The Node" is emailed every Wednesday and shares around a dozen key resources from the field of IR/IE. This session highlights what we have learned about the current and future state of the field of IR/IE since the project started, including insights from our weekly polls and subscriber feedback, and how "The Node" can be used to support professional development. Learn more at http://bit.ly/nodeforir.

Presenter(s): Eric Atchison; Eric Godin

#### Writing for Publication: Advice from Writers and Editors

Speaker Session | Meeting Room 21

This session is for individuals interested in learning about writing for scholarly publication. A panel of editors and authors will share insight, advice, and suggestions. Topics include getting started with writing for publication, building a publication portfolio, and tips for navigating the publication and peer review processes. The focus of this session is on tangible advice for aspiring authors, including ways to gain experience. Join us to discover how you can contribute to the body of literature and impact the field.

Presenter(s): Iryna Muse; Bethany Miller; Stefano Fiorini; Leah Ross

#### 11:15 AM - 12:15 PM

#### Building Data Literacy and Use in Decision-Making in Practice

Data and Technology;Featured Session;Panel Session | Meeting Room 25 B-C

Who knew that building the analytic platform and tools would be the easy part?... anyone who knows how hard it is to get people to change their behaviors and embrace new ways of doing business! Hear how three universities at different points in analytic maturity and with different approaches, worked to build a culture of data literacy and use of data in decision-making on their campuses. This panel will discuss practical approaches to building data literacy at all levels of the institution. Topics will include reducing barriers to adoption, stakeholder training and education, promoting data use, and avoiding and overcoming challenges.

Presenter(s): Jason Simon; Loralyn Taylor; Krisztina Filep

Please visit <u>airweb.org/forumapp</u> for the most current and complete listing of sessions and events.

#### How to Build a Culture of Assessment From Within

Panel Session; Assessment and Evaluation; Featured Session | Meeting Room 26 C

Due to critical feedback provided by an accrediting body that requested a detailed, assessment monitoring report, a mid-size private university formed an assessment committee, University Program & Assessment Committee (UPAC), to increase collaboration amongst a diverse group of university stakeholders. UPAC implemented several initiatives to align the annual program assessment with institutional accreditation requirements. This session will describe successful initiatives over a more than 10-year period resulting in a shift from criticism to compliance to continuous improvement. These initiatives include collaborative improvements in assessment, creation of more organized and formal...

assessment plans, innovative impacts to increase communication, and professional development strategies to foster collaboration. The attendees will discover practical and creative insights in assessment initiatives that lead to successful accreditation reports.

Presenter(s): Ute Lahaie; Amy Heston; Mary Cook; Seth Hepner

#### Leveraging Labor Market Data to Inform Students and Align Academic Programs *Panel Session;Educate | Meeting Room 1*

The University System of Georgia (USG) is focused on student success and meeting state talent needs. The system office is putting these goals into action by ensuring that new academic programs are aligned with in-demand jobs and that students and families have access to transparent data about the value of a USG degree, including cost of attendance, student outcomes, and earnings of graduates. At the core of this effort is empowering staff at the 26 USG institutions with understanding of labor market data including its sources, uses, and shortcomings. This session will highlight a recurring successful labor market data course, demonstrate new web-based outcome data comparison tools, and discuss how partnering with experts in local workforce and economic development issues strengthens system data analytics, data literacy, and workforce development efforts.

Presenter(s): David Tanner; Angela Bell; Rebecca Hunt

#### No Straight Paths: Moving Into IR / IE Leadership Roles

Panel Session;Leadership | Meeting Room 26 A-B

There is no singular path to discovering a career in institutional research or assuming a leadership role in it. This panel discussion will feature IR / IE professionals in leadership positions with varying levels of responsibility and at different types of institutions. Through structured questions and audience engagement, the session will highlight various paths that leaders in IR have taken in their careers and, as possible, uncover themes that could inform aspiring leaders in the field. Participants will not only be invited to engage with the panel and each other, they will also be challenged to reflect on the information shared to inform their own growth and development.

Presenter(s): Shari Ellertson; Emily Berg; Adrea Hernandez; Ellen Peters; Eric White

#### 11:40 AM - 12:00 PM

### Making it Cleaner, Easier, and More Meaningful: A Chat with Watermark Assessment and Evaluation; Sponsor Ask an Expert Session | Expo Theater 2

This short session is designed to field participant questions about Watermark tools and their use in IR/IE/Assessment spaces. Presenters include a former IR Director and a former Director of Assessment who both now work at Watermark. While not a traditional product demonstration, a brief overview of...

our products and purpose will be followed by a short, open forum to discuss good practice related to our tools. We hope this presentation serves as a "launching pad" for deeper conversations about institutional needs and Watermark's ability to meet those needs.

Presenter(s): Nina Oman; Glenn Phillips

#### Modernizing Strategic Enrollment Management & Planning in Higher Education Data and Technology; Sponsor Product Demonstration | Expo Theater 1

Plaid Forecast is a fully interactive, web-based, mobile-friendly, enrollment forecasting system. Plaid Forecast aligns academic and financial planning teams whilst eliminating bottlenecks in the forecasting process. By producing timely and accurate enrollment forecasts, Plaid Forecast enables data-informed insights and decisions to help leaders: -Save Time: Generate enrolment forecasts in minutes -Reduce Risk: Reduce dependency on key forecasting staff -Strategic Foresight: Future forecast analysis allows for earlier and more accurate strategic planning -Improve Utilization: Manage capacity more intentionally and ensure optimal enrollment levels -Increase Revenue: Accurate utilization forecasting provides greater clarity around capacity, enabling increase student enrollment

Presenter(s): Patrick Lougheed; Andrew Drinkwater; Clara Yeung

#### 12:00 PM - 01:00 PM

The Colonial Group Auxiliary Meeting *Auxiliary Meeting | Meeting Room 10* 

Attendees are invited to meet, network, and receive updates from the Colonial Group agenda items.

Presenter(s): Eric Yang

#### 12:00 P.M. – 1:30 P.M.

### Lunch break, poster presentations, and networking in the Exhibit Hall *Exhibit Hall C*

Grab-and-go options for purchase will be available in the Exhibit Hall on Wednesday, May 31, and Thursday, June 1. Be sure to visit sponsor booths while you're there!

#### 12:30 PM - 01:30 PM

#### A Mission Statement Analysis on the National Research University in Japan *Poster Presentation;Policy | Poster 21*

This presentation provides a text analysis of the mission statements of Japanese research universities (formally "designated national universities"). In 2017, the Japanese government launched the designated national university corporation system to establish world-class research universities. As of FY2022, there are 10 designated national universities. We use a free software named KH Coder and visualize an analysis of mission statements on the preambles of medium-term goals. KH Coder is an application soft for quantitative content analysis or text mining. It can analyze the text of multiple languages including English. It has been used widely in Japan, and AIR members can also use it for free. The results are as follows. Firstly, Japanese national universities, including designated national universities, maintain the core function of education and research.

Presenter(s): Soichiro Aihara

#### A New Approach to Predict Student Retention at Georgia Gwinnett College Data and Technology;Poster Presentation | Poster 3

The purpose of this study was to inform the Georgia Gwinnett College (GGC) community on potential factors that impact one-year retention of first-time new students at the College, so as to provide guidance to the campus-wide endeavors to enhance student retention. These GGC factors typically represent the recent efforts that the College made to improve student retention and success. However, their impact on retention was never systematically measured. Methodology of the study includes descriptions of the variables first, which are then recoded into binary variables. Logistic regression is performed to compared correlation coefficients of the independent variables to the one-year retention.

Presenter(s): Juan Ren; Wlliam Zhang

#### Achieving Collegiate Excellence

Poster Presentation; Decision Support | Poster 27

Achieving Collegiate Excellence (ACE) is a student success program at New York Institute of Technology (New York Tech) that incorporates academic coaching, engagement activities, and online success modules to support eligible students. This poster presentation will focus on (1) how a collaborative and ongoing review of student data across New York Tech has informed the initiation, assessment, and continuous improvement of ACE, and (2) how the target group has shown improved retention (e.g., 29% vs. 18%) and other success outcomes since implementing ACE. ACE serves as a strong example of how in many ways, data can inform a better understanding of student barriers and can support institutions in better aligning with their missions through responding to student needs.

Presenter(s): Mohammed Moizuddin

### Collecting and Submitting Data as Well as Utilizing the PDP Dashboard *Poster Presentation;Data and Technology | Poster 25*

The Southern Association of Colleges and Schools Commission on Colleges (SACSCOC) has strongly suggested that each institution in the SACSCOC participate in the Postsecondary Data Partnership (PDP), which is a new initiative of the National Student Clearinghouse. First, the session introduces how PDP data, which include cohort, course, and financial aid data, are collected and submitted. This session will share the experience and lessons learned since the project has been implemented. Then, the session will uncover our best practices and insights around how the PDP can be used as a strategic tool, particularly around strategic enrollment management, the fulfillment of general education requirements, as well as efforts leading to student success. For example, the course data expose the reason why students were not persistent in fall of their sophomore year based on their first-year GPA and their English and Math pathway course completions.

Presenter(s): Faxian Yang

### College Accountability Framework for University Performance and Planning *Poster Presentation;Decision Support | Poster 29*

To support leadership with accountability around institutional and strategic planning, the University of South Florida's Office of Decision Support has developed a college accountability framework that aligns with the university's strategic direction. This poster presentation will provide the overview of the college accountability framework, which includes a set of processes and products for performance planning and evaluation of the colleges' performance across numerous factors in a data-driven transparent manner.

#### Presenter(s): Sangita Singh

### Continuous Program Improvement Through the CGS PhD Career Pathways Project *Poster Presentation;Data and Technology | Poster 13*

U.S. doctoral education plays a critical role in the advancement of knowledge and innovations that bolster the nation's ability to sustain its economic prosperity and global leadership. This presentation will discuss how the data reported to the Council of Graduate Schools can help shed light on the Ph.D. career pathway and graduate education. Attendees will learn about the data collection effort of the CGS PhD Career Pathways Survey; how graduate schools institutionalize PhD Career Pathways activities and sustain the data collection efforts beyond the project-funded period; their effects to administrate and communicate data relating to doctoral career pathways; and the ways in which these data would be of assistance for benchmarking and strategic planning at multiple institutions.

#### Presenter(s): Enyu Zhou

### Data Validation by IR: Why and How to Utilize SQL, SAS, and Power BI *Poster Presentation;Data and Technology | Poster 19*

One of the missions of an IR office is to provide accurate and timely data in support of administrative decision-making, planning, and policy analysis. Like most institutions, data from the IR office's databases are considered office data points at Florida Atlantic University. These data are used for most internal and external data requests. Ensuring data accuracy and integrity is the first and most important step. This poster presentation will describe how the IR office not only coordinates between data custodian offices and IT programmers, but also builds our own data validation process utilizing SQL, SAS, and Power BI.

#### Presenter(s): Zhiyuan Ma; Ying Liu

#### Data@Pitt: How We Brought Together Novice Data Users on Campus Poster Presentation; Educate | Poster 15

Data analytic tools and access to data for planning and decision purposes is not at an equal place within all areas within my institution. Some of the reasons could be staffing shortages, staff unaware of existing and/or no-cost resources, and/or a perceived need to not change business processes. There is a need to get everyone on the same page and to demystify data and data analytics, or more simply put, to let people know they can become data people. Also, there is a need to create more connections and relationships across units on our campus and to provide staff a foundation to learn about availability of data and data analytic tools. There is an existing Tableau Users Group, which is an exemplar of how such a group can grow and cultivate relationships. This presentation will outline how one voice united with many to create a successful 'kick-off' event open to staff with little to no prior experience working with data or data analytics.

#### Presenter(s): Robin A. Leaf

### Development of a University Autonomy Scale Using an Identity-Based Approach *Poster Presentation;Assessment and Evaluation | Poster 7*

University autonomy is hard to define and difficult to measure, as its multidimensional concept tends to change over time and vary across national contexts. Part of the difficulty has focused on the meaning of the term, the degree to which universities and colleges should be allowed to determine their destinies, and how far they must be accountable to society. In view of this issue, its definition and measurement range from emphasizing the absolute autonomy of a university to the absolute of the government. This study aims to understand the intrinsic value of the institutional and national identities involved in the actual meaning of university autonomy in the context of globalization. It also aims to analyze the structural and contextual dimensions of university autonomy using factor analysis, and then to develop a new scale for measuring the autonomy of universities. The study is designed employing a sequential mixed-methods design in the process of the new scale development.

Presenter(s): Ong-art Naiyapatana

### Effects of Course Modality on Student Satisfaction and Academic Outcomes *Poster Presentation;Assessment and Evaluation | Poster 11*

During the pandemic, colleges de-densified campus by requiring or incentivizing students to study remotely or take hybrid classes. Limited empirical research exists regarding the impact of this unprecedented shift in course delivery mode on student experiences and outcomes. This poster session presents findings from a survey conducted at a selective liberal arts college in mid-spring 2021 and from objective academic records for that term. The presenter compared satisfaction with academic experiences and performance of the following four groups of undergraduates: Remote Group; Residential-But-Online-Class Group; Residential Blended Learning Group; and Residential In-Person Group.

#### Presenter(s): Suhua Dong

#### How Distance and Socioeconomic Factors Impact Student Success Data and Technology; Poster Presentation | Poster 9

One factor that is often overlooked in analyzing student success is the spatial relationship between students and their chosen institution. What role, if any, does distance play? This research project is examining the spatial relationship between Morgan State University student success metrics and the student's distance from campus. The study will examine the effects of distance from campus and socio-economic status on second-year retention and six-year graduation for Morgan State University fall freshmen cohorts between 2010 and 2016. In addition, a model will be developed for predicting student success using distance and census-tract-level socio-economic data. Utilizing spatial data may help universities better predict student outcomes and tailor initiatives to better support students. The poster presentation will visually display the relationship between distance and student success.

Presenter(s): Jamal Rollins; Cheryl Rollins

#### Model Minority Myth and STEM Attrition Predictors: A Closer Look

Poster Presentation; Decision Support | Poster 17

STEM attrition as an issue has garnered the attention of public policy-makers and senior leadership of higher education institutes (HEIs). This study explored the validity and need to study Asian international (AsI) students and Asian domestic (AsD) students separately and examined these two groups of students as predictors for major choices and STEM attrition rate against each other and other known predictors. RStudio was used to conduct multinomial logistic regression on these predictors of a sample of 15,028 students from a large midwestern university. AsI and AsD students were found to indeed predict differently in some regards and consistently in others. They were also found to predict stronger than some of the known predictors. Future studies are warranted to further investigate the intersectionality within this issue.

#### Presenter(s): Yih Tsao

#### Predicting First-Year Retention Using BCSSE Aggregate & Non-Aggregate Items Poster Presentation; Data and Technology | Poster 5

This poster presentation compares the prediction results of first-year retention (FYR) among First-Timein-College (FTIC) students using individual versus aggregate survey items from the Beginning College Survey of Student Engagement (BCSSE). By conducting logistic regression analyses and testing the predictive results against the actual retention outcomes, the findings suggested that although the predictive model using non-aggregate items explained more variance, the model using aggregate scales was more sensitive in identifying the top 10% most at-risk students who indeed did not progress into the sophomore year. Methods of predictive modeling and classifying at-risk students will be addressed in the poster presentation.

#### Presenter(s): Zhong Zheng

### Who Studies What: The Impact of Students' Demographics on Major Selection *Poster Presentation;Decision Support | Poster 23*

It's easy for university policy-makers to pay excessive attention to a single factor or two when evaluating students' choice of major. In reality, however, different aspects of the demographics as a whole play a crucial impact, but the combined effect is often overlooked in research. Thus, this study aims to identify the relationship between students' major selection and their ethnicity, gender, economic status, high school GPA, and first-generation status. Through logistic regression analysis, the poster presentation is...

able to construct a holistic understanding of factors that affect college major choices, which will support university administrations in advancing social justice outcomes through infusing diversity, equity, and inclusion into academics.

#### Presenter(s): Yumeng Liang

#### 01:30 PM - 01:50 PM

#### Data Driven Decisions for Institutional Research Professionals with JobsEQ Data and Technology; Sponsor Product Demonstration | Expo Theater 1

This demonstration of JobsEQ by Chmura will show you how our leading labor market technology platform can help identify what skills, certifications, and occupations will be high-wage and in-demand in the coming years. Through these data you can target occupations with potential demand gaps in your region and the surplus or shortage of certificates & degrees conferred based on occupation demand. In addition to aligning programs to your community's needs, you will see data that can aid in the completion of grants and assist in your CLNA through our reports which include Perkins V!

Presenter(s): Anthony Marchetto; Ryan Fearon; Clay Smalley

### U.S. News, Academic Insights - Higher Education Rankings, Data, & Analytics Assessment and Evaluation; Sponsor Product Demonstration | Expo Theater 2

U.S. News & World Report's Academic Insights is the top peer benchmarking and performance assessment tool in Higher Education. Containing 30+ years of unpublished rankings and data, Academic

Insights allows college, university, and graduate school administrators the ability to create custom peer and metric groups and compare their relative performance to that of others. Data can be viewed using Academic Insights' unique data visualizations or exported as reports, and users can access the Download Center to export large data sets. This session will highlight how Academic Insights supports the institutional data reporting needs of Higher Education and IR professionals.

Presenter(s): Patricia Xavier Burns; Jessica Locklear

#### 01:30 PM - 02:30 PM

### Advancing Postsecondary Use of Labor Market Information

Data and Technology;Panel Session | Meeting Room 26 A-B

As the sources and potential uses of labor market information proliferate, there is limited research on how they are used and best practices to support their adoption and institutionalization. This panel shares results from a series of case studies of why colleges adopt LMI and how colleges use LMI to support program review processes; improve program and credential outcomes; and promote closer connections to the workforce. Higher education data professionals from two community colleges and one four-year college who participated in the case studies will join a moderator from the research team to discuss the research findings and share their insights. The panel session will discuss new organizational structures to promote the use of these data, innovative applications of LMI, and ideas for expanding LMI usage. The session will conclude with an opportunity to connect with others to support a network focused on sharing knowledge and innovating with LMI. Contributing Author: Monica Kerrigan

Presenter(s): Robynn Shannon; Wyl McCully; Victoria Coty; Michelle Van Noy

#### **AIR Annual Business Meeting**

AIR Annual Business Meeting; Panel Session | Meeting Room 25 B-C

The Annual Business Meeting of the association is scheduled at each year's Forum and all AIR members are invited to attend. The meeting is led by the current Board of Directors and attended by newly elected Board members as well. The Annual Report of the Board of Directors is released at the meeting to provide an overview of Board activities in the previous year. Also included is the official count of membership, election results, and the Board Treasurer's report to the membership about the association's financial position. Board members will answer questions and discuss future plans for AIR.

Presenter(s): Karen Webber; Junelyn Peeples; Jonathan Gagliardi; Braden Hosch; Christine Keller

### Empowering IR Professionals as Leaders in Supporting Student Parents *Panel Session;Assessment and Evaluation;Featured Session | Meeting Room 26 C*

Comprising about 20% of all undergraduate students in the U.S., student parents are a growing population essential to institutions, states, and regions for meeting college-attainment goals. Most student parents are female (70%); they are more likely than students without children to be students of color; and, two in five Black women in college are mothers. Despite facing challenges such as access to childcare, student parents tend to have higher grades than their peers. As all student-parent-support initiatives must start with data, IR professionals are uniquely positioned to serve as leaders at their institutions in devising and evaluating such programs. In this session, participants will hear from fellow researchers—one of whom is a student parent—on core strategies and tools for identifying and helping student parents succeed in earning postsecondary credentials and tying student parent initiatives to broader institutional goals.

Presenter(s): Jennifer Pocai; Mary Ann M. DeMario; Jessica Pelton; Denese Skinner; Alisa Cunningham

#### Identify and Support At-Risk Students at Three Institutions

Panel Session; Assessment and Evaluation | Meeting Room 1

IR professionals are often tasked with identifying at-risk students and/or predictors for student success. This panel will illustrate how three universities handle such challenges. Panelists will share concrete examples involving different student populations including: (1) intervention-based approaches to support at-risk minority and international students at a large public campus; (2) metrics in a machine-learning tool to predict at-risk students at a small private institution; and (3) credit ratio as an early indicator to identify at-risk first-year engineering students at a large multi-campus public research university. Attendees will develop an understanding of the rationale of these approaches and learn how to apply them to their own IR work.

Presenter(s): Linli Zhou; Jun Xiang; Jennifer Wu

#### 01:45 PM - 02:30 PM

#### Applying Predictive Models to Advance Institutional Effectiveness

Data and Technology;Sponsor Speaker Session | Meeting Room 14

Creating a single predictive model can be a challenge, but creating models to improve decisions across the entire student life cycle can feel overwhelming. Predictive models have the power to improve institutional effectiveness in many ways, but they are often difficult to build – or difficult to understand and implement. With the right technology and strategies, however, predictive models are a powerful and informative tool for your campus. In this session, you will: • Get actionable advice on how to determine what questions to answer and when a predictive model may be appropriate • Learn to make predictive modeling easier and see examples of creative models in action • Increase the acceptance and use of predictive modeling on campus

Presenter(s): Jason Browning; Eric Yurko

#### Assistant Professor Hiring Trends: A Longitudinal Perspective Decision Support; Speaker Session | Meeting Room 23

The academic job market is thought to reflect an oversupply of doctorates amidst "cratering" numbers of job postings. Moreover, faculty hiring follows a steep prestige hierarchy favoring the graduates of a small number of institutions. We analyzed large-scale longitudinal

assistant professorship growth/contraction trends in 154 fields at Ph.D. granting universities. Humanities and education fields are contracting, but the job market is expanding in a majority of fields. Institutions can leverage these data and the underlying large-scale trends to better understand equity in hiring, inform outreach and candidate selection, and intentionally support the number of faculty needed to graduate the foreseeable pool for each discipline.

Presenter(s): Anthony J. Olejniczak; Kathy Felts

#### Considering New Programs? The Six Metrics You Need

Speaker Session; Decision Support | Meeting Room 16

Is your institution considering launching new programs to drive growth? What data points does your leadership team need to identify the highest-impact, lowest-risk new program growth opportunities? In this session, we discuss the six key metrics that provide the most clarity and insight, in our experience, into which programs will thrive at your specific institution, what outcomes you can expect, and the next steps to consider as you continue the decision-making process. We will share the metrics, how to gather and calculate them, and how to communicate them to stakeholders. Along the way, we will illustrate concepts with stories from our work together at Illinois Wesleyan University. Launching new programs is expensive, time-consuming, and risky. With these six metrics, you can help your leadership team identify the right programs to drive growth at your institution.

#### Presenter(s): Seth Houston; Michael Thompson

#### Developing a State Accountability Model for Private Institutions in Florida Speaker Session; Decision Support | Meeting Room 3

In Florida, the Effective Access to Student Education Program (EASE) provides tuition assistance to Florida undergraduate students attending eligible private, non-profit Florida institutions. In 2021, the state of Florida attempted to pass legislation creating an accountability system to regulate the amount of funding each institution could receive. In response, the Independent Colleges and Universities of Florida (ICUF) developed their own model (which has similarities to the already established Florida University System and Florida College System performance-based funding models) and presented it to the legislature. This session highlights the proposed ICUF model, including how it was developed.

#### Presenter(s): Eric Godin

#### Dreams Do Become Reality: An Institution's Decision-Support Journey Speaker Session; Decision Support | Meeting Room 20

Bowie State University, Maryland's oldest HBCU, has been on a 10-year journey in developing, sharing, and using data in decision-making. This session will highlight the many twists and turns encountered by the Office of Planning, Analysis, and Accountability along the way. An overview of the journey highlighting key events that led to the institution's current decision-support structure will set the stage for the session. The presenters will then share the factors that lead to the realization that a technology partner was necessary to successfully launch a data warehouse as well as a retrospective on human and technical challenges/opportunities along the current phase of the journey. A live demonstration of the front and back end of decision-support data visualizations including post-graduation outcomes will be shared. The session will close with a conversation about best practices for training and supporting campus leadership use of data.

#### Presenter(s): Gayle Fink; Tim Vlamis

### Earth, Air, Fire & Water: Four Foundational Elements of Academic Program Review Speaker Session; Data and Technology | Meeting Room 19

Program Review (PR) Data Reports come in many shapes and sizes, but they break down to four foundational elements: Earth—Data, presented in tables, serve as the terra firma for the reports; Air— Meetings with faculty about their programs breathe life into the PR Data Reports; Fire—Visualizations shed light on trends and anomalies in the data; Water—Text flows throughout the document and provides in-depth information. Attendees will be able to assess the needs of their faculty in terms of program review data, design data tables and visualizations for a PR Data Report, and create meaningful dialogue within the report. The approaches presented apply to one-person offices as well as larger offices. Software used includes MS Excel and Word, SAS, and R, but the approaches apply regardless of software.

#### Presenter(s): Lynette Duncan

#### Empowering Master's Program Decisions With Strategic Analytics Dashboards Speaker Session; Decision Support; Featured Session | Meeting Room 22

According to a 2021 article from McKinsey (Mulligan, 2021), use of analytics in a strategy context can reduce bias in decision-making and uncover growth opportunities, as well as help to better understand the market and coming trends. For institutions and academic units looking to grow or scale back programs and allocate limited resources effectively, these types of insights can be critical to making the right decisions. Carnegie Mellon's new approach to making analytics available for strategic decision-making has combined prominent ideas from the consulting world, such as the Boston Consulting Group Growth Share Matrix model, with our institutional data and external data sources, such as IPEDS and Bureau of Labor Statistics datasets. This presentation will provide examples of the dashboards we created, explain how they were built, and demonstrate the value that dashboards of this kind can provide.

#### Presenter(s): Mark Chimel; Melissa Baker

#### Equity, Intersectionality, and Education: Best Practices Speaker Session; Data and Technology | Meeting Room 11

IR/IE professionals assist executive leaders in establishing strategic objectives and tactical approaches to current educational crisis points by interpreting data and providing guidance. To be most effective at their jobs, IR/IE professionals must utilize best practices and carefully articulated research terminology. Equity and intersectionality are key research terms in multiple fields of study, including education and public health. With the expansion of political division into local school board races and state budget discussions, it is an opportune time to step back and assess how education is approaching equity and intersectionality and to identify best practices. The presentation will compare the current usage of equity and intersectionality with early research, identify best practices, and provide suggestions for successfully navigating the current environment.

#### Presenter(s): Kelly Smith; Bobbie Frye

#### Putting a Face on Adult Learners Through Cluster Analysis Speaker Session; Data and Technology | Meeting Room 21

This session will describe a process for executing statistical cluster analysis on adult (age 25+) student data to draw disparate segments within the population that are relatable to all facets of college administration/research and that can be leveraged to build adult learner pathways at very little cost. Includes a real life case study. Participants will have a process, using their own student data, R, department of labor data, and MS Excel, for generating cluster analysis at their respective institutions that can be leveraged to fit programs and pathways that form a bridge between student need and occupational opportunities in the respective economic region. This is important for ensuring that the institution is meeting measurable needs for adult learners as well as providing the human resources needed for industry now and in the future. The objectives are for every attendee to (1) Possess R code for executing the analysis and (2) Understand and leverage the data for student pathways.

#### Presenter(s): Kelly Graves

#### **Reimagining the Carnegie Classifications**

Educate;Featured Session;Speaker Session | Meeting Room 12

The Carnegie Classification of Institutions of Higher Education will soon change. As the Classifications enter their 50th year, the Carnegie Foundation and the American Council on Education are reimagining the Classifications as a tool for responding to today's challenges and opportunities while honoring their legacy. In this session, leaders from ACE and Indiana University will provide context and share an overview of planned changes, including introducing a new Social and Economic Mobility Classification and releasing an updated Basic Classification. Attendees will leave with a better understanding of the updates and will be able to inform their colleagues as to how the classifications are being designed to place student success at the center of the higher education experience. Contibuting Author: Daria Ivleva (Indiana University Bloomington)

Presenter(s): Mushtaq Gunja; Victor Borden; Sara Gast

#### Understanding COVID-19 Black Box Effects on Retention Data

Discussion Group; Decision Support | Meeting Room 15

The pandemic was felt across all of higher education, and many may be observing a shift in retention rates. Join us for a discussion to unpack some of these effects. This topic is not without its challenges. The first challenge is that we cannot compare this cohort's data to the previous two years because the data are heavily impacted by COVID-19. The second challenge is that because of the pandemic, this cohort is the beginning of a new population. These challenges leave us with many questions that are pivotal to Institutional Research. We don't have all the answers, but the discussion of these topics will be very fruitful and productive for all attendees. Attendees will leave the discussion with the following takeaways: discussion of the impact of COVID-19 on retention and other metrics; strategies that can be applied to your own data and contexts; comparison of methodologies between institutions; and determining sound analytical practices going forward.

Presenter(s): Alexandra Lawson; Sara Irizarry

Using Analytics to "Move the Needle" to Address Equity Gaps Speaker Session; Policy; Featured Session | Meeting Room 10 The growing call for racial justice has propelled colleges to evaluate equity gaps among their students and be catalysts for socio-economic mobility in their communities. Data visualizations has become the mirror by which colleges study their reflection to objectively understand equity gaps and measure whether a policy change or resource investment has "moved the needle." Reynolds Community College analyzed data on how students of different races, gender, and socioeconomic groups perform in Early Momentum Metrics, fundamental to closing equity gaps. Learn how data visualizations add value in setting goals, monitoring performance, and successfully addressing equity gaps.

#### Presenter(s): Melanie Boynton

#### We Are Listening: Monthly Student Surveys

Affiliated Organization Best Presentation; Decision Support | Meeting Room 13

Abstract:"We Are Listening" is a monthly survey initiative at Bemidji State University that asks students questions related to a themed topic such as registration intent or student activities. Each survey measures student sentiment and asks questions related to actionable items the university could take, with the goal of rapid assessment for continuous improvement.

Presenter(s): Russell Dahlke; Julian Licata; Travis Ricks

### We're All in This Together: An In-Depth Discussion on Data Management and Sharing *Discussion Group;Decision Support | Meeting Room 24*

This interactive discussion session will be informed by guided questions that are meant to help participants develop effective strategies for managing and sharing contextualized data on campus. The discussion leaders will share their own experiences and allow space for participants to harness the power of the collective to expand their toolkit related to data management and sharing. Participants will receive the collectively developed strategies as a resource after the session.

Presenter(s): Bethany Miller; Leeshawn Cradoc Moore

#### 02:45 PM - 03:30 PM

### "Is This Really a Survey Question?" How to Approach a Survey Request Discussion Group; Decision Support | Meeting Room 15

In this session, we will discuss when it is necessary to conduct a survey. Those in Institutional Research receive many survey requests on a yearly basis, and it is difficult to determine what questions can actually be answered by a survey. Sometimes, we need to determine whether a survey is even the right approach at all. Typically, this depends on the research question that we are attempting to answer. Is survey data good enough for informed decision-making? When can we rely on survey data, and what makes survey data significant enough to make a change? In the session, we will discuss different scenarios and determine whether a survey is the right approach. The discussion will also focus on guiding the requestors in the right direction after this process, especially when the survey is their only solution in mind. The session will conclude with discussing some pros and cons of a survey, survey fatigue, survey bias, and more.

Please visit <u>airweb.org/forumapp</u> for the most current and complete listing of sessions and events.

#### Presenter(s): Ambreen Hasan

#### A Rapid Approach to Program Assessment Through Matching Algorithms Speaker Session; Data and Technology | Meeting Room 19

In this session, we will review and demonstrate the effectiveness of distance-based matching algorithms for creating control groups and analyzing the impact of campus programs and interventions. Compared to propensity score matching, these algorithms can provide more flexibility in terms of handling missing data and configuring variable weights to allow for matching within key characteristics tied to a program's mission. We will show two examples of using distance-based matching algorithms at our institution— one for a program intervention and another for a course-level intervention. We will also preview a RShiny application that provides a user-friendly interface for matching and streamlining program assessment analyses.

#### Presenter(s): Stefano Fiorini; Gina Deom

### Collaborating With Student Affairs to Understand Student Engagement *Speaker Session;Educate | Meeting Room 14*

Institutional research offices can create opportunities to collaborate with campus stakeholders to improve the student experience. At Case Western Reserve University, the Office of Student Affairs partnered with the Office of Institutional Research to examine student engagement and how engagement across the university impacts student outcomes. By organizing engagement data and visualizing data in Tableau, CWRU has established a method to understand who is engaged, who is not engaged, where they are engaged, and where opportunities for cross-engagement exist. Attendees to this session will learn how this partnership began, how CWRU and its students have benefited from this partnership, and how to begin gathering and utilizing engagement data. Attendees will also be able to consider opportunities for collaboration at their respective institutions and how those partnerships could lead to beneficial data and insight for their communities.

Presenter(s): Eddie Bolden; Ken Tubbs; Dennis Rupert; Anthony Polito

### Demystifying Answering the Call to Serve: Leadership and Engagement Opportunities *Leadership;Panel Session | Meeting Room 25 B-C*

The Nominations and Elections Committee wants to share our insights to help YOU answer the call to serve. Your engagement in the process from nominations to voting and everything in between is what makes for a diverse and inclusive slate of candidates. We will share why your unique experience and expertise are what we need to help lead AIR! We will demystify the process, so you can feel confident to engage and accept the challenge when we send the message for a call to serve.

**Presenter(s):** Junelyn Peeples; Yenny Anderson; Iryna Muse; David Rudden; M Paige Borden; Meghal Parikh; Suzanne Simpson

### **Embedding Student Analytics into Operational Tools**

Affiliated Organization Best Presentation; Decision Support | Meeting Room 20

Predictive analytic models are becoming more and more common as a tool to understand persistence behaviors in higher education. The movement from student-level estimation results to actual operational use, however, can be difficult due to the complexity of model findings and the suggestion of a mathematical process 'predicting' student outcomes. This presentation will discuss a range of strategies/methods to implement analytical model findings into advising decision-making. Proper decision framing, operational use trade-offs, user engagement, and visualization techniques will be discussed as methods to embed analytical findings into persistence reports. Alamo Colleges' persistence dashboard tool will be shown as an example of how these discussions led to an operational tool for advising professionals.

#### Presenter(s): Paul Kailiponi

## Game On! Beating the Clock on Data Collection Deadlines

Speaker Session;Leadership | Meeting Room 9

Wishing you had more time and were not constantly reacting to impending deadlines? As we all know, time is a limited commodity, especially for overworked and under-resourced institutional researchers and often for their collaborators and technical support as well. In these situations, using time efficiently becomes essential. To help reduce the time burdens accurate compliance and priority reporting can create, this presentation will challenge those tasked with data gathering and reporting to strategize annual collections and timelines based on data availability rather than collection deadlines, to approach multiple submissions as more of a single comprehensive submission—regardless of deadline—to avoid duplication of effort, and to collaborate with all involved in data gathering to create a sustainable, internal reporting cycle better suited to workflow and competing priorities.

Presenter(s): Sarah Dunnagan

#### Implementing Data Governance

Speaker Session; Data and Technology | Meeting Room 23

An increasing trend in higher education, especially for institutional research professionals, is data governance. There is a lot of literature pointing to the benefits, many software systems to support it, and lots of people throwing the words around, but what does data governance actually look like? How is it established on a campus? And when the team is assembled, what do you do? When we began data governance at John Carroll University, we were told to eat this elephant one bite at a time, but we didn't know where to start "eating"!

Presenter(s): Maria O'Connor

### Managing Academic Program Assessment for Quality Improvement

Speaker Session; Assessment and Evaluation | Meeting Room 5

While many academic departments assess their programs, a number of them could not map their program learning outcome results to specific improvements. The purpose of this presentation is to demonstrate the approach used at a four-year institution to steer program assessment in the direction that facilitated the use of results for improvement. Using internally developed rubrics to score annual assessment reports, the approach serves as a two-edged sword: (1) for advising departmental facilitators to close the assessment loop and (2) for evaluating the Office of Assessment's effectiveness.

Presenter(s): Ebenezer Kolajo

## Non-credit in the States: What We Learned from Six States

Sponsor Speaker Session | Meeting Room 16

Non-credit activity has been a topic of continuous conversation from the halls of colleges to those of state capitols. Join us in this session where we share both the basics of non-credit data collection and findings from multi-state studies across 6 states. While this session will provide a comprehensive of noncredit data, we also recognize these six states just serve as a small sample of noncredit data collection.Contributing Author: Peter Bahr

Presenter(s): Michelle Van Noy; Jennifer May-Trifiletti

### Performing Group Comparison With Multiple Levels of Statistical Analysis Speaker Session; Data and Technology | Meeting Room 12

A group comparison analysis, which involves examining the statistical differences between two or more groups, is a valuable educational research method that can be used in the context of program evaluation or correlational studies. This presentation will walk through four stages of analysis: Is there a difference? Is it significant? What is causing it? Does it exist if we remove any underlying bias or confounding factors? Each step is done with increasing analytic complexity, with each providing deeper insight into the data and each requiring communication with stakeholders. Throughout this presentation, the use case included is an exploration of the relationship between living on campus and retention rates. This presentation will conclude with lessons learned and a brief conversation about how IR analysts can implement best practices when conducting a group comparison analysis that addresses selection bias and confounding factor issues.

#### Presenter(s): Rob Rolleston

## Quantitative Case Studies: An Introduction to Synthetic Cohort Method

Speaker Session; Data and Technology; Featured Session | Meeting Room 4

Institutions and policymakers often look for tools to evaluate new policies. Researchers tend to use peer groups or quasi-experimental methods such as difference-in-difference to compare outcomes before and after policy implementation. This is problematic as peer groups are often not rigorous enough, and difference-in-difference requires adequate sample size, typically with multiple treated units. Synthetic

cohort method is a relatively new tool that can accommodate comparing a single institution to a set of other institutions, making it a quantitative case study method. This presentation will introduce the method, explaining how and why it is used for policy analysis using examples from two recently published articles.

#### Presenter(s): Mark Umbricht

## Spatial Analyses of Undergraduate Enrollment Patterns, 2012–2022 Speaker Session; Data and Technology | Meeting Room 13

Postsecondary enrollment across the country has been greatly affected by the pandemic. Enrollment in community colleges, in particular, accounts "for more than half of the total postsecondary enrollment losses" during the spring 2022 semester. In line with national trends, enrollment has continued to be the area hardest hit by the pandemic at Columbus State Community College. However, regular undergraduate enrollment has been steadily declining for the past five years indicating that the pandemic has only exacerbated the trend. This presentation will highlight key findings from a spatial analysis that explored the geographic shifts in the enrollment patterns of regular undergraduate students by their student type (new, continuing, or stop-in) from 2012 to 2022. By incorporating census data such as educational attainment and poverty rates by census tract, it will also gauge the impact the College has had on the region.

#### Presenter(s): Kat McDonald

# Strong Foundations at Work: Improving Outcomes With Postsecondary Data Data and Technology; Speaker Session | Meeting Room 10

Since 2010, the State Higher Education Executive Officers Association (SHEEO) has conducted surveys of state postsecondary data systems to better understand the state of state postsecondary data. For Strong Foundations 2023, we investigated the state use of postsecondary data to improve workforce outcomes, advance equity, and secure privacy. Through our results and SHEEO's postsecondary data website tool, attendees will learn how postsecondary data are protected, used, and shared across P2OW sectors, how disaggregated data can advance equitable individual outcomes and state economic and workforce goals, and the cost of developing and maintaining these systems. Contributing Author: Jessica Colorado

#### Presenter(s): Carrie Klein

## Students' Civic Engagement Pre- and Post- Pandemic: Evidence From NSSE Decision Support;Speaker Session | Meeting Room 22

This presentation examines senior college students' perceptions of democratic awareness and participation prior to and post-COVID-19 pandemic. It also explores the key factors associated with perceived gains in civic engagement, civic awareness, and democratic participation at two data points. The results reveal educationally purposeful activities, such as discussing with people from diverse perspectives in course discussions or assignments, taking courses with service-learning opportunities, doing community service or volunteer work, learning community, and attending events that address important social, economic, or political issues, have more significant predictive powers than demographic factors. The audience will be engaged in a conversation about how the IR office could use

NSSE results or alike to inform institutional efforts in (re)vitalizing civic education and (re)emphasizing its role in enriching student civic experiences and enhancing democratic awareness and participation.

#### Presenter(s): John Crooker; Qingmin Shi; Ashley Guyer

#### Transform Annual Reports Into Dashboards Using Qualtrics

Assessment and Evaluation;Speaker Session | Meeting Room 11

Learn how Nebraska Methodist College uses Qualtrics dashboards to improve efficiencies and streamline data collection and reporting for everything from strategic planning to process improvement to accreditation with The Higher Learning Commission. The Nebraska Methodist College Institutional Research team has developed an easy collection tool, reporting capability for program accreditations, and an interactive dashboard environment within Qualtrics. In this session, Nebraska Methodist College will share the evolution of its reporting process from Word documents to custom SQL Reports to Qualtrics. Both the tool and interactive dashboard will be shared in this session.

#### Presenter(s): Megan Dreeszen

### Transforming Course Evaluation From Historical Record to Real-Time Action Speaker Session; Assessment and Evaluation | Meeting Room 21

Understanding students' classroom experience is critical to all higher education institutions, especially fully online institutions, such as Walden University. Over the last two years, Walden's Office of Institutional Effectiveness has led a transformation process to move from manual survey management, multiple course evaluation tools, and quarterly reports in Excel to automated survey management, a refocused and revised student evaluation of learning and teaching, and dynamic dashboards through Qualtrics. Presenters will share project milestones, lessons learned, and insights gained through a new way of work designed to provide timely, actionable data to faculty and academic leaders. The presentation will include small group discussion and time for Q&A. Participants will leave the session considering how the transformation work at Walden University may inspire improvement at their own institution.

Presenter(s): Hillary Blevins; Kathleen Rossow

## 03:45 PM - 04:30 PM

## Adopting a "Seamful" Design Approach to the Sharing of Analytics

Affiliated Organization Best Presentation; Decision Support; Speaker Session | Meeting Room 10

Most of our interactions, when designed with a user-experience focus, strive to make those interactions as effortless or "seamless" as possible. Oftentimes, to ensure our decision makers quickly and easily understand the information that we are sharing, our reporting of data and mathematical model outcomes follows this same approach. There are times, however, that introducing some small design frictions (or seams) can be a useful and important tool. When small obstacles to an interaction are introduced, it can be beneficial in creating a more mindful and considerate interaction that forces a consumer to reflect on the information and take a deeper level of involvement. This presentation will

focus on using a "seamful" design approach in sharing enrollment projections and the value added by this approach.

Presenter(s): Bridgett Milner

### AIR Town Hall, Exploring DEI Perspectives and Practices

Leadership; Panel Session | Meeting Room 25 B-C

As ambassadors, the AIR Board of Directors oversee policy governance and are charged with engaging and connecting with members in an effort to strengthen our field. This town hall will serve as an opportunity for the AIR community to share their views on the current state of our association's diversity, equity, and inclusion practices. We want to identify ways to strengthen accessibility, belonging, diversity, equity, and inclusion efforts within and beyond the association.

Presenter(s): Jonathan Gagliardi; Junelyn Peeples; Karen Webber

#### Ask the CIP Wizard: CIP2020 and Beyond

Data and Technology; Discussion Group | Meeting Room 24

The National Center for Education Statistics (NCES) released the latest version of the Classification of Instructional Programs (CIP), CIP 2020, on July 10, 2019, for use starting with the 2020–2021 IPEDS Completions survey component. NCES also released an updated version of the CIP-SOC Crosswalk. Over 450 new CIP Codes were added in 2020. This discussion session will highlight the major changes in CIP 2020, discuss key areas of current CIP development, answer attendee questions on academic program classification, and describe ways to contribute to future versions of the CIP.

Presenter(s): Allan Medwick

## Does Higher Education Change? How? An Analysis of Substantive Changes Speaker Session; Decision Support | Meeting Room 16

A substantive change is a significant modification of the nature and scope of an institution and includes high-impact/risk changes that can influence the quality of educational programs. Session facilitators will present key findings from a descriptive study on the scope, pace, and types of substantive changes reported in recent years by approximately 780 accredited colleges and universities located in the U.S. Southeastern region. Differences in substantive change submissions by key institutional segments as well as emerging patterns in developing substantively new and closing existing academic programs will be highlighted. The session will conclude with a discussion of implications of these changes for organizational evolution in higher education.

Presenter(s): Alexei Matveev; Kevin Sightler; Nuria Cuevas

### Ethical and Practical Considerations for Financial Aid Predictive Analytics Decision Support; Speaker Session | Meeting Room 5

Intentional and sustainable financial aid disbursement is mired by the difficulty of choosing award criteria that provide support to students who are malleable in their enrollment decision-making while also limiting funding to students whose decisions are unlikely to change. Ethical use of probabilistic models and machine learning can help with those decisions, but care must be taken in portraying and explaining the results of such models to non-technical users. This presentation will explore these ethical and practical challenges by discussing the development and implementation of such a tool for institutional aid disbursement at Indiana University's regional campuses.

#### Presenter(s): Jesse Talley; Oniffe Grizzle

## Examining Response Rates of Racial/Ethnic Minoritized Students

Assessment and Evaluation; Discussion Group | Meeting Room 15

Of increasing concern is the quality of data for racial and ethnic minoritized students who participate in surveys at lower rates. Given these issues, institutions strive to maximize response rates using effective methods such as incentivizing participation, survey sponsorship, frequent reminders, and identifying participation benefits (Beck, 2012; Fan & Yan, 2010). However, low response rates across higher education persists. Therefore, the purpose of this session is to discuss with institutional researcher colleagues how we improve the data quality for racial and ethnic minoritized students through increasing survey response rates. Contributing Author: Kevin Wenger

Presenter(s): Christen Priddie; Shimon Sarraf

### Four Actionable Strategies to Build Buy-In for Your Data Projects Speaker Session; Decision Support | Meeting Room 12

As the resident data experts on campus, IR professionals are inundated with various data requests from a multitude of departments. Yet, it is often difficult to generate buy-in for their data projects outside of ad hoc requests. In this session, we go beyond the data and jump into strategy. Attendees will learn actionable strategies to overcome common barriers and create awareness for their work in support of advancing institutional priorities. We will walk you through proven examples, and attendees will have an opportunity to engage in problem-solving and discussion.

Presenter(s): James Cousins; Lily Brennan

## From Text to NLP: Methods for Analyzing Qualitative IR Data

Data and Technology;Featured Session;Speaker Session | Meeting Room 22

Qualitative data is essential to supplement and enrich traditional quantitative reporting and analysis. Advance in Artificial Intelligence (AI) enable the use of qualitative data for training chatbots to support students and staff in navigating the institutional environment. The present study compares two methods for qualitative data analysis: traditional thematic, manual coding, and Natural Language Processing (NLP). This session will show how the methods be used to both supplement and validate each other to produce actionable findings. Contributing Author: Daria Ivleva (Indiana University Bloomington)

Presenter(s): Victor Borden; George Avirappattu

## Market Research + Tableau = Improved New-Degree-Program-Proposal Process Speaker Session; Decision Support | Meeting Room 21

Market research is a critical step when creating new program proposals. However, campus stakeholders are often unfamiliar with where to find, or how to use, publicly available information that will help them explore the viability of new programs. To empower stakeholders to do their own market research and improve the New-Degree-Program-proposal process, the University of Colorado Boulder's IR office used Tableau to create a self-service market analysis tool that allows stakeholders to do preliminary market analysis for newly proposed programs. This one-stop Tableau tool allows campus stakeholders to explore current offerings and projected labor market growth with data from IPEDS, Bureau of Labor Statistics, the Association of American Universities and the National Student Clearinghouse. Combining all these data sources into one, easy-to-use tool has allowed campus stakeholders to explore and understand market demand for programs before submitting a new program proposal.

#### Presenter(s): Mari Dark; Robert Stubbs

## Racial Climate at California Community Colleges: Data Trends & Action Items *Speaker Session;Assessment and Evaluation | Meeting Room 11*

In this session, five key emergent themes from the NACCC results of 51 California community colleges (CCCs) are presented alongside recommended action items. CCCs are among the most diverse institutions in the country, with the majority considered minority-serving institutions. As such, issues of race may manifest differently at CCCs; hence, analyzing racial climate trends at these institutions is worthy of investigation. The NACCC, developed by the USC Race and Equity Center, is a quantitative campus racial climate survey that elicits perspectives from undergraduates on the ways they experience campus racial climate. The survey was designed for and tested by students at community colleges and four-year institutions. Session objectives include informing attendees of key findings regarding racial climate issues and trends among CCC students and providing expert-recommended action items to address these issues that can be applied and implemented at their home institutions.

Presenter(s): Ya-Chi Hung; RodolfoJr Andy Núñez; Kaitlyn Lange; Jenise; Jihye Kwon

### Spinning Straw Into Gold: Turning Exit Survey Data Into Real Insights Speaker Session; Assessment and Evaluation | Meeting Room 20

Post-secondary institutions are collecting a multitude of data from and about students with the aim of using those data to drive improvements in the overall student experience. While the aim is continuous improvement, many institutions fall short of gaining real insight from the data they are collecting from students. This session exposes attendees to an analysis of exit survey data using Biglan's classification of academic disciplines as a framework. As academic disciplines provide the structure of knowledge in which students are trained and socialized to their field, efforts to better understand their experiences should account for discipline differences. Results of such studies have implications for student success and institutional effectiveness initiatives within the post-secondary context.

#### Presenter(s): Franz Rerneau; Joe Ludlum

## Streamlining General Education Assessment and Closing the Loop

Affiliated Organization Best Presentation; Assessment and Evaluation | Meeting Room 14

The Office of Assessment, Institutional Research & Effectiveness (AIRE) has led efforts to streamline the Gen Ed assessment process in ways that minimize effort and maximize useful outcomes. This session shares how the Office has managed to establish an efficient, user-friendly and cost-effective new assessment system based on existing tools. The session includes describing the process of streamlining (i.e., rationale, collaboration) and demonstrating the new assessment system, including the data collection templates, and the assessment results reporting dashboard created by Tableau.

#### Presenter(s): Yongchao Zhao

## Tackling Graduate Time-to-Degree and Other Graduate Student Outcomes Speaker Session; Data and Technology | Meeting Room 9

Reporting outcomes of graduate programs such as time-to-degree, graduate retention, and completion and attrition rates is critical for institutions aiming to improve their graduate education. However, measuring such outcomes can be a very complex task. In this session, we will discuss how Lehigh set out to develop and implement a sustainable process to calculate time-to-degree accurately and efficiently for all its graduate degrees. We share lessons learned during the pilot phase of the project and describe the data used in the calculation. We will discuss how we are planning to apply this methodology to calculate time-to-degree for recent graduating classes, build reports and dashboards to share these data with our campus and with the public, and develop similar approaches to tackle other graduate student outcome metrics.

#### Presenter(s): Caroline Seguin; Zane Kratzer

### The Best of Both Worlds: SAS and Open Source Software

Data and Technology;Sponsor Speaker Session | Meeting Room 13

Academic institutions and their associated research organizations rely on computer software to aid in the accurate and timely analysis of data. SAS software enables users of all levels to apply advanced analytics, data visualizations, and complex statistical modeling capabilities to all aspects of the analytics lifecycle producing data artifacts spanning from the descriptive to the predictive. Open source software (OSS) is becoming more prevalent in all organizations from academia to industry to government, and SAS software is meeting this increased demand by enhancing functionality to be more inclusive of OSS (e.g., Python, R). SAS software is an open platform - it is built, hosted, and integrates with OSS. This session will provide an overview of SAS software as it pertains to institutional research (IR), the analytics lifecycle, and OSS, and it gives participants a better understanding of how to leverage software for higher quality IR.

#### Presenter(s): Joseph Castle, PhD

## 03:45 PM - 04:45 PM

## CDS: Annual Update, How It Is Used by Publishers, and Other Issues *Panel Session;Data and Technology | Meeting Room 26 A-B*

Every year, hundreds of IR offices fill out the Common Data Set (CDS) and use that CDS data to complete the U.S. News, College Board, and Peterson's annual statistical surveys. This panel session will describe how the U.S. News, College Board, and Peterson's surveys overlap; how publishers use the CDS data in their many products including the U.S. News rankings; and how IR offices can most efficiently fulfill these data requests and reduce their survey burden. A detailed explanation will be provided on the new questions that were added to the current CDS and preliminary plans for what changes are being contemplated for the upcoming Fall 2023 CDS and future CDS editions. The session will also discuss the basics of the CDS.

#### Presenter(s): Robert Morse; Ashley Robinson-Spann; Jeremy Serna

## Knowledge Management and IR/E: What Can We Learn From This Related Field? *Panel Session;Leadership | Meeting Room 26 C*

This session will explore the language and learnings of knowledge management (KM), highlighting concepts relevant to IR/E. Using templates, session facilitators will share specific examples of ways in which the development of a KM framework can help IR/E units strategically articulate their vision, mission, and goals to enhance their effectiveness in collaborating with institutional partners to ensure people have the data, information, and knowledge they need at the time they need it. IR/E with a grounding in KM brings added value to the institution. The session will also dive into the four essential KM focus areas of people, processes, technology, and strategy. Facilitators will share methods for securing stakeholder input for the purpose of evaluating an institution's current KM capacity in these areas and in developing specific plans for enhancing it. Attendees will gain knowledge and practical ways to incorporate KM foundations to enhance their IR/E efforts.

Presenter(s): Gina Johnson; Phillip Wallace; Sarah Torres Lugo

## Student Satisfaction: Utilizing Data for Institutional Effectiveness

Panel Session; Decision Support | Meeting Room 1

Student satisfaction surveys are a key component in assessing the student experience. However, just collecting the satisfaction data is not enough. Representatives from four-year and two-year institutions will share how they have overcome barriers for administering satisfaction assessments and will provide examples of how student satisfaction data are being utilized for institutional dialogue and change. They will share how their IR offices are partnering with other college departments to actively use the data for planning and evaluation purposes. This session will share the perspectives of the panelists and the moderator to identify how campuses can effectively use student satisfaction survey results.

Presenter(s): Julie Bryant; Julie Eagen; Eleanor Fox; Katie Tharp

## 4:45 P.M. – 6:00 P.M.

## Networking reception hosted by AIR Board of Directors in the Exhibit Hall *Reception | Exhibit Hall C*

Join us for a networking reception hosted by AIR Board of Directors in the Exhibit Hall. Be sure to visit sponsor booths while you're there and participate in the Networking Game to be entered into a drawing to win a \$100 American Express gift card.

### 6:30 P.M. – 8:30 P.M.

### Dessert reception at the Rock & Roll Hall of Fame Reception | Rock & Roll Hall of Fame

Join us Wednesday, May 31 from 6:30-8:30 p.m. for a dessert reception (with cash bar) and exclusive access to the entire Rock & Roll Hall of Fame filled with good music, exhibits and experiences, and more. Transportation will be provided-busses load at the Lakeside entry of the convention center beginning at 6 p.m. and will loop until 8:30 p.m.

## Thursday, June 1, 2023

## 08:00 AM - 08:45 AM

## Analyzing Ways First-Time Freshmen Acquire Gateway Course Credits Decision Support; Speaker Session | Meeting Room 23

This session analyzes ways first-time freshmen in the University System of Georgia acquire gateway course credits (introductory English and math). Students can obtain gateway course credits at many points in their academic journeys (e.g., AP credit, dual enrollment, first-year courses), and earning credits in gateway courses is linked to key student success metrics. This presentation utilizes logistic regression to discuss what characteristics are associated with students' early credit accumulation and how these factors differ across institution types within a state-system. Participants will learn how University System of Georgia researchers use course-level data to gain a more accurate understanding of when and how students earn gateway course credits.

#### Presenter(s): Pearson Brown

#### APR Annual Wellness Snapshot: Your Academic Program Health Check! Speaker Session; Assessment and Evaluation | Meeting Room 19

The University of Findlay embarked on a redesign of the Academic Program Review (APR) process in 2021. Hiring a Director of Institutional Research & amp; Assessment coincided with the waning of the pandemic and the implementation of a new student information system. Following a two-year stagnation due to those complications, the APR process was reinvigorated. The APR Committee (comprised of faculty and administrators) developed an Annual Wellness Snapshot patterned after medical models. Data are presented for review, and program leads—in collaboration with department colleagues—answer a brief set of reflection questions. Questions focus on strengths, challenges, strategic plan directives, and data review. The process addresses several challenges: the need for a replicable annual process that provides momentum, strengthening data confidence, training program leadership to act on data, and preparing for the roll-out of the redesigned full APR process.

#### Presenter(s): Kristen Lindsay

### Being Data Driven: Building a Sustainable Culture of Data Literacy Educate;Speaker Session | Meeting Room 13

During this session attendees will learn about general processes, technical challenges, and lessons learned in a journey of transitioning traditional reports to interactive platforms such as Power BI and Tableau. Participants will be introduced to a concept of Data Liaisons training series and how this model plays an integral role in building data-culture on our campuses. Specifically, this session will share practical approaches to building data literacy across campuses in efforts to increase the institutional capacity for data-informed decision-making to drive student success. **Presenter(s):** Ivana Fredotovic

### Budgetary Decision-Making With University Data

Speaker Session;Decision Support | Meeting Room 11

In their quest to continue to use data to inform decision-making, The University of Southern Mississippi (USM) created the "Resource Allocation Rubric" to assist university administrators during the budget process. Prior to the rubric, academic units would request funds with no evidentiary support for their expected outcomes. The institution needed a tool that would both aid the requestor and help the approver to understand the needs of the academic units. Thus, a rubric was created to help decision makers direct the appropriate amount of resources based upon the academic unit's prior outcomes. The rubric is comprised of three different sections: (1) Instructional Effort; (2) Student Success; and (3) Engagement. Together, these sections support a holistic review. In this session, USM will walk through the impetus for adopting a budget rubric, how they implemented and achieved buy-in for this new tool, how it works, and their results so far.

#### Presenter(s): Amanda Kale

## Building Relationships to Foster Data Culture

Speaker Session;Leadership | Meeting Room 22

Effective relationship-building skills are a crucial element for successful data initiatives and for building a culture of collaborative data usage, analysis, and stewardship. Presented by the Data Governance leads at three different types of higher education institutions, this session will focus on strategies for building and maintaining an array of relationships that enable data cultures to thrive. Through focusing on effective best practices and lessons learned, we will outline methodologies for building rapport with— and amongst—individual stakeholders (e.g., making connections to build a Community of Practice), fostering collaborative group dynamics (e.g., recognizing progress toward goals), and navigating difficult relationships (e.g., adjusting mindset prior to meeting). Across this range of contexts, relationships must be carefully developed in order to maximize the collaborations that will ultimately advance the data culture of any institution.

#### Presenter(s): Rachel Groenhout; Melissa Barnett; Casey Gogno

## Data From the Experts: Classroom Projects and Exercises for Assessment Discussion Group; Assessment and Evaluation | Meeting Room 15

Institutions engage in multiple methods to hear from our students including comprehensive surveys with benchmark comparisons. However, some of the most useful data are institution- and time-specific and come directly from our students. Using student research and classroom exercises, IR can be accomplished through the diverse efforts of our faculty and students, while also providing beneficial learning experiences for students. Share your own experiences in how your institution learns directly from students and discuss the pros and cons of opening the IR process to new data-gathering mechanisms. Both the pros and cons of giving students a direct voice into institutional assessment will be considered.

#### Presenter(s): Lisa Wilder

## Defining the Public Perception of Your Institution: Admitted Student Survey Speaker Session; Assessment and Evaluation | Meeting Room 12

How does one distill the entirety of the University experience into a marketing brochure? How do we assess what external constituents feel, believe, and perceive about our institution? How do we take those perceptions and inspire improvement from our campus community? hrough the conception, administration, and analysis of an Admitted Student Survey, the Institutional Effectiveness and Analytics team at Ohio University, in concert with colleagues in the Division of Enrollment Management, was able to harness key information from perhaps the primary external constituent group of any institution, prospective students and their families. ositioning results within the complex systems framework of the University, key takeaways surface, producing actionable metrics for internal constituents across divisional and hierarchical structure.

#### Presenter(s): David Tobias

### Getting Granular: Building Research Tools to Reveal Student Pathways Assessment and Evaluation; Featured Session; Speaker Session | Meeting Room 9

Experiential learning can be a key influence on student experience, yet we know little about how it can be best positioned in a career pathway. In this session, we apply Backtracking technique to better understand the impact of experiential learning on community college student journeys. Using Power BI dashboards, we will demonstrate how to document alumni academic experiences through historical IR data and performance metrics to inform structured interviews in which alumni recount how experiential learning activities impacted their career pathways. We will share the resulting integrated data visualizations that illustrate the interplay between academic measures and experiential learning. This session is valuable for institutional researchers who seek to identify and quantify experiential learning activities using IR and share how IR can generate powerful knowledge about student pathways.

Presenter(s): Faye Jones; Rick Burnette

# IR's Role in Workforce Development and Work-Related Experiential Activities *Educate;Speaker Session | Meeting Room 14*

Successful transition into the workforce is a critical priority for higher education stakeholders, and professionals in institutional research and assessment can provide important decision support to institutional colleagues. In this session, we will discuss the value of experiential education, describe experiential education in the context of state and local workforce needs, and offer findings from a recent multi-institution survey of student perceptions of their work-related experiential activities (WREAs). Participants will gain new insights into the importance of institutional efforts to develop workforce partnerships, the challenges of data collection in recent post-Covid times, and lessons learned related to work-related experiential learning.

Presenter(s): David Tanner; Karen Webber; Matthew Grandstaff

## **Objective Assessment of Degree Pathway Health**

Speaker Session;Leadership | Meeting Room 21

Assessing programs is a vital aspect of college administration. Using the wide range of data available, both institutional and market demands, we can create methods for analyzing how programs are performing. This session will share the Credential Pathway Scorecard, a method for processing, organizing, and presenting data regarding program performance that scores each degree or certificate pathway on five dimensions, accounting for variance in pathway and student goals. These results can be used prior to full program review to highlight pathways that may need a little more attention. The conversation will include the process of scorecard construction, identification of relevant metrics, development of calculations, and organizational challenges involved in implementing the tool.

Presenter(s): Wyl McCully; Matthew Fall

### **Optimizing Student Outcomes Using Student Flow Analysis**

Decision Support;Featured Session;Speaker Session | Meeting Room 20

Institutions invest considerable resources each year to recruit and enroll new students, only to subsequently lose some of them via attrition. Retention of these newly acquired students is important for both the student, who is intent on pursuing a degree, and for the institution, which needs to generate tuition revenue. The University at Buffalo Institutional Analytics team developed analysis and visualization tools that help us understand the WHO, WHEN and WHY of student flow, both internal (major changes) and external (attrition). Insight gained from these tools allows individuals tasked with retention and student success to identify issues early and make early decisions that improve outcomes for students and the institutions alike.

Presenter(s): Brian O'Connor; Shannon Mahany-Kulinski; Mychal Ostuni

## Predictive Analytics: Course Combination Success Rates

Affiliated Organization Best Presentation;Data and Technology | Meeting Room 10

JCCC embarked on a four-year journey of using predictive analytics to improve student success. The most recent model focuses on identifying course combinations where high failure rates are used to predict student success. The presentation will discuss the science behind identifying the course combinations, using the information to inform student advising and provide wrap-around services, and the future plans for leveraging this data.

Presenter(s): Connor Nyberg; Alexander Wells; John Clayton

## Survey Engagement Strategies: Demonstrating Commitment to Equity

Assessment and Evaluation; Discussion Group | Meeting Room 24

When launching DEI surveys to capture the experiences of students, staff, or faculty, related to their personal identities, the need for higher response rates and engagement is emphasized. To reach a wider audience, institutions should utilize the five key components of survey promotion and communication: Demonstrate Importance, Show Accountability, Call to Action, Acknowledge Emotional Impact, and Expand Visibility. The National Assessment of Collegiate Campus Climates (NACCC), developed by the

USC Race and Equity Center, is a trio of surveys that elicits perspectives from students, staff, and faculty on the ways they experience campus racial climate. Using our experience in surveying 162 institutions, this discussion will provide the key components of communicating the importance of a DEI survey along with action items in order to foster a conversation about overcoming the unique barriers and difficulties of such a survey.

#### Presenter(s): Kaitlyn Lange; Ya-Chi Hung

## The Effects of Online Learning: Moving Into a Post-Pandemic World

Speaker Session; Assessment and Evaluation | Meeting Room 16

Interest in online learning, which was already increasing throughout the 2010s, has skyrocketed since the COVID-19 pandemic. Salt Lake Community College recently completed a comprehensive quantitative study of online classes at our institution, with the goal of informing administrator decisions about future course offerings. This session presents our primary findings: that more students are taking online classes now than before the pandemic; that outcomes are systematically worse in online classes (a gap unchanged even after the pandemic); that the "online penalty" is larger for women and for some non-White students; that students are less satisfied with online classes; and that well-designed materials are particularly important to online students' success. The session also describes some of the details of our analyses, including data sources and model design. Attendees should leave with concrete ideas about how to study the effects of online learning at their own institutions.

#### Presenter(s): Abby Kaplan

## 8:45 A.M. - 9:45 A.M.

## Coffee and networking in the Exhibit Hall Exhibit Hall C

Join us for coffee and networking in the Exhibit Hall and be sure to visit sponsor booths while you're there!

## 09:45 AM - 10:30 AM

## Developing User-Friendly and Accessible Public-Facing Data Tools Speaker Session; Data and Technology; Featured Session | Meeting Room 22

To help prospective students and inform stakeholders on the value of higher education, the University System of Georgia (USG) is engaging in efforts to increase transparency around student success and cost of attendance data. This is in alignment with their strategic goal to "provide an affordable, accessible and high-quality education; promote lifelong success of students; and create, disseminate and apply knowledge for the advancement of our state, nation and world." Along these lines, via a partnership between the USG and the Carl Vinson Institute of Government's Data Analytics and Visualization unit, a new tool was developed and published on the USG website highlighting the costs, makeup, and outcomes for students, institutions, and programs within USG. Utilizing Microsoft's Power BI and other resources, our team of data scientists developed an easy-to-use and accessible tool to help prospective students better make a data-informed decision about their future alma mater.

Presenter(s): Scott King; Angela Bell; Nyasha Hamilton

### Examining the Effect of Student Engagement on the Student Experience Discussion Group; Decision Support | Meeting Room 24

Student engagement and student experience are two initiatives that higher education institutions usually pursue. However, the relationship between these two initiatives has not been examined adequately. Thus, this study assesses student engagement's effect on the student experience. A survey research design was used to conduct the study. Data were collected from students of a small university in the Midwest. The results show that collaborative learning, student-faculty interactions, and a supportive environment explain the variance in student experience. The implications are discussed at the end of the paper.

#### Presenter(s): Henry Boateng

### Leading From the Middle: How Data People Can Build Relationships

Speaker Session;Leadership | Meeting Room 13

While the topic of leadership in higher education is heavily researched and well-documented, most of this work focuses at the top levels of leadership—President, Provost, or Chancellor—and leaves uninvestigated the challenging role of leading from the middle. Those with responsibilities for Institutional Research, Institutional Effectiveness, and Assessment often find themselves in that middle space. We are often the ones who possess institutional knowledge, participate in strategic planning, take care of day-to-day operations, navigate thorny issues, engage with students, and build bridges as we carry out our mandates. What are the strategies that position midlevel leaders to leverage the power inherent in our roles? This session will share approaches for building relationships, managing conflict, negotiating change, and empowering others that IR/IE/Assessment professionals can use as we work to advance student success at our institutions.

#### Presenter(s): Laura Palucki Blake; Elisa Alban

## Making Diversity, Equity, and Inclusion an Integral Part of Our IR/IE Work. Affiliated Organization Best Presentation;Leadership | Meeting Room 23

The session focuses how our large Institutional Research and Decision Support (IRDS) office engaged in efforts to promote culturally responsive and inclusive IR/IE practices that take into account the increasingly diverse student, faculty, and staff populations we serve. We will describe how we developed a Diversity, Equity and Inclusion (DEI) strategic plan that addressed the following 1) How the IRDS Mission Statement reflects our commitment to diversity, 2) How we apply an equity lens to our work and support campus DEI efforts, and 3) How we implement internal office practices to support the recruitment and retention of a diverse team and ensure professionals in the unit have access and

opportunities to current trends in equity. Follow-up discussion will focus on the continuing work of assessing and refreshing the existing plan given changes i organizational structure.

#### Presenter(s): Michele Hansen; Steven Graunke

## Predicting Impact of Initiatives as Well as The Simpsons Predict the Future Speaker Session; Assessment and Evaluation | Meeting Room 21

The Simpsons TV show has been an American television mainstay for more than 30 seasons and, over that time, has garnered a reputation for ludicrous events occurring in past episodes that then happen in the real world many years later. An episode in 2000, for example, included a bit about Donald Trump being president! The story we'll tell in this speaker session can only dream of that same level of prognostic ability, but it's worth sharing nonetheless. In it, we highlight recent work at Elgin Community College (ECC) to utilize statistical modeling techniques, such as logistic regression and propensity scorebased matching, as a means of evaluating the effectiveness of student success initiatives and programs, while accounting for existing student differences, when comparing results for students who participate in these initiatives with those who don't. Using such techniques, the College is increasingly able to "predict" the unique impact of our student success work.

#### Presenter(s): David Rudden

## Predictive Intelligence to Support Institutions' Strategic Enrollment Goals Decision Support;Speaker Session | Meeting Room 11

Virginia Tech's strategic plan sets ambitious institutional goals, many of which are tied to increasing diversity, access, and student success. This presentation will discuss how a collaborative data and analytics initiative is supporting the implementation of Strategic Enrollment Management (SEM) practice to achieve the institution's strategic enrollment goals. Presenters will discuss the institution's goals, implementation of the enrollment/admission process improvements, data analytics collaboration, the process of data-informed strategy development and implementation, and successes so far in achieving set goals. The presentation will include the demo of the analytics application supporting the SEM implementation. Successes and challenges in bringing culture change will also be discussed.

#### Presenter(s): Abhay Joshi

## Techniques for Handling Missing Data for Surveys

Data and Technology;Speaker Session | Meeting Room 19

Survey researchers commonly encounter missing data during data analysis. Methods used by the Integrated Postsecondary Education Data System and the Survey of Graduate Students and Postdoctorates in Science and Engineering will be presented to demonstrate techniques for addressing missing data. Unit nonresponse occurs when all survey items are blank; item nonresponse occurs when, within a unit, only some items are blank. Unit nonresponse is oftentimes addressed by weighting, where unit respondents are weighted to account for the nonresponding units. Item nonresponse is generally handled by imputation methods, where missing values are replaced with estimated values. This presentation will provide a resource for researchers to understand how to handle missing data.

#### Presenter(s): Kimberly Ault; Scott Ginder

### The First Three Years of CIP 2020: Updates and Future Directions

Data and Technology;Featured Session;Speaker Session | Meeting Room 1

The National Center for Education Statistics (NCES) released the latest version of the Classification of Instructional Programs (CIP), CIP 2020, on July 10, 2019, for use starting with the 2020–2021 IPEDS Completions survey component. The 2022–23 IPEDS Data Collection is the third year of completions data using CIP 2020. In this session, we will present our findings on the adoption of the new CIP Codes and highlight some of the emerging fields identified through the "write-in" process and an analysis of academic program inventories. We will also discuss key areas of current CIP development, answer attendee questions on academic program classification, and describe ways to contribute to future versions of the CIP.

#### Presenter(s): Allan Medwick

## The NLC Student Entry-to-Exit Continuum

Decision Support; Speaker Session | Meeting Room 20

Leveraging knowledge to achieve student equity is core to Northeast Lakeview College Post-Secondary Data Partnership (PDP) participation. PDP participation is cornerstone to a college-wide learning construct that leverages institutional knowledge, operational data, and student engagement. Such efforts have resulted in expanded data accessibility, assumption demystifications, and performance contextualization for student achievement, institutional effectiveness, and planning.

#### Presenter(s): Marty Fortner; Franc Castro

## The Student-Level Data Network: Lessons Learned From an Institutional Pilot *Featured Session; Policy; Speaker Session | Meeting Room 12*

Will the federal government start collecting student-level records? Come and learn more about potential future changes in federal reporting related to a Student-Level Data Network (SLDN). Over the last year, we conducted a pilot where three institutions submitted anonymized student data in an attempt to both match their past IPEDS submissions and simulate additional fields included in the proposed College Transparency Act (CTA) legislation. We will use a mix of styles (presentation, polling, Q&A) to improve attendees' level of understanding about the proposed SLDN and how it could alter reporting for institutions. For additional background on the CTA and SLDN, including information from previous AIR forums, please see this website: https://www.rti.org/impact/building-a-federal-student-level-data-network

Presenter(s): Joshua Pretlow; Jamie Isaac; Eric Atchison; Ginger Otwell

## Tips and Strategies for Increasing Institutional Support for Your Office *Discussion Group;Leadership | Meeting Room 15*

Colleges and universities are increasingly seeing the need for timely, relevant, and robust data and analysis that can help them to take action and make the best decisions to support student success. While IR/IE offices are often called upon to lead such efforts, the increased responsibilities don't necessarily equate with having what we need to take on additional responsibilities. During this discussion, the presenter and participants will share tips and strategies on how to successfully advocate for increased resources and support.

#### Presenter(s): Karen Egypt

## Tracking the Key Cohorts: Student Success Dashboard

Speaker Session; Decision Support | Meeting Room 14

Student success is the coin of our institutional realms. How can institutions and advisors gain more insights and better understand where to deploy resources? This session will demonstrate an institutionally created dashboard that tracks daily retention status for more than six key cohorts. The demonstrated Retention Tracking dashboard functionality includes year-over-year performance, projected retention calculations, summary metrics, student row-level detail, multiple predictive models, and other key retention criteria. The session presenters will explain both why and how the dashboard was created and discuss the impact of the dashboard on student success stakeholders.

#### Presenter(s): M Paige Borden; DeLaine Priest

## U.S. News Education Rankings: Review of Last Year and the Upcoming Rankings *Speaker Session;Assessment and Evaluation | Meeting Room 26 C*

This presentation will provide updates on all the U.S. News education rankings: Best Colleges; Best Graduate Schools; Best Online Degree Programs: and Best Global Universities. Presenters will discuss what data and methodology changes were made to all these ranking projects over the past year. Special emphasis will be given to the Best Colleges rankings. There will be an explanation of any new methodology, ranking, data, and web presentation ideas being considered for the upcoming edition of the Best Colleges and the other rankings. The session will discuss why and how U.S. News gives ranking table data in Excel files and unpublished rankings to the IR community, and how AIR members can obtain these unpublished rankings and rankings data-free from U.S. News.

#### Presenter(s): Robert Morse; Eric Brooks; Kenneth Hines

# Wage Premiums for Graduate Degrees: Evidence From College Scorecard Data Speaker Session; Data and Technology | Meeting Room 16

With more college graduates pursuing advanced degrees, it is important to understand how investment in education beyond the bachelor's degree pays off. Using College Scorecard data, this presentation explores earnings premiums for advanced degrees. The study shows that discipline is more consequential for future earnings than a college. At the same time, disciplines with greater earnings are not necessarily disciplines with greatest wage premiums for graduate degrees. For example, in fields with high earnings of bachelor's degree holders, payoffs from an advanced degree — measured as a percentage difference and not the dollar difference — might be smaller than in fields with relatively low earnings of bachelor's degree holders. Dashboards with College Scorecard data and Post-Secondary Employment Outcomes (PSEO) data are used to illustrate some of the findings of the study.

#### Presenter(s): Iryna Muse

Xitracs<sup>™</sup>: Flexible and Focused on YOUR Data-Driven Future Data and Technology;Sponsor Speaker Session | Meeting Room 9

Xitracs allows you to perform your institution's assessment activities in a more streamlined and cost-effective manner. This presentation will give an introductory overview of how Xitracs can help you and your institution's assessment and planning teams manage processes that promote institutional improvement and faculty engagement.

#### Presenter(s): Stephanie Allen

### 10:45 AM - 11:30 AM

## An IR and IT Partnership in Data Strategy Development and Implementation Speaker Session;Leadership | Meeting Room 12

This presentation is a case study on Carnegie Mellon University's journey in developing and implementing a robust data strategy to transform the university data infrastructure and organizational culture. We will share our experience of building strong collaboration between the IT and IR teams. We created a Data & amp; Analytics Collaborative that is a hub and spoke model. A team of IR and IT leaders and core data stewards form the hub of the network. An over-arching network of data engineers, data explorers, analytics power developers, and business data consumers form the spokes who interact frequently with the hub to develop data analytics solutions. We hope to share our experience as well as our challenges and want to have a productive dialogue with the audience to refine our strategies and initiatives.

#### Presenter(s): Melissa Baker; Henry Zheng; Amy Coutu

## Bridging between Data and Action using Student Success and Equity Dashboard Affiliated Organization Best Presentation; Decision Support | Meeting Room 21

A few years ago, IR offices across the nation raced to publish dashboards that allowed end-users to slice and dice and self-serve data. Have those dashboards/visuals achieved their goals of generating insights and taking action? Does your dashboard have the right data to identify and dislodge barriers to student success and advance equitable outcomes? Oakland University's newly implemented Student Success and Equity Dashboard presents in-depth data on student success and equity gaps alongside factors contributing to these outcomes such as course success patterns, bottle-neck courses, and student major changes. The dashboard allows for evaluating trends at the intersections of race/ethnicity, first generation, and pell status where it is known that inequities in student outcomes occur. We will also share our strategies for training and engaging the campus community to utilize the data to create more inclusive, supportive, and student centered environments.

Presenter(s): Song Yan; Susanne Condron; Reuben Ternes; Britt Rios-Ellis

## Data Literacy Framework: How to Build an Effective Data Culture on Campus

Speaker Session; Decision Support; Featured Session | Meeting Room 19

How do we improve institutional data capacity to improve student success? Learn from strategies implemented by 15 institutions in APLU's Powered by Publics initiative. The Data Literacy Institute (DLI) is a program piloted at 10 institutions to improve data literacy on campus by teaching knowledge and skills on how to use and apply data to make better and more ethical decisions to support student success. The Data Maturity Index (DMI) is an assessment tool evaluating seven components of an effective data-informed environment. Join us and discover how these and other strategies are synthesized into a framework that outlines the key components in building an effective data culture.

#### Presenter(s): Denise Nadasen

## Data-Informed Practices to Promote Racial Equity on Campus

Speaker Session; Decision Support | Meeting Room 22

A campus climate survey provides information on student experiences, particularly centered on race and equity issues on campus. However, it could be challenging for many institutions to utilize the survey results despite the importance of the campus climate data. Institutional Research offices can therefore be a bridge between raw data and their campus community by contextualizing data so that they can be easily understood by students, staff, and faculty. In this regard, this session will provide ways that the institutional research and diversity department can utilize campus climate survey data in effective and practical ways. This session will introduce a case study on how community colleges utilize the National Assessment Collegiate Campus Climate (NACCC) survey results to promote diversity and equity on their campus. Participants will learn about data-informed practices to promote campus equity, diversity, and inclusion.

Presenter(s): Jihye Kwon; Ya-Chi Hung; RodolfoJr Andy Núñez; Kaitlyn Lange; Jenise

## Embedding Equity and BI Principles Into Academic Assessment

Decision Support;Featured Session;Speaker Session | Meeting Room 20

Our new approach to academic assessment emphasizes setting departmental equity goals for student outcomes. We will discuss our approach to using business intelligence (BI) principles to address new regional accreditation standards, develop new dashboards to explore equity gaps in student outcomes, and embed these dashboards into an ongoing system for academic unit goal setting and equity-minded decision-making. Our session will describe the principles we used for developing this new assessment system, new disaggregated student outcome dashboards (including the Microsoft products used for our data lake, data security, dashboarding, and user tracking), and the process to support and collect department-level decisions and support goal implementation over time.

Presenter(s): Austin Hocker; Travis Shea

## Moving from Data to Action

Speaker Session; Assessment and Evaluation; Featured Session | Meeting Room 16

The presenters will discuss the process of translating findings from campus sexual misconduct climate surveys into tangible steps an institution can take to promote student health, facilitate retention, and reduce educational inequalities. The presenters will also discuss effective techniques for communicating those findings and action steps to senior leaders, students, and other campus stakeholders. This presentation will be grounded in the details of Tulane University's 2017 campus climate survey on sexual misconduct, the ensuing action planning, and the communication plan to provide a targeted example of an evidence-based approach to facilitating change across a variety of academic and administrative units. At the end, participants will be encouraged to share their experiences with sexual misconduct climate surveys, where applicable, to ensure this process is reviewed across multiple institutional contexts.

#### Presenter(s): Kevin Swartout; Jessica Shedd

## ROI: How One Institution Leveraged Its Assessment Manual for IE Compliance Speaker Session; Assessment and Evaluation | Meeting Room 10

Prior to its 2021 decennial review, Campbell University worked to renew its processes and templates to better guide institutional effectiveness efforts. The endeavor of aligning and documenting institutional effectiveness processes with the SACSCOC 2018 Principles proved to be a great return on resources and time invested. The 6th edition of the Planning and Assessment Manual (PAM) provided the content for the Compliance Certification narratives, while the revised processes expedited evidence-gathering across academic, administrative, and student support services units.

#### Presenter(s): Maren Hess

### Scaling the Demographic Cliff in Indiana

Affiliated Organization Best Presentation; Decision Support | Meeting Room 9

To understand enrollment decline at Purdue University Northwest and Indiana universities more broadly, the "demographic cliff" thesis is examined using publicly available state K-12 and university historical enrollment data. The concepts, methods and findings are reproducible and may inspire similar approaches by other institutions of higher education to leverage public data to inform strategic enrollment planning and related decision-making. Contributing Author: Michael Bourgeois

#### Presenter(s): Jeff Schieb

### Study Abroad: Does It Matter for Student Success?

Decision Support; Discussion Group | Meeting Room 15

This presentation examines who are study abroad (SA) students and how SA matters for student success metrics measured by retention and 4-year and 6-year graduation rates. Three questions guiding this Discussion Group session are: (1) Who are SA students, and is there a measurable equity gap in SA participation? (2) How to measure the effect of SA on student success to address the selection bias of SA

participation and account for a myriad of potentially confounding variables? (3) To what extent does SA matter for student success? We will briefly introduce our SA program, share R code and k-nearest neighbor algorithm procedure to address the selection bias SA participation and account for a myriad of potentially confounding variables, and present and discuss our preliminary results. Participants will have opportunities to engage in the conversation and share their approaches for assessing SA and disseminating the results to support decision-making for student success.

Presenter(s): Christina Drum; John Crooker; Qingmin Shi

## Taking a Closer Look: The Importance of Disaggregation in Survey Analysis Speaker Session; Decision Support | Meeting Room 14

IR offices continue to play a pivotal role in the dissemination and subsequent analysis of institutional surveys. However, the realities of the modern higher education environment often demand actionable results with very little lead time. As such, IR offices are constrained in their ability to produce thorough reports, instead opting for big-picture analysis that satisfies the tight timelines. This session will draw on the results of a large, multi-institutional survey and discuss the ways that simple data disaggregation can highlight findings among historically underrepresented groups that are often lost among broader survey findings. This approach adds very little time to the survey analysis phase but has the potential to start incredibly important conversations among campus leaders.

Presenter(s): Matthew Grandstaff; Karen Webber

## Using 4DX to Improve Project Management in IR

Speaker Session;Leadership | Meeting Room 11

Does your IR office struggle to execute large projects amidst the whirlwind of your daily tasks and emergency data requests? This session will introduce participants to the 4DX approach to project management described in the book, "The 4 Disciplines of Execution." The speaker will describe how institutional researchers can apply the four disciplines to projects through the framework of their own experience using the approach to execute a succession plan within their office. Even if your office is not anticipating staffing changes in the future, though, you'll learn how 4DX can improve the execution of many major continuous improvement initiatives in IR. Anyone who works in higher education can benefit from learning about this approach and how you can use it to improve the execution of your wildly important goals.

### Presenter(s): Chris Orem

## Where Do They Go? Examining Admission Trends Using Multiple Data Sources Speaker Session; Decision Support; Featured Session | Meeting Room 23

With massive shifts in enrollment over the past several years and even more changes on the horizon, many institutions want to know how their application pools and student bodies have changed. To answer these questions, the UNC System combined their admissions data, data on all high school graduates in North Carolina, and enrollment data from the National Student Clearinghouse. With these data, the UNC System was able to examine questions such as whether their share of high school graduates changed, how application pools and enrollment shifted within the system, and which graduates left the state.

Attendees will learn how we put these data together, why each piece of data was used, and see examples of the findings from our research to support decisions across the UNC System.

Presenter(s): Mark Umbricht; Caleb P. Rose; Mary Gaegler

## 10:45 AM - 11:45 AM

## Beyond the Numbers: Embracing the Culture of Care in Institutional Research Leadership;Panel Session | Meeting Room 26 C

As higher education continues to think about the reverberations of COVID throughout the sector and grapples with faculty and staff burnout, it is important for institutional researchers to think about how we do our own work with care for ourselves and others. This dynamic panel will focus on how institutional research professionals and leaders are working towards a culture of care in their work. The discussion will be driven by audience participation and questions that IR professionals are grappling with. Please note: This session may cover topics that are sensitive in nature.

Presenter(s): Bethany Miller; Jacqui Broughton; Taiwo Ande; La Toya Hart; Nancy Floyd

### Early-Career Professionals in IR: Great Start. Promising Career? Leadership;Panel Session | Meeting Room 1

Institutional research professionals frequently possess the skills, aptitude, and talents that can be easily transferred to more lucrative professions and organizations—both for-profit and not-for-profit. Furthermore, we know that today's early-career professionals in nearly any field or industry are much less likely than the preceding generation to stay with the same organization or even in the same profession over the duration of their career. Consequently, this session asks three early-career, accomplished IR professionals to address the following: What aspects of their work would likely keep them dedicated to the institutional research profession during the next phase of their career? What aspects of their work would give them pause and open the door for them to consider other career options within or outside of the academy? The profession needs to keep its best and brightest: The goal of this session is to highlight actions we all can take to make that happen.

Presenter(s): Mardy Eimers; Smriti Ingrole; Jason Wang; Jared Beasley

## Equitable Postsecondary Value and the Value Data Collaborative *Featured Session; Panel Session; Policy | Meeting Room 26 A-B*

As higher education continues to grapple with racial, gender, and socioeconomic disparities, it is more important than ever that institutions and state systems use their own data to promote equitable access, attainment, and post-college outcomes for students of color, students from low-income backgrounds, and women. The Value Data Collaborative, an innovative initiative led by IHEP, helps further the field's understanding of the return on investment in postsecondary education, through implementing the Postsecondary Value Framework. This IHEP-moderated panel discussion will (1) share an overview of the Value Framework and emerging research findings from the Value Data Collaborative; (2) provide first-person accounts from institutional and system leaders for why the framework is a powerful tool for creating a more equitable postsecondary education system; and (3) engage audience members in a discussion applying the Value Framework to measure return on investment at their institutions. Contributing Author: Kimberly Dancy

Presenter(s): Diane Cheng; Julie Mueller

## To Infinity & Beyond! Data Collaboration & Resource Sharing for Everyone! Decision Support; Panel Session | Meeting Room 25 B-C

Big Data, Weapons of Math Destruction, Machine Learning, Predictive Analytics, and Data Mining—a few phrases to spring up in the past 15 years of IR. So how do Higher Education IR Professionals stay above it all and not lose themselves in the infinity of data available? Collaboration and Resource-sharing is the key fundamental! Cincinnati State is one of the first state colleges to offer bachelor's degrees in Ohio and without the data support from OACC and CCRC, those degree programs would not have been successfully approved. The Ohio Association of Community Colleges (OACC) and the Community College Research Center (CCRC) have provided advocacy and support that we can measure. In this panel discussion, three key leaders showcase how collaboration and resource-sharing has driven improvement metrics at all levels from the institution, to the state advocacy group OACC, support from the CRCC, and help with data sharing to Infinity & BEYOND!

Presenter(s): Mollie Miller; Anne Foster; John Fink

## 11:10 AM - 11:30 AM

# Out of the Fog with HelioCampus: Considerations for Large-Scale Data Analytics Initiatives Data and Technology; Sponsor Product Demonstration | Expo Theater 1

Connecting admissions, enrollment, and financial aid data to gain visibility across the student lifecycle, and the ability to do so quickly, is the key to improving yield, persistence, retention, and ultimately, student success. HelioCampus is a leading provider of data analytics solutions to the Higher Ed community. This session will provide guidelines for what the Institutional Research community needs to know when engaging with vendors for data analytics products and services. We review the HelioCampus strategic approach, our data architecture, the components of the HelioCampus platform, and discuss some novel results uncovered while working with our partners.

#### Presenter(s): Doug Nutter

## 11:30 A.M. – 1:15 P.M.

Lunch break, poster presentations, and networking in the Exhibit Hall *Exhibit Hall C* 

## 1:45 AM - 12:45 PM

## Closing the Loop With Student Learning Outcomes Assessment

Poster Presentation; Assessment and Evaluation | Poster 14

Effective assessment practices are very important for college quality improvement initiatives and successful accreditation reviews. Student learning outcomes (SLO) assessment can be particularly challenging, especially closing the loop and ensuring assessment results are used for improvement. This poster presentation will offer a successful example of "closing the loop" in SLO assessment. A baccalaureate nursing program's critical thinking SLO assessment is discussed. The Institutional Effectiveness/Assessment Specialist collaborated with the faculty curriculum and quality improvement committee and the nursing faculty to assess and report student critical thinking as well as identify methods to improve student critical thinking. The SLO assessment report template will include a summary of these efforts along with the analysis of whether student critical thinking improved after implementing the initiatives. Visual examples of the SLO assessment cycle and closing the loop will be included.

#### Presenter(s): Elizabeth Harp

## Comparing 7- and 15-Week Course Sections Using Propensity Scoring Methods *Poster Presentation;Assessment and Evaluation | Poster 4*

Students who enrolled in 7- and 15- week sections of the same online general education course were compared. There were two research questions: Were the students who chose to enroll in 7- and 15- week sections different at the beginning of the term? And, were there any differences in outcomes? At the beginning of the term, the 7- and 15-week sections were similar in terms of GPA, cumulative credits, attempted credits, and gender, they differed in terms of adult learner status, race and ethnicity, and primary campus. To address the second research question, propensity scoring methods were used to create groups of students in the 7- and 15-week sections who were similar in their likelihood to enroll in 7- versus 15-week sections. The presentation will explain why and how propensity scoring methods were used. Results and suggestions for the future of condensed courses will be discussed. Attendees will be encouraged to use these methods to conduct similar studies at their institutions.

#### Presenter(s): Whitney Zimmerman

## Impact of Remote and DEI & Belonging on Retention and Employee Engagement Poster Presentation;Leadership | Poster 22

A lot has changed in the workplace over the last three years. The increase in remote work possibilities and the necessity for the institution to embrace diversity, equity, and inclusions created a sense of employee belonging that has established heightened expectations from the workforce. Leadership is often called upon to recommend, direct, conduct, and provide analysis on projects related to the assessment of attitudes and general organizational climate of faculty and staff related to these issues. This session provides the university profession real-world practices of employee engagement assessment, promotion, and the critical analysis that leadership in the academia find most relevant in understanding the changing workforce regarding remote work, turnover, and DEI & amp; Belonging. The information provided is derived from an ongoing assessment of human resources that has been conducted in over 50 institution of higher education.

#### Presenter(s): Noel Landuyt

## In This Course & Beyond: Assessing an Intervention Using Matched Sampling *Poster Presentation;Assessment and Evaluation | Poster 18*

As instructors make major changes in a course, they are likely to turn to IR professionals to help assess the effectiveness of their interventions. With introductory and gateway courses, it is especially important to track students' performance in subsequent courses in the curriculum. This poster presentation will demonstrate how IR professionals can assess an intervention's effect on course outcomes and also in subsequent courses using SPSS case control matching.

Presenter(s): Joseph Finke; Yih Tsao; Yumeng Liang

## Increasing Course Evaluation Response Rates Using a Research-Feedback Loop Poster Presentation; Assessment and Evaluation | Poster 8

We will describe implementation of a research-feedback loop with the aim of increasing student participation in course evaluations. We first assessed faculty utilization of strategies intended to promote student participation and identified those associated with higher response rates at our institution. We will describe the process of sharing these findings with faculty and conducting a follow-up survey to assess whether faculty subsequently modified their strategies and test for any changes in student participation. The strategies discussed are important since the quality of course evaluations depends on student participation. Furthermore, this example of implementing a feedback-research loop is relevant for IR functions in other domains.

Presenter(s): Benjamin Pichlmaier; Caroline Seguin

## Informing Investment: CUPA-Based Approaches to Faculty Salary Increases Poster Presentation; Decision Support | Poster 6

In the Summer of 2022, the new president of Northern Arizona University announced a three-year plan to raise all salaries by at least 10%. The provost's office has been tasked to determine how to raise faculty salaries, which gave us an opportunity to re-evaluate the way we use CUPA data to calculate benchmarks for each discipline and rank. This poster session will share our work in quantifying the effects on CUPA-based salary goals by using different institution comparison groups, tenure groups, and scaling factors. We look at switching from High Research institutions to Public Doctorate institutions and at splitting CUPA salaries to tenure-track only and NTT Teaching instead of the combined NTT/TT salaries. We compare the change in medians, NTT:TT median ratios, and the most affected disciplines and ranks.

Presenter(s): Crystal Graziano; Sam Yingling

Institutional Reporting: A Collaborative Approach *Poster Presentation;Educate | Poster 26* 

Our institution has implemented an IPEDS "IPR" (In-Progress Review) schedule to improve data quality and awareness about publicly reported data points. The timeline includes the IPEDS survey schedule plus additional relevant external submissions. Key data stakeholders review the current year's proposed dataset, where it is analyzed and compared to previous years. Any issues, discrepancies, concerns, or updates/changes are noted, discussed, and agreed upon as a group. The IPR process has brought visibility, transparency, and confidence to the institution's externally reported data and has resulted in fewer errors and inconsistencies.

Presenter(s): Kellie Delmonico; Brian Novoselich

### Measuring Post-Graduation Preparation: Challenges Surveying Employers Assessment and Evaluation; Poster Presentation | Poster 30

This poster presentation will highlight the lessons learned and complexity of collecting data from employers regarding recent college graduates' early career preparation and success. Higher education faces increasing challenges to its value, purpose, and return on investment. Institutions are exploring better ways to assess employment preparation to inform program improvements and make the curriculum more relevant to employer needs. This poster presentation will review a pilot survey conducted with elementary school principals to assess early career teacher preparation and success. The lessons learned from this pilot survey highlight the challenges of creating a sample, developing appropriate questions, and gathering survey data from employers. Suggestions regarding less complex alternatives for collecting data on program quality and graduate preparation will be addressed.

#### Presenter(s): David Tanner

### **Outcome Measures for Tracking Doctoral Student Success**

Poster Presentation; Assessment and Evaluation | Poster 20

The poster presentation will cover the process and practice of tracking doctoral student milestones: calculating doctoral outcomes in SAS and visualizing doctoral student success via a Power BI dashboard. Focusing on identifying milestones and measuring time to reach milestones, the poster will present divergent trajectories of both research and professional doctoral students at an R1 university. The presentation will also address the importance of coordinating with stakeholders to have a deeper understanding of doctoral admission policies, program requirements and classifications, and data availability in order to present the doctoral experience and outcomes in a more accurate and inclusive way.

#### Presenter(s): Xiaoying Liu; Zhong Zheng

### **Predicting Step 1 Performance**

Poster Presentation; Assessment and Evaluation | Poster 12

This presentation will examine an analysis that was conducted in order to identify the predictors of performance on the Step 1 (licensing) exam among medical students at a public university. This presentation will explain how to convert logistic regression coefficients to a probability interpretation, which makes it easier to understand and explain the results of a logistic regression analysis. Participants will learn how to conduct and explain the results of similar analyses.

#### Presenter(s): Paul Sturgis

## Strengthening Graduation and Employment Outcomes in Career and Technical Ed *Policy;Poster Presentation | Poster 24*

In many states, community colleges are the main source of education and short-term training in technical fields, often encapsulated in postsecondary certificate programs. However, some states, including Ohio, offer a parallel public postsecondary system for earning short-term credentials in career and technical fields. In this study, we use mixed quantitative and qualitative methods to investigate the superior graduation and employment rates of students in Ohio Technical Centers (OTCs) as compared with students in Ohio Community Colleges (OCCs). We find that the favorable outcomes of OTCs are not an artifact of serving different students and do not come at the cost of credentials with lower labor market value, suggesting different institutional policies and practices in OTCs as the likely cause of superior outcomes. We identify some of these policies and practices, and derive from our findings a set of recommendations to improve career and technical education in other institutions. Contributing Author: Peter Bahr and Rooney Columbus

Presenter(s): Sarah Woodruff; Jennifer May-Trifiletti

### Transforming Enrollment Management Using Visualizations

Poster Presentation; Decision Support | Poster 28

The University of Colorado Boulder (CU Boulder) wanted to improve the first-year cohort admission cycle by having a centralized resource for campus stakeholders. Presenting actionable information visually provides stakeholders with an easily digestible format to understand the entire admission cycle for firstyear students. Mari and Rob collaborated with CU Boulder stakeholders to develop visualizations of incoming first-year students. These visualizations show applicant yield probabilities of students, projected scholarships awarded for each merit scholarship, and projected confirmation, matriculation, and enrollment numbers by school/college/program and residency. Efforts by campus stakeholders resulted in the University of Colorado Boulder enrolling a fall 2022 first-year cohort of 19 students, or 0.3% different from enrollment targets.

Presenter(s): Mari Dark; Robert Stubbs

## 1:15 P.M. – 2:15 P.M.

## Dessert break and networking in the Exhibit Hall

Exhibit Hall C

Join us for a Dessert break and networking in the Exhibit Hall and be sure to visit sponsor booths while you're there! Prize winners from the Wednesday Networking Game will be announced, you must be present to win.

## 02:30 PM - 03:15 PM

### Analyzing Qualitative Data Using Text Classification

Affiliated Organization Best Presentation; Data and Technology | Meeting Room 13

Qualitative data provides valuable insights to institutional researchers, which is difficult to achieve through quantitative data. Despite the advantages, institutional researchers are still reluctant to analyze qualitative data since the analysis process is time consuming. This presentation will explore text classification, a natural language processing method that quickly classifies narrative responses into topics, which was used to efficiently analyze a Common Data Set Feedback Survey. Attendees will learn about the pros and cons of the techniques, the logic of implementing the techniques to efficiently classify survey responses with topics (no mathematics discussions), as well as strategies used for data cleaning.

#### Presenter(s): Jung-ts Lin

## Considerations for Measuring Students' Socioeconomic Status Discussion Group; Assessment and Evaluation | Meeting Room 24

Traditional measures of socioeconomic status (SES) use proxies for economic capital such as low-income status and federal financial aid. But these do not include many of the theoretical considerations of SES and may exclude students from being recognized as low SES in our studies of student success. Facilitators in this session will compile several SES- and cultural capital-related frameworks, survey items, and data analyses and will present several alternative ways to measure SES in the field of higher education. Participants will be encouraged to share their experiences assessing student SES as we collectively discuss the advantages, limitations, and potential challenges with using a variety of methods for assessing student SES.

Presenter(s): Allison BrckaLorenz; Tien-Ling Hu

## Does Student Involvement Bridge the Equity Gap in Student Success?

Decision Support;Featured Session;Speaker Session | Meeting Room 19

Student involvement has consistently appeared as a significant predictor for commonly measured student success metrics, such as retention and graduation. This collaborative project examines whether there are any equity gaps in student involvement in Registered Student Organizations (RSO) and the impact of such involvement on student success metrics measured by retention and 4-year graduation rates. Participants of this session will have an opportunity to explore the impact of student campus involvement on student outcomes; learn about our approaches to control the selection bias using K-Nearest Neighbor (KNN) algorithms procedure; discuss how the findings of this project can be used to inform student affairs administrators' decision-making in designing programs and assessing the effect of student involvement in RSOs; and have an opportunity to share their practices in analyzing the impact of campus involvement or alike on student outcomes.

Presenter(s): John Crooker; Qingmin Shi; Ashley Guyer

## Earnings of College Graduates by Data Source: PSEO or College Scorecard *Speaker Session;Data and Technology | Meeting Room 12*

With multiple sources of employment outcomes data, the institutional researcher has to understand the advantages and limitations of each source. Following an overview of existing sources of data on employment outcomes, this presentation focuses on the comparison between College Scorecard and Post-Secondary Educational Outcomes (PSEO) data on median earnings of Bachelor's degree completers one year after graduation or entering repayment. Use of a cross-classified model allows the exploration of differences in median earnings by institution and by field of study. Disciplines and institutions with substantial differences in median earnings by data source—PSEO or College Scorecard—are discussed during the session. Dashboards with College Scorecard and PSEO data are used to illustrate some of the findings of the study.

#### Presenter(s): Iryna Muse

## Leading Data Conversations through the Lens of Equity Leadership;Speaker Session | Meeting Room 16

With equity becoming an increasingly important topic for higher education institutions, institutional

researchers and assessment professionals often engage in dialogues on closing equity gaps, which are present in student success measures. This presentation shares a community college's practices in using and communicating data as a tool to advance equity and to build capacity for achieving a greater level of success for all students. Practical examples about how an IR office works with campus constituencies to foster an equity-minded data practice will be discussed at the session.

#### Presenter(s): Shuang Liu

## New Retention Insights: National Student Clearinghouse & Machine Learning Speaker Session; Assessment and Evaluation; Featured Session | Meeting Room 11

This presentation demonstrates how National Student Clearinghouse data can be used to answer the key hypothetical retention question: "If our student(s) had chosen to attend a different institution, would they have been more (or less) likely to persist?" Presentation topics will include National Student Clearinghouse data cleaning and preparation, machine learning tools to predict student retention, and real-world examples of how to communicate results to university leaders. Attendees will discover how they can use National Student Clearinghouse data to help their institution answer this hypothetical question. They will learn how to assess their institution's ability to retain students of varying demographic, socioeconomic, and academic qualities and how to validly compare retention rates to other institutions using NSC data.

### Presenter(s): Steven Sherrin

### The LEADing Edge of IR Speaker Session | Meeting Room 10

Last year, we launched AIR LEADs (Leadership with Evidence, Analytics, and Data). Join us to explore the six central ideas around which the course is built. We will engage together in an activity focused on one of those ideas.

#### Presenter(s): Jeremy Goodman

## Tools and Strategies for Communicating Return on Investment *Educate;Speaker Session | Meeting Room 14*

Institutional data professionals are increasingly called upon to provide evidence for return on investment (ROI) of a college education. This session will explore various techniques for collecting ROI data and how to communicate this information to diverse audiences, including families, leadership, and policymakers. Presenters will share examples of graduation surveys that collect ROI information, public earnings data from external sources, and academic literature on quantifying the externalities of higher education. Presenters will then facilitate a discussion among attendees about how to embed this information in communications, including student financial education and institutional scorecards. The objective of this session is for institutional research professionals to have more resources and techniques for communicating ROI to different stakeholders.

Presenter(s): Tori Rehr; Erica Regan

## Tracking Tenure-Track Faculty Retention, a Dashboard Approach Speaker Session; Decision Support | Meeting Room 23

The Tenure-track Faculty Retention Dashboard concept came to light as USF has the mission to ensure diversity, anti-racism, and equity within its community. This dashboard works as a tool to visualize the career path towards tenure accomplishment and to help ensure the achievement of the community goal. The analysis process involves identifying the data, and cleansing and transforming the identified data to build a model to discover the career-progression trend to improve faculty retention. Internally, this dashboard is capable of breaking down into individual levels to pinpoint relevant issues. A similar approach can be used to track career paths, retention, and attrition of any type of faculty or staff in postsecondary education institutions.

#### Presenter(s): Adam Caskie; Michael Bolen

# Using Dashboard Tools to Create a "One-Stop Shop" for Academic Program Data Speaker Session; Data and Technology | Meeting Room 22

No matter what tools IR offices use to report and share data, disparate data types are oftentimes housed in different reports and areas making it difficult for data users to quickly and easily access the key data points they need. How can we bring these data together in one place to simplify the user experience? This presentation will describe our approach for creating and using dashboards to help solve this issue. This solution offers data users a one-page or "one stop shop" resource for easily finding much of the key data they need. We will demonstrate our example of a dashboard that we created to provide a one-page summary for all of our Master's program data. The presentation will describe the process of creating this dashboard, which succinctly summarizes many data points, including tuition, units, admissions, enrollment, and employment outlooks. Specifically, we will show how this example can, and is, being applied in other contexts.

Presenter(s): Mark Chimel; Melissa Baker

### Using Enrollment Analytics to Support College Planning and Budgeting Speaker Session; Data and Technology | Meeting Room 21

The Division of Enrollment Management at UCI has led the institution in the development of a holistic Enrollment Management Analytics (EMA) system that centralizes student enrollment data and provides a suite of analytic tools to support the full range of enrollment management and student success. The system is used to support a broad range of the institution's operational planning and student success initiatives including admissions, enrollment,, student success, school planning, and post-graduation tracking. The development of a centralized EMA system provides critical business intelligence to help improve students' time-to-degree through effective management of bottleneck courses; improves student retention and graduation rates through early identification for intervention; and supports academic operations through predictive analytics for section planning.

Presenter(s): Jovonte Willis; Tony Hwang

### Using R to Automate and Reproduce IR Works

Speaker Session; Data and Technology | Meeting Room 9

IR professionals always work with annual reviews and surveys, involving potentially automatable works. With the help of R, our office automated the bulk of reporting and developed the freedom for in-depth interpretations and insightful analysis for decision-support. This session shares processes our office went through to improve efficiency and advance analytical performance by using R. Example projects will be shared, including data freezing, IPEDS reporting, survey analysis, and producing fact-book infographics and accreditation reports. This session highlights key features of R for cross-checking data from different data warehouses, reproducing data visualization in annual fact-book and survey infographics, and ensuring integrity and consistency in data reporting. Attendees will learn strategies to handle and report data effectively with R. Resources of sample codes will be shared to help interested attendees develop their reproducible IR projects.

#### Presenter(s): Linli Zhou

## 03:30 PM - 04:15 PM

## A Text Mining Tool to Get Relevant Insights From Survey Responses

Data and Technology;Featured Session;Speaker Session | Meeting Room 23

University staffs, faculties, and students are often tasked with conducting surveys for research and administrative purposes. In many cases, these surveys consist of open-ended questions which offer rich, qualitative data that have the potential to provide unfamiliar insight on a topic. Given a large sample size, this type of question may end up having a large amount of text responses which might not be feasible for researchers to read through before they can extract any valuable insight. Despite having

modern computing power and advanced text mining techniques, analyzing text responses still involves several steps of pre-processing, cleaning, and applying statistical procedures, and this can be very laborintensive particularly for researchers who conduct several surveys each year. In this session, we will share and demonstrate a tool that will allow you to easily analyze text responses in a survey with minimal effort.

#### Presenter(s): Ayubur Khan

#### Breaking Down Silos Using Data Visualization

Affiliated Organization Best Presentation; Decision Support | Meeting Room 21

This session provides attendees with an understanding of the steps take by Henderson State University to identify, develop, and implement in-depth analysis for their Higher Learning Commission Quality Initiative Project. Issues addressed will include the work of the IR/IE team in communicating the project's goals and assistance provided by the System Office during the development phase. Attendees will learn the struggles and success faced during this process and how to overcome data silos through the use of effective data visualization.

Presenter(s): Ginger Otwell; Wrenette Tedder; Eric Atchison

## Collaborative Decision Support: Working Together to Do More With Less

Speaker Session; Decision Support | Meeting Room 10

As IR professionals, we collaborate with decision makers, applying our analytical tools to university business problems. In this presentation, we share our six steps to successful decision support: (1) Understand the business and the current challenges. (2) Explore the available data. (3) Apply analytical tools. (4) Recommend solutions. (5) Work with operational staff to implement the chosen solution. (6) Evaluate and adjust. We share a case study in enrollment management, showing how we applied this framework to supporting admissions and scholarship decision makers. The challenge was to admit and scholarship students in the face of an abrupt reduction in test score availability and a large increase in the number of applications with high school GPAs of 4.0 or above. They provided a problem; we brought the analysis and the algorithms. See how this collaborative approach can strengthen IR decision-support for you too.

Presenter(s): Bridgett Milner; Douglas Anderson

## From Talk to Walk: The Journey of Student Success at an Institution Speaker Session; Decision Support | Meeting Room 13

From creating a few graphical charts to storytelling, institutional research has evolved dramatically in the ways it supports decision-making processes in higher education institutions. At many data-oriented institutions, data dashboard literacy is not limited to the office of institutional research. Other departments now have individuals who are either data-savvy or at least capable of using data dashboards for their respective needs. Although a challenge, leveraging this extended data literacy can lead to more powerful and meaningful data dashboards. In this presentation, we will narrate the story of Emory University's student retention efforts and how we leveraged other departments' data and domain knowledge. The audience will learn different techniques that they can apply at their own institutions to

improve inter-departmental collaborations along with examples of data dashboards and how these collaborations can help combat data and methodological gaps in student retention work.

#### Presenter(s): Smriti Ingrole

## Hit by a Bus: Documentation in IR as Risk Management & Career Development *Speaker Session;Leadership | Meeting Room 22*

Hit by a bus? Win the lottery? How about asking for a raise? Comprehensive process documentation in institutional research minimizes risk, improves project outcomes, and can smooth transitions. But thorough documentation can also be a powerful tool for professional advocacy, providing concrete evidence for targeted skills development and career performance metrics. This session shares practical recommendations on how to incorporate documentation regularly into institutional research work. The presentation includes an overview of documentation best practices from risk and organizational management using tools you already have, a discussion on institutional memory, and practical recommendations on leveraging documented performance data to advance your career. After this presentation, you can plan for the worst, but document for the best.

#### Presenter(s): Jillian Morn

## Machine Learning Pipelines for Improving Retention: Privacy and Procedures Speaker Session; Data and Technology | Meeting Room 11

In applying predictive analytics to the research of student learning outcomes, data transformation and model specifications are crucial aspects of improving predictive power. However, these aspects as well as the introduction of novel types of data are accompanied by new challenges to data privacy. In the past year, we developed models to identify students at risk of attrition, carry out interventions, and raise graduation rate. The models utilize traditional data such as demographic, academic, and financial aid records, as well as alternative forms such as engagement and campus interaction. In this session, we will discuss the construction of our machine learning pipeline, which includes data collection and processing, model training and evaluation, parameter tuning, and deployment. We will also discuss the navigation of data privacy issues, variables of most concern to campus communities, and collaboration with stakeholders such as the Data Governance Committee and Privacy Office.

#### Presenter(s): Eric Yang; Melaku Woube; Nena Beecham

## Minding the Grades: Lessons Learned From Building a Class Dashboard Speaker Session; Data and Technology | Meeting Room 20

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 can 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 dashboard.

#### Presenter(s): Hanlong Fu; Susan Moreno

## NACCC Survey Development: Centering Respondents' Racialized Experiences Speaker Session; Data and Technology | Meeting Room 14

Racism is a complex structure, not an individual event. Because of this, the National Assessment of Collegiate Campus Climate (NACCC) student, staff, and faculty surveys were designed to deconstruct racism by understanding the different aspects of campus racial climate and how racism might be embedded in the institution's structure. In this session, we will introduce the content and selected factors of the NACCC surveys, the guiding principles for the NACCC project creation, and the approach the USC Race and Equity Center took to develop surveys that emphasized centering respondents' racialized experiences and humanizing the data.

#### Presenter(s): Ya-Chi Hung

# One State's Journey to Measure and Set Statewide Attainment Goals *Speaker Session;Decision Support | Meeting Room 9*

As part of accountability conversations in higher education, states have been asked to create relevant attainment metrics and, in some cases, tie funding to these metrics. This session will review how one state developed new attainment metrics following a system merger that brought together 16 public institutions that range in type and mission from open admission, technical, non-degree-granting institutions to Research 1 selective admissions institutions. The presenters will discuss the development of metrics that measure access, completion, and workforce alignment; how data are presented to stakeholders; and how metrics are tied to funding in the state.

#### Presenter(s): Laura Zemp; Spriha Pradhan

### Reducing Student Summer Melt Using Tableau With Actionable Information Speaker Session; Decision Support | Meeting Room 16

University of Colorado Boulder (CU Boulder) wanted to reduce summer melt and fall term no-show rates for incoming first-year students. Presenting actionable information visually provides stakeholders with an easily digestible format to understand students likely to melt during the summer or be a fall term no-show. Mari and Rob collaborated with CU Boulder stakeholders to develop visualizations of incoming first-year students to show progression through summer orientation, the New Student Survey results, and progress toward registering for fall term classes. These visualizations enabled CU Boulder stakeholders to determine which student to contact to provide needed assistance.

#### Presenter(s): Mari Dark; Robert Stubbs

## Retention Elasticity (The Relationship Between Cohort Size and Retention) Speaker Session; Decision Support | Meeting Room 12

The purpose of this study is to determine if there is a relationship between retention rate and cohort size. Furthermore, this study introduces, defines, and utilizes a new concept, Retention Elasticity. This concept uses percentage changes to determine the responsiveness of student retention to a change in an institution's cohort size. The following research questions are addressed in this study: Is there a significant relationship between the percentage change in cohort size and the percentage change in

retention rate? What is the average Retention Elasticity for the sampled four-year institutions? Five years of cohort data from 10 institutions were collected using the Integrated Postsecondary Education Data System (IPEDS). Pearson's correlation, linear regression, and elasticity calculations were used for analysis. Results indicated that there was a significant negative relationship between percentage change in cohort size and percentage change in retention rate.

#### Presenter(s): Mondrail Myrick

## The Next Steps in Building AIR's Leadership Capacity for Continuity and Effectiveness Leadership;Panel Session | Meeting Room 1

Join members of the AIR Board ad hoc committee on Board Structure for Accountability and Effectiveness in an interactive session to discuss the recently approved changes to the AIR Constitution and Bylaws and how these changes are being implemented. Learn how these adjustments, aimed at diversifying leadership, providing continuity, and enhancing the productivity of the AIR Board of Directors and Nominations & Elections Committee (NEC), will be put into practice. This session encourages you to play an active role in AIR's growth and improvement. Share valuable insights and collaborate on effective strategies to better serve our members and stakeholders in the organization's future.

Presenter(s): Heather Kelly; Mary Lelik; Junelyn Peeples; Ellen Peters; Michael Urmeneta; Karen Webber

## Using Analytics to Recruit the Students of the Future

#### Speaker Session; Data and Technology; Featured Session | Meeting Room 19

Community colleges face numerous challenges nationwide: a 15% average decline in enrollments, a shifting demographic landscape, and growing public skepticism of the value of higher education. Higher education institutions must have a robust data and analytics strategy to accurately forecast enrollment projections and tailor their approach to recruiting. Reynolds Community College employed a comprehensive analytics and data strategy to pull out of an enrollment nosedive, increase enrollment numbers of adult learners, provide greater access to underrepresented students, and boost retention. Learn how centering equity in your data strategy helps enrollment offices set realistic goals and better serve students.

#### Presenter(s): Melanie Boynton

## Wrangling and Analyzing the Geographic Data of Underserved Students Speaker Session; Decision Support | Meeting Room 26 C

Goals of supporting underrepresented students and addressing equity gaps are often limited by extant data. As a supplement to institutional sources, we provide an evaluation of several secondary data sources—each tied to geographic attributes and provided by US government agencies. We discuss the procurement of these data and their uses in key areas, such as overcoming institutional data limitations, providing analytical insights for the evaluation of programs and policies aimed at students of different backgrounds, and assessing the effect of potential policy changes. We also look at the relationship between these data and first-year performance, retention, and other analyses.

Presenter(s): Jesse Talley; Stefano Fiorini; Gina Deom

## 04:30 PM - 05:15 PM

## A Conversation with AIR Leaders: Shaping the Direction of Our Profession *Panel Session | Meeting Room 25 B-C*

As colleges and universities face a future that increasingly requires data-informed decision making, the importance of Institutional Research, Institutional Effectiveness, and related organizational analytics functions are clear. The Association for Institutional Research (AIR) has a pivotal role to play in helping our community members leverage data to amplify student and institutional success, promote diversity, equity, and inclusion, cultivate leadership for the IR/IE/Analytics professional, and in so doing, demonstrate the value of our work. Join the AIR Board's Future of IR Committee as we share the key themes that shape our future and share your ideas as we unpack the opportunities and challenges inherent in achieving them.

**Presenter(s):** Laura Palucki Blake; Jonathan Gagliardi; Maren Hess; Karen Vance; Eric Atchison; Lisa Anh Nguyen; Brent Drake

#### AI and Advanced Analytics: Recent Developments and Implications for IR/IE Speaker Session / Meeting Room 10

Join the guest editors of a forthcoming special volume of Professional File and other panelists to explore the quickly evolving role of AI/ML and advanced analytics and implications for IR/IE. This will be an interactive session in which the audience will be invited to weigh in on the topic and provide your own assessment and suggestions.

Presenter(s): Henry Zheng; Victor Borden; Steven Sherrin; Karen Webber

## Course-Level Evaluation of an 8-Week Calendar Implementation After Two Years

Speaker Session; Assessment and Evaluation | Meeting Room 16

A midwestern 2-year college undertook a course-level analysis of student success in courses two years after transitioning to an 8-week calendar. Generating a study data set that only included courses that might have changed formats by itself generated more positive results. Course success changes by gender, race/ethnicity, and age of students will be shared. A high-level overview of results for General Education courses will be provided, classifying courses into those that saw improved success (17% of courses evaluated), no change in success (73%), or declines in success (10%). Implications for evaluation procedures as well as findings of relevance to colleges considering implementing an 8-week calendar will be discussed.

#### Presenter(s): Viktor Brenner

How the Core Education Model and Its Assessment Evolve at a Technical College Speaker Session; Assessment and Evaluation | Meeting Room 13

This session looks at how a 4-year technical institution involved the whole campus to revamp the institution's general education model and create a new plan to assess the foundations in the new curriculum. Specifically, the session will elaborate on how program faculty become the major player in the assessment process and how the assessment data are shared and utilized for program improvements. This session will offer a unique approach to general education assessment that other institutions, especially technical institutions similar to Penn College, can adapt for their own use.

#### Presenter(s): Juan Zhou; Brian Cygan

## Integrating Cluster Analysis to Select Peer and Aspirant Comparison Groups Speaker Session; Decision Support | Meeting Room 11

As our institution began preparing for a decennial reaffirmation, it seemed an appropriate time to reexamine our peer and aspirant comparison groups. Our institution had made great strides in improving graduation rates and a variety of other metrics, and our current peer and aspirant groups no longer seemed to "fit." This session will describe our institution's selection process that involved stakeholder input and cluster analysis to select peer and aspirant comparison groups that accurately reflected where our institution was currently as well as where our mission and strategic plan would take us in the future.

Presenter(s): Angela Bryan; Christophe Lizen; Jonathan Lee

## Making Sense of Community Engagement Data

Speaker Session; Assessment and Evaluation | Meeting Room 21

There have been increased efforts to document and collect community engagement data at higher education institutions (HEIs), especially since the introduction of the Carnegie Elective Community Engagement Classification and the expansion of internal and external grants supporting institution-community engagement. This presentation will address the importance of contextualizing community engagement data by identifying critical information and datasets to consider for meaningful assessments and interpretations. Lastly, the presentation will include building an interactive dashboard to engage colleagues in tracking and assessing their community engagements.

#### Presenter(s): Victor Borden; Seonmi Jin

## Postcollegiate Outcomes of Students From Rural Backgrounds: Equity Matters Decision Support; Speaker Session | Meeting Room 12

The rural-urban gap in college attainment, especially for those from lower income backgrounds, is growing. This study presents findings from the University of Minnesota Postcollegiate Outcomes Project, a multi-year project focused on outcomes of alumni from 2007–2019 utilizing State Unemployment Insurance data combined with National Student Clearinghouse data and university records. This multi-faceted longitudinal approach to alumni outcomes allows for enough time to elapse before we begin to assess postgraduation success. We examine college value through the lens of the measurement framework proposed by the Postsecondary Value Commission (2022) to help colleges and universities create equitable value for all their students.

#### Presenter(s): Ronald Huesman; Helen Horner

# Sharing Assessment Results via Interactive Data Visualizations & Dashboards Speaker Session; Data and Technology; Featured Session | Meeting Room 19

IR offices often conduct and report on a variety of internal surveys for students, faculty, and staff, and disseminating results in an interactive form can be a challenge. In an effort to re-envision the presentation of survey findings, members of the IR team at Carnegie Mellon undertook a process to transition from overwhelming PDF reports to interactive self-service dashboards. In this session, presenters will share their experience using examples from university-wide assessment projects. They will highlight best practices for cleaning and shaping data, unique visualization techniques, and balancing access to potentially identifiable information. Considerations related to dashboard dissemination and support practices for users of the platform will also be shared.

#### Presenter(s): Mark Chimel; Shannon Foster

## Skills Builders: Successful Short-Term Course-Takers in Community Colleges Decision Support; Speaker Session | Meeting Room 23

Although "student success" is often synonymous with credential attainment, many community college students enroll in pursuit of goals other than completing a degree or certificate. This session introduces participants to a subset of successful non-completers called "skills builders." Skills builders enroll for a limited time and take few courses, typically in career/technical fields. Yet skills builders complete their courses at high rates, earn high GPAs, and experience earnings gains from their course-taking. We share our findings on skills builders' characteristics, course-taking, and labor market outcomes. We then demonstrate how institutional researchers can replicate our identification and analysis of skills builders using their own data. Colleges can use this information to better advise skills builders, promote equity in skills-builders' course-taking, and communicate to stakeholders about a group of highly successful non-completers. Contributing Authors: Peter Bahr, Yiran Chen, and Kathy Booth

#### Presenter(s): Jennifer May-Trifiletti

#### The Pandemic's Impact on Student Survey Instruments and Results Speaker Session; Assessment and Evaluation | Meeting Room 9

For decades, Tufts University's Office of Institutional Research has collected undergraduate and graduate student data by administering annual experience and exiting student surveys. In this presentation, we will discuss the impact the COVID-19 pandemic had on both how we approach our survey work and on the survey results themselves. In the first part of this presentation, we will discuss the pandemic's influence on our approaches to student surveys—both the instrument and analyses. In the second part, we will discuss our findings after examining student perspectives about Tufts and their experiences before the pandemic, at the height of the pandemic, and in the current day. We will conclude with a discussion about the implications of this work and the future of these efforts. How do we ensure that we are effectively evaluating the student experience as the pandemic and its impact evolves?

Presenter(s): Rebecca Hatch; Kathleen McGreal; Dawn Geronimo Terkla

# University Carrying Capacity: When Is Growth Too Much of a Good Thing? *Speaker Session;Decision Support | Meeting Room 14*

Carrying capacity (in the context of higher education) is the optimal level of education and research activities that an institution can conduct effectively based on the institution's mission, operating principles, academic expectation, and available resources. The resources devoted to serving these missions include space, faculty and staff, financial investment, technology infrastructure, and support services. Analyzing opportunities for growth and recognizing the institutional constraints on growth are important for strategic planning and operational decisions. In this session, we will discuss what types of resources should be included in a carrying capacity analysis. We will also share metrics to consider when evaluating resources and activities on your own campus. Finally, we will share how we presented these findings to senior leadership at our own institution using a variety of means, including Tableau dashboards, presentation slides, white papers, and executive summaries.

Presenter(s): Melissa Baker; Matthew Hoolsema

## 04:30 PM - 05:30 PM

Aligning Degrees to Workforce Needs: Three States' Experiences (GA, TN, LA) *Panel Session;Policy | Meeting Room 26 C* 

This session will highlight how three states have used their degree-authorization process to enact reforms to improve the alignment of academic degrees with state workforce priorities. In the past, graduation rate was one of the key indicators of higher education's success. The goalpost has moved. More external stakeholders are defining success for higher education in terms of social mobility and employment outcomes. The use of labor market data, graduate outcome data, and occupation data is of increasing importance in justifying academic programs and new proposals for academic programs that can contribute to social mobility goals and better employment outcomes. Those attending this session will gain new insights into state policy making, how state workforce development priorities are driving system-level changes, and how data are at the center of state efforts to align academic programs with workforce needs.

#### Presenter(s): David Tanner; Julie Roberts

# Different Nations Yet Common Goals: Advancing IR in Canada and the U.S. *Decision Support;Panel Session | Meeting Room 20*

What are the common challenges and opportunities facing institutional research across the United States and Canadian higher education systems? What lessons can we learn from each other to benefit our students and our common goals of institutional success? Join us for a cross-cultural discussion on some of the most pressing issues facing our two countries' IR practitioners. Issues around accountability, analytic maturity, data literacy, equity data practices, and the importance of leadership will be discussed in ways that allow our attendees to not only deepen their understanding of the differences between our two nations' approaches to IR but also the areas for cross-border collaboration and cooperation. Come expand your horizons and join us for a fast-paced and immersive session.

#### Presenter(s): Jason Simon; Stephanie McKeown

### Leveraging Institutional Data for First-Generation Student Success

Panel Session; Decision Support | Meeting Room 1

With over one-third of currently enrolled students identifying as first-generation, dismantling barriers and creating accessible environments for success is imperative. As institutions enhance support for firstgeneration students, they have the opportunity to optimize the use of data in decision-making and continuous improvement. Institutional researchers have an imperative to support first-generation student success in the ways they collect, analyze, disseminate, and communicate first-generation student data. In this session, the Center for First-generation Student Success will facilitate a panel discussion featuring institutional research representation from a four-year institution, Achieving the Dream, and the Postsecondary Data Partnership. Participants from all institution types will leave with a better understanding of how various institutional data can be best utilized to elevate the first-generation identity and better advocate for first-generation students.

Presenter(s): Mary Fugate; Alexander Yin; Ken McVearry; Lisa Stich

## 05:30 PM - 06:15 PM

### **AIRUM Affiliated Organization Meeting**

Affiliated Organization Meeting | Meeting Room 16

AIRUM affiliated organizational meeting during the 2023 Annual AIR Forum.

## Annual Business Meeting of the Overseas Chinese Association of Institutional Research *Affiliated Organization Meeting | Meeting Room 9*

Annual business meeting of the Overseas Chinese Association of Institutional Research. Introducing new and current members to AIR leaders; review annual activity and financial reports; transition leadership to next group of elected officers; and network among members.

# Association of American Universities Data Exchange Auxiliary Meeting *Auxiliary Meeting | Meeting Room 14*

A topical discussion and updates on recent issues and policies related to the AAU Data Exchange, a membership organization of institutional research professionals in North America.

## Black IR Professionals Networking Event

Auxiliary Meeting | Meeting Room 15

Please join us for this informal networking event designed for Black IR professionals to meet and network with each other.

#### Graduate Student Gathering

Auxiliary Meeting | Meeting Room 10

Come and meet fellow graduate students who love data-informed decision making as much as you do! Along with a few higher education faculty members, we will share areas of interest for research and graduate study, possible ideas for research, and considerations to strengthen possibilities for publication.

## Michigan Association for Institutional Research Affiliated Organization Meeting *Affiliated Organization Meeting | Meeting Room 11*

Come join your colleagues from Michigan and beyond! Will we give updates on our annual conference, talk about issues both global and local, and then, of course, make dinner plans for those that want to chat with their colleagues further.

#### MidAIR Affiliated Organization Meeting

Affiliated Organization Meeting | Meeting Room 13

Networking meeting for MidAIR members. Speakers: MidAIR members

#### SAIR Affiliated Organization Meeting

Affiliated Organization Meeting | Meeting Room 12

Join the Southern Association for Institutional Reaseach (SAIR) to hear updates from the SAIR Board. We will provide updates on the annual conference, professional development, and opportunities to get involved.

## 06:30 PM - 07:15 PM

#### CIRPA Affiliated Organization Meeting

Affiliated Organization Meeting | Meeting Room 12

The meeting is for the Canadian Institutional Research and Planning Association and friends who are attending the AIR conference. Other delegates are also welcome to join us.

#### KAIR Affiliated Organization Meeting

Affiliated Organization Meeting | Meeting Room 13

Kentucky Association for Institutional Research (KAIR) networking meeting. The meeting is open to all those who are associated with institutions of higher education that operate in Kentucky. Speakers: KAIR Board Members

#### **OAIRP** Affiliated Organization Meeting

Affiliated Organization Meeting | Meeting Room 11

The Ohio Association for Institutional Research and Planning is an organization of higher education professionals working in the areas of Institutional Research and Strategic Planning in the State of Ohio. Our members represent institutions serving the two-year public, four-year public, and four-year private market sectors. OAIRP is Ohio's state-level affiliate for both the Association for Institutional Research (AIR) and the Society for College and University Planning (SCUP). This session is an opportunity for Ohio IR professionals to network and build professional relationships within our state.

### **PNAIRP Affiliated Organization Meeting**

Affiliated Organization Meeting | Meeting room 18

Members of PNAIRP will gather to meet each other, get updates from the board.

#### TAIR Affiliated Organization Meeting

Affiliated Organization Meeting | Meeting Room 14

The Texas Association for Institutional Research (TAIR) is the professional organization supporting institutional research, planning, evaluation, and policy analysis in Texas institutions of higher education. Please join us to share ideas, discuss current events, ask questions, and network with your TAIR colleagues.

## Friday, June 02, 2023

## 08:00 AM - 08:45 AM

# A Collaborative Approach to Setting Enrollment Goals by Academic Unit Speaker Session; Decision Support | Meeting Room 21

This presentation focuses on an iterative, data-informed approach of disaggregating enrollment goals by academic unit to engender more meaningful campus collaboration. The approach represented a collaborative model involving enrollment management leadership, IR, and representatives from academic units. Establishing clear and agreed-upon strategic enrollment goals required considering enhanced recruiting models while also taking into account the academic and social contexts of institutions to ensure that enrollment and student success goals are attained. Given shifts in enrollment, setting meaningful goals also entailed considering external contexts affecting institutions and academic units such as the national decline in straight-from-high-school-to-college enrollment, the increase in stop outs (already enrolled students pausing their educations), competitive markets, demographic shifts, and students' perspectives on the value of a college degree.

Presenter(s): Michele Hansen; PJ Woolston; Steven Graunke

#### Barriers to Sophomore Success: Predicting Second-to-Third-Year Retention Decision Support; Featured Session; Speaker Session | Meeting Room 13

Although the 'sophomore slump' is a well-recognized phenomenon in higher education, the academy has focused relatively little attention on the experience of college sophomores. This presentation describes the efforts of one large regional state university to identity the main factors impeding successful student transitions from sophomore to junior year through a multi-variate regression analysis examining (among others issues) the impact of gateway courses, core curriculum requirements, and major changes. The logit regression model examines 10 undergraduate fall cohorts (~15,000 students) in light of over 50 independent variables. The aim of the project is the identification measures that will most efficiently bolster second-to-third-year retention, given increasing financial constraints at public universities.

#### Presenter(s): Jess Clayton

## Consequential Validity and Why It Matters for Institutional Research Decision Support; Speaker Session | Meeting Room 23

This session will present a brief review of consequential validity, which refers to the identification of intended and unintended consequences related to test development, interpretation, and dissemination. The ways in which institutional researchers measure, analyze, and interpret data can have potential costs, benefits, and harms—both intended and unintended. The consequences of decisions surrounding such data use, both intended and unintended, can have significant implications for higher education institutions and the constituents they serve. Consequential validity provides a framework for higher education professionals to consider social consequences alongside data usage. We will offer strategies to

incorporate consequential validity, discuss the associated benefits and challenges, and consider the role of institutional research in advancing social justice and ensuring a commitment to the success of all students.

#### Presenter(s): Jacqueline McLaughlin

## Data Literacy by Design at Ohio University Speaker Session; Educate / Meeting Room 11

Learn how the team at Ohio University used design thinking and a ground-up approach to launch a comprehensive training program for data users and then transformed those users into an active and engaged user community. View OHIO's Tableau-based "Data Navigator" dashboard, their user guides, and online data help center and hear how using good design principles in all aspects of your data community can improve users' data skills and confidence.

Presenter(s): Alyse Carter Schultz

### Forecasting Goals for Student Success Metrics in Accountability Reporting Speaker Session; Data and Technology | Meeting Room 19

As a state-wide accountability requirement, the university is required to report student performance on various student success metrics with proposed goals for the next five years. SAS Viya is used to build forecasting models to generate 5-year goals based on the institution's historical performance. Proposed goals are shared with campus stakeholders with analytics output and forecasting rationale to assist in institution-wide goal setting and strategic planning.

Presenter(s): Hennadii Balashov; Xiaoying Liu

## Hocus Pocus! Spells for Making Some Favorite (Non-Standard) Graphs Speaker Session; Decision Support; Featured Session | Meeting Room 10

In our analytic and reporting roles, it's critical that we share data with decision makers in a way that is easy and quick for them to interpret. Ideally, our presentation of data is also beautiful and memorable. To do this best, sometimes we need to employ charts and graphs that are not available in the standard Excel or Tableau dropdown menus. We have some favorites that have served us well. Some of these include scaled Venn diagrams, comet charts, bubble charts in Excel, interactive Excel displays that utilize "spin buttons," animated gifs for use in PowerPoint, infographics created with freeware, and many others. We'll share our use of these non-standard chart types, along with instructions on how to make them.

Presenter(s): Sasha Haywood; Bridgett Milner

#### Leading Indicators

Speaker Session; Decision Support | Meeting Room 14

While cohort-based outcome metrics such as completion rates tell us how the institution as a whole is performing over time, they are only the final sentence of a long story. Outcome metrics can't tell us why we are observing a trend, which students are impacted, and whether the steps we are taking for continuous improvement are working. In this session, we will show how we developed term-based, disaggregated leading indicators for these metrics. Using these indicators, we can (1) predict future performance; (2) inform stakeholders of issues in advance; (3) more quickly assess new initiatives; and (4) uncover and address equity issues.

Presenter(s): Jessie Winitzky-Stephens; Leonel Nieto

# Learning Programming for IR: Improve Work Efficiency & Enhance Creativity *Educate;Speaker Session | Meeting Room 16*

Switching between different software tools to pull, convert, calculate, and report a single set of data is both time-consuming and risky for institutional researchers. For example, software may not be fully compatible, resulting in unexpected data changes during formatting conversions. Programming offers an effective and accessible solution. This session will introduce Structured Query Language (SQL) to institutional researchers who want to learn about programming. The attendees will learn how to begin their self-learning journey, solve problems when encountering difficulty, and strengthen programming skills. The presentation will also address what beginners should do and should not do. The attendees will be given real-life examples of how institutional researchers can improve work efficiency using SQL. Through a strategic and empathetic approach, attendees will be empowered and inspired to acquire programming in their IR toolbox.

Presenter(s): Jung-ts Lin

## Modeling Further Education of Graduates With NSC Data in Power BI Speaker Session; Data and Technology | Meeting Room 22

Institutional Research and Technology & amp; Innovation collaborated to create a Power BI report on additional education graduates pursue after completing their degree. Multiple faculty requests to IR for post-graduation educational pursuits of departmental majors indicated the need for this information. Additional uses of the report and these data for other campus departments were identified. This session will share the process commencing with requesting data from the National Student Clearinghouse through data cleaning, model development, and creation of the final report. Beyond the development process, the presentation will include a demonstration of the report features and a discussion of the next steps for maintaining and updating the report.

#### Presenter(s): Laura Boyles; Pete Benbow

### Putting Success Initiatives on the Map: Persistence Lift and Cost for ROI Affiliated Organization Best Presentation; Decision Support | Meeting Room 12

In our effort to help our students, we put great energy into programs that focus on student success. However, measuring the impact student success programs are having on our students is challenging. We often rely on how those involved feel about how the program is helping students, and we point to a few examples who had positive experiences. But, we actually know little about the improvement of the actual outcomes, especially increased persistence. We know even less about how much money we are spending compared to our results. The goal of this project is twofold. First, analyze each student success initiative for its effect on student persistence. Using Civitas Learning's Prediction-based Propensity Score Matching (PPSM), we evaluate initiative efficacy without self-selection bias. Second, use budget data to measure the spend-per-student-served. We can then plot these two measures on a four-quadrant chart to get a graphical impact map of Return on Investment driving insight for growth.

#### Presenter(s): Kevin McMindes

# Rhetorical Situations for Data Communication: Roadmap to Data Transparency *Decision Support;Speaker Session | Meeting Room 20*

Data communication is still a challenge in higher education due to obstacles such as the lack of a culture of data sharing and transparency and the lack of data literacy among campus administrators. While preparing data deliverables and presentations, institutional researchers take many factors into consideration: What is the purpose of sharing the results? Who is the audience? How will the audience potentially respond? This speaker session presents a roadmap to navigate data-sharing contexts, incorporate diverse audience perspectives, and increase transparency. Attendees in this session will be able to identify potential roadblocks to transparent communication of data, learn the framework of the rhetorical situation, and use the rhetorical-situation roadmap for effective data communication.

Presenter(s): Ya-Chi Hung

# Using the Scorecard Field of Study Data to Determine Program Value *Speaker Session;Decision Support | Meeting Room 9*

Institutional leaders, policymakers, and other decision-makers are often asked to demonstrate the value of a higher education credential to students and families, taxpayers, and the general public. Earnings over time, earnings compared to debt, and other labor market outcomes are value metrics that have surfaced in recent years to hold colleges accountable. Participants in this session will (1) learn three ways to access College Scorecard earnings data, by CIP, using R; (2) examine the completeness of the Scorecard's Field of Study data using descriptive statistics; and (3) engage in a discussion on using the Field of Study earnings as a postsecondary value accountability metric.

Presenter(s): Bao Le

## 09:00 AM - 09:45 AM

# Analytics With Curated Datasets: Discovering New Insights With Tableau Speaker Session; Decision Support; Featured Session | Meeting Room 19

Institutions of higher education are drowning in data with already large datasets growing larger each day. But how are these datasets translated into actionable intelligence? One of the greatest strengths of visual analytics is being able to think differently about common and new campus issues. When we couple intentionally curated data with innovative visualization techniques, campus users are equipped to unlock powerful insights that lead to action. In this session, the University at Buffalo Analytics Team will share some custom data systems combining seemingly disparate sources and specific Tableau dashboard design techniques that have supported increased actionable intelligence on campus. Through developing intentionally curated data and visual storytelling techniques, the team has worked to better serve the campus community by addressing student flow, quick and rapid-question queries, point-in-time data display via flow concept, and dashboard navigation and user support.

Presenter(s): Shannon Mahany-Kulinski; Brian O'Connor; Mychal Ostuni

## Does Response Time to a Lead Impact Successful Recruitment?

Speaker Session; Assessment and Evaluation | Meeting Room 21

After a lead arrives in a university's customer relationship system, does the speed of response impact the likelihood of success at the following stages in the recruitment/admissions funnel: Contact, Interview Held, Applied, Enrolled? The session will explore/discuss the results of several logistic regressions applied to the main question, while attempting to control for multiple auxiliary variables that also likely affect success. The goal of the research is to provide the institution's Recruitment Team with actionable research findings on which to base changes in functional area policies and procedures. Given that recruitment practices are similar among higher education institutions, this research—and the method in which it was done—is relevant and repeatable in the IR community.

Presenter(s): Mark Mailloux

## Early-Semester LMS-Based Outreach to Increase Academic Advising Visits Speaker Session; Data and Technology | Meeting Room 10

Students who struggle early in a semester can often benefit from meeting with an academic advisor. We targeted outreach to students with low (

Presenter(s): Carl Grafe

# Enneagram Personality Types: A Tool to Enhance IR Communication & Outreach *Educate;Speaker Session | Meeting Room 9*

Do you ever feel a lack of connection with a colleague when trying to communicate data stories? Are they overwhelmed? Or wanting to jump right to action without listening to all you have to say? You may need to build the conversation around that person's motivations and fears. The Enneagram is a

personality framework that has gained popularity for applications in work settings. This session provides an overview of the nine Enneagram types and ways to apply them in IR and assessment. Attendees will leave with ideas for tailoring messages to individuals based on their Enneagram type in a way that encourages them to engage more fully in listening, discussing, and taking action around data.

#### Presenter(s): Linnea Stafford

## Examining Course Grades Through a Social Equity Lens

Speaker Session; Decision Support | Meeting Room 23

This session will inform attendees of key research findings about course grade distributions among variables such as race/ethnicity, gender, Pell-eligibility, and first-generation status. Data visualizations, which aid in identifying student achievement gaps within the intersectionality of key demographic measures, will be displayed. Results of inferential statistical analyses comparing final grade distributions in "gateway/student success" courses and non-gateway/student success courses for the past five academic years will be presented. Insights into reasons for the observed achievement gaps as well as possible programming to address the gaps will be discussed.

Presenter(s): Rebecca Patterson; Robert (Bob) Goldstein; Krista Young

#### **Extract IPEDS Data for Strategic Program Decisions**

Speaker Session; Decision Support | Meeting Room 12

Academic leaders often need to make data-informed strategic program decisions. Such as: "Is there a need for more graduates in this program in my region?"; "Should this program be online or residential?"; "How does my current program perform compared to other institutions in the market?"; "How do I allocate my resources to my existing programs?"; or "What advantage does my existing program have that I could use in marketing?". This presentation will demonstrate how IPEDS data can be used in answering academic program planning questions and how to effectively extract related data from the IPEDS database. Participants will learn how to make meaningful recommendations for decision making. Participants will also be able to build a similar data tool upon returning to their own institution.

#### Presenter(s): Sarah Gallimore

## How a Code-Free Analytics Platform Can Make Your Job Easier Speaker Session; Data and Technology | Meeting Room 20

Most Institutional Research offices are tasked with reporting institutional data to both internal and external audiences, and many do not have the staff or resources that it takes to complete all of this reporting. But, there is hope! The speakers will discuss how they have used publicly available tools to help institutions automate and streamline reporting, freeing up time and resources for more meaningful research projects. In addition to saving time, automating reporting request helps to ensure that the data being reported are consistent and accurate.

#### Presenter(s): Emily Coleman; Jen Cox; Gene Rinas

## Implementing a Cost Study Model to Support Academic Program Review

Decision Support;Featured Session;Speaker Session | Meeting Room 14

This presentation will describe the recent effort to implement a cost study model at Manhattan College. In 2022, Manhattan College successfully implemented its first-ever cost study model to account for the revenue, expenses, and margins attributed to each student major and all academic courses at the institution. Led by the Office of Institution Research, the institution underwent an unprecedented effort to combine several traditionally disparate data sources to provide a detailed financial overview of academic programs. This information has proven critical to make informed decisions across the institution related to academic program review and strategic planning for enrollment management. The presentation will describe how the data sources are incorporated into the cost study, how to build confidence in the model, how we communicated results with a variety of stakeholders across the institution, and what actionable insight we learned from this process.

#### Presenter(s): Rani Roy; Thomas Kirnbauer

#### Liberate Your Time—Accelerate With R

Speaker Session; Data and Technology | Meeting Room 11

Looking to speed up IPEDS submissions with the creation of text files? Want to programmatically create Excel or CSV files for accelerated mandatory state reporting? Trying to deliver consistent, individualized content for program assessment and review? You can do it, and so much more, with R! With the ever increasing demand for data coupled with decreasing budgets, institutional researchers are often asked to do more with less. This session will demonstrate how the College of Southern Idaho's Office of Analytics and Institutional Research has successfully increased output, data consumption, and usage across campus by liberating ourselves from the time-consuming nature of accountability obligations.

Presenter(s): Thomas Sharpe

## New Data Sources for Higher Education: Highlights From the Common App Speaker Session; Decision Support | Meeting Room 16

The Common Application made a major investment in data warehousing in in 2020. Since that time, in service of our mission of promoting access, equity, and integrity in the admissions process, we have released a number of analytic products to the public at large that provide unprecedented insights into this stage of the enrollment management funnel. In this session, we will share the timing and content of these products, and highlight some of our most impactful insights to date. As part of this session, we welcome your thoughts about how to improve Common App's analytic products and services.

**Presenter(s):** Mark Freeman; Trent Kajikawa; Preston Magouirk

# Surfacing Fresh Data on Student Success: High Impact Practices at OSU Speaker Session; Decision Support | Meeting Room 22

Several years ago, Ohio State University embarked on a journey to begin collating and reporting data on student participation in High Impact Practices (HIPs). HIPs are specific educational practices that "have been widely tested and have been shown to be beneficial for college students from many backgrounds," including undergraduate research, service learning experiences, and living/learning communities (Kuh, 2008). While individual elements of these data were already being gathered by many different groups at OSU, there was no unified source available to university leadership for tracking HIPs. In this talk, we will share our experience of bringing together disparate nuggets of data from across the University into a single, unified dashboard for tracking student involvement in High Impact Practices.

Presenter(s): Benson Lindsey; Jay Johnson

## Visualizing Logistic Regression Results for Non-Technical Audiences Speaker Session; Decision Support | Meeting Room 13

Communicating the results of a logistic regression to a non-technical audience can be challenging because the parameters are on a log-odds scale. This talk will explore several visualization options for presenting logistic regression results that are both interpretable and meaningful to college stakeholders. This talk will explore the strengths and weaknesses of each visualization, with special attention to the different ways they may align with stakeholder needs.

Presenter(s): Abby Kaplan; Keiko Cawley

## 09:45 AM - 12:00 PM

## Farewell brunch, awards celebration, and closing keynote

(Meal function included with conference registration); seating and service end at 10:45 a.m.

## Closing Keynote: Strengthening the Relationship between IR/IE and Senior Leaders: Insights from the Field *Keynote | Grand Ballroom*

An experienced and data-savvy panel of presidents and provosts will share their knowledge and insights on how IR/IE professionals can forge stronger relationships with their own senior leaders. The panelists will offer their wisdom and expertise as well as provide practical examples for better supporting senior leaders through actionable data, analysis, and contextual expertise. This interactive session will include opportunities for audience members to ask questions and seek feedback on their own challenges.

Presenter(s): Mary Ann Coughlin; Valerie Martin Conley; Monica J. Posey