

## **AIRUM Conference 2017**

### ***IR Reconsidered:***

### ***Leveraging Institutional Research Capital for Campus Success***

November 2-3, 2017

Hilton Minneapolis/St. Paul Airport-Mall of America, Bloomington, MN

### **Pre-Conference Workshop (Nov. 1)**

#### **IPEDS Workshop, Presented by IPEDS staff**

**IPEDS Data as the Public Face of an Institution** raises the level of awareness among higher education professionals about the importance of accuracy and consistency in data reported to IPEDS. Examples of real IPEDS data used in the public domain will be incorporated, enabling participants to understand how IPEDS data are used by governmental and non-governmental entities. This module includes presentations, discussions, exercises and demonstrations utilizing IPEDS data tools and resources.

**IPEDS Data and Benchmarking: Supporting Decision Making and Institutional Effectiveness** This workshop introduces the fundamentals of benchmarking as a measure of 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 of Data" section of 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.

Note: Participants are required to bring a MAC or PC laptop with wireless capability and Microsoft Excel.

## **Conference Sessions**

### **Keynote**



**Lisa Helmin Foss, Ph.D., MBA**  
**Vice President for Planning & Engagement**  
**St. Cloud State University**

### **Institutional Research as a Strategic Partner in Organizational Success**

If we are to believe the headlines in both higher education and mainstream publications, higher education institutions are on a downward trending path. Our business model is broken, our students aren't graduating and students and their families are questioning the value of a college education.

Much of this may be a bit of hyperbole, but it is a fact that institutions across the country are facing new operational and enrollment challenges that are requiring them to think differently about the business of higher education and how best to serve their students and communities. Leaders are turning to power of data to help them understand their campuses and to craft new strategies to support their long-term organizational sustainability.

As a result, leaders are asking for a different kind of institutional research officer – one that is a strategic partner in helping them to understand their institutions, students and environments and leverage that information to make better, more strategic decisions about their future.

The AIRUM keynote presentation will share approaches for developing strategic partnerships between the Institutional Research office and administrative and faculty leaders across their campus. It will discuss approaches to building and expanding the analytical capacity of your organization and how institutional research professionals can play a central role in leveraging data and analytics to drive positive organizational change.

About Dr. Foss: Lisa Helmin Foss, Ph.D., MBA, is the Vice President for Planning & Engagement at St. Cloud State University in Minnesota. She holds a Bachelor's Degree in Mass Communications and a Master in Business Administration from St. Cloud State University and a Ph.D. in Educational Policy and Administration – Higher Education from the University of Minnesota. Her dissertation topic was "Implementing Data Analytics as an Organizational Innovation in Colleges and Universities". She completed an American Council on Education Fellowship at The City University of New York and LaGuardia Community College during 2015-16, and she completed the Harvard Graduate School of Education's Management and Leadership in Higher Education institute. She presents frequently at the locally, nationally and internationally on change management and data analytics in higher education.

## Presentations

### **Exploring Campus Climate - The Process of Transforming Difficult Questions into Actionable Data**

*Isaacson, Molly.*

Abstract: A climate study is an effective tool for a university. When created from scratch with collaboration from faculty, resources are pooled, valuable skills are shared and a highly useful benchmarking tool is poised to gather valuable data for evidence-based decision making.

### **Use of Program Indicators to Drive Institutional Decision Making**

*Ullom, Kristy; Kahl, Jay.*

Abstract: In 2015, Dakota State University launched a five-year strategic plan Excellence through Innovation (Strategic Plan, 2015). An initiative of the strategic plan included the development of a master academic plan, which is intended to create a roadmap for the university's future. It was determined early on that this level of planning included having metrics for academic program health. To support this, one of the three components of the master academic plan was the development of an Academic Score Card. Using various institutional data, each program at Dakota State University was assigned a grade to determine the health of the program.

### **Using time-sensitive incentive reminders and additional methods to increase survey response**

*Soria, Krista; Miazga, Mark.*

Abstract: Obtaining adequate response from students and high quality data is an ongoing challenge for campuses across the country. This presentation will focus on the successful efforts of the University of Minnesota Twin Cities campus to obtain high response rates on the Student Experience in the Research University (SERU) survey in 2016 using a data collection experiment involving numerous ideas.

### **Building strategic partnerships: Using institutional data to identify and address timely student degree completion rates**

*Dusbiber, Brian.*

Abstract: Data starts the conversation on campus. Using it for institutional culture and policy changes is a responsibility we have in Institutional Research. National initiatives are calling for increased four year degree completion rates. This session will couple data with building collaborative action across campus to improve these rates. A focus will be on revealing institutional obstacles for timely degree completion.

## **From Crisis to Confidence: A 20-year journey to build effective, award winning strategic planning and IR processes**

*Drzakowski, Meridith.*

Abstract: We address how we changed campus culture from insular, non-transparent decision making to collaborative, transparent decision making. Our journey started with a vote of no confidence in our chancellor that created the first turning point in journey from crisis to confidence. The chancellor stayed the course and was vital in creating change. We present keys for the change and specific strategies used.

## **A few tips for basic quantitative data analysis: from data cleaning to effect sizes**

*Greene, Susan.*

Abstract: This session presents a variety of tips and techniques for handling basic IR quantitative data analysis. A brief overview of cleaning data, keeping a data codebook, having a data analysis plan, deciding what statistical test to use, and reporting effect sizes, which effect size to use and how to compute in Excel and/or an online tool. Also, review a few free online tools.

## **Measuring Belonging for Improved Student Success**

*Robinson, David; Hanzsek-Brill, Melissa; Davis, Glenn.*

Abstract: Increasingly, a student's feeling of belonging in college is known to be a key component of student retention and success. St. Cloud State University has developed a Belonging Index, a predictive measurement that is strongly related to retention. The measurement process will be described, along with our procedures for using it to offer timely interventions.

## **Math Placement Using Multiple Measures**

*Robinson, David; Johnson, Sandra; Konz, Karl; Houdek, Stephanie..*

Abstract: St. Cloud State University has begun using multiple measures to determine math placement for incoming students. Traditionally, placement has been done using the ACT Math score and the Accuplacer math placement tests. Several alternative measures have been developed to incorporate student success metrics from high school. These measures will be described, along with our procedures for using them.

## **Using a Learning Community Model to Increase Assessment Capacity in Co-Curricular Departments at Macalester**

*Bostrom, Nancy; Johnson, Adam.*

Abstract: The Assessment Office at Macalester College designed a year-long Learning Community to guide 16 staff members from various co-curricular offices through the assessment cycle. In partnership with IR, monthly sessions covered Backward Design, data collection, analysis, and using assessment to confirm current practice and/or implement programmatic change. We will share our methods and lessons learned, and will discuss what's next for co-curricular assessment at Mac.

### **Studying the relationship between student behaviors, engagement, and academic success.**

*Gerlach, Shamayne.*

Abstract: This presentation will examine the relationship between academic success and selected items in the Student Experiences in the Research University (SERU) survey. Participants will learn research and presentation strategies highlighting how behaviors (e.g., skipping class, socializing, studying), student engagement (e.g., belonging, faculty relationships), and academic barriers (e.g., debt, health issues) influence academic success. Using SERU data in this way increases our institutional understanding of the student experience and the accuracy of our efforts to support them.

### **Maximizing Efficiency and Minimizing Human Error and Effort with SQL**

*Zobel, Emily; Yates, Aaron.*

Abstract: Have you spent endless hours setting up lookup tables in Excel, merging tables in Access, and/or recoding in SPSS? Reduce human error, countless steps, and time using SQL. This beginner session in SQL (Scripted Query Language) will help maximize data cleaning and coding effectiveness in your office. Learn how UW-Superior Office of Institutional Effectiveness teamed with Information Technology to enhance data reporting.

### **Getting your Feet Wet: Taking the Plunge to Translate your Assessment Process into a Software Based System**

*Barlow, Patrick.*

Abstract: Institutions agonize over converting assessment efforts into a standard, campus-wide software solution. We will explore the deep dive our campus took to move the reporting of assessment of student learning into Taskstream to facilitate our work in general education and academic programs. The needs that spurred the decision, description of the initial system roll-out, and reflections on our current status three years into the process will be shared.

### **Using National Student Clearinghouse Data to Gain Insight into Admissions Trends**

*Wallinga, Mike.*

Abstract: Drawing conclusions about prospective students that enrolled elsewhere can be tricky. Did they really pick a school closer to home? Was it really too expensive to enroll here? This presentation will demonstrate how to use enrollment data from the National Student Clearinghouse, analyzed in R and visualized using Plotly, to achieve a clearer picture of the students that DIDN'T come.

### **Annual Program Improvement Process: Using Data, Increasing Buy-in, and Tracking Progress**

*Baldwin, Andrew; Michels, Lexis.*

Abstract: Programs at Chippewa Valley Technical College go through an annual program improvement process (PIP). Institutional Research representatives meet with each program to review data, identify areas for improvement, and help develop and record an improvement plan. Buy-in and implementation of improvement plans has increased since directly including all program faculty in the PIP process.

### **From "Here's What You Asked For" to "How We Can Help"**

*Beehr, Matt; Brenner, Viktor; Holland, Nicole; Lydell, Lesley.*

Abstract: IR offices want to share their data, but how can we get people to use it? This panel discussion will look at strategies that IR offices in different sectors have tried to facilitate data-driven decision-making across offices in their organization. We'll discuss what has worked and what hasn't, and how effective strategies may depend on the nature of the organization.

### **Data-Informed Revisions for First-Year Seminar Courses**

*Solverson, Natalie.*

Abstract: UW-La Crosse, as part of a national project, examined the process by which incoming first-year students enrolled in the limited seats in the first-year seminar course. We used a retention matrix to begin the process of identifying students most in need of the course, and then used a logistic regression to evaluate the effect of student participation on persistence to the second semester. In this presentation we'll cover the background leading to this decision, the data that drove our decision, and what's happened since the change in fall 2016.

### **IPEDS, SAM, VSA, & VFA: Comparing Tools for Tracking Cohorts & Measuring Student Progress**

*Shockley, Ellie; Bailey, Todd; Volk, Erin.*

Abstract: IPEDS generally highlights traditional college student outcomes. However, part-time, transfer, or returning students are common. Failing to examine such students in IR metrics underserves strategic planning and institutional effectiveness. A panel of IR professionals representing

community colleges and a public state university system will lead a discussion of supplements to IPEDS such as the SAM, VSA, VFA, and more.

### **Improving student outcomes in college mathematics: What baseline data imply for math reform strategies in the University of Wisconsin System**

*Blough, David; Chen, Jing.*

Abstract: The University of Wisconsin System has undertaken an initiative to increase student success in mathematics. We will share baseline data on current student outcomes in developmental and college-level math. Comparisons across UW institutions and among underrepresented student populations will reveal implications for the math reform strategies being pursued in our system, such as co-requisite remediation and math pathways.

### **Re-Building the Academic Program Review Process: Charting a New Process, Navigating Barriers, and Keeping Passengers from Jumping Ship.**

*Shah, Priyank; Pyfferoen, Michelle.*

Abstract: Academic Program Review (APR) is a challenging endeavor, which is increasingly becoming evidence based. This session will present an overview of Rochester Community & Technical College's (RCTC) revamped APR process, provide a demonstration of a data delivery platform, and share lessons and insights from the implementation process. Attendees can expect to better understand and discuss best practices in the program review process.

### **Major Changers: Using Sankey Diagrams for Student Retention & Graduation**

*Kraft, Nicole; Herbison, Kari; Cieslewicz, Lance.*

Abstract: UW-Eau Claire's IR office shares its process to track student progress over 12 terms. Using custom data warehouse tables, this office transforms retention and graduation rate data into a visual explanation that clearly shows the movement/flow of students in a Sankey diagram.

### **NSSE Reimagined**

*Nelson, Andy; Kraft, Nicole.*

Abstract: This presentation will discuss how one institution revitalized both its promotion of the NSSE survey, and the use of its results using Tableau to provide actionable information for campus decision-makers.

### **How Carleton Students Change**

*Trosset, Carol; Walters, Kirsten.*

Abstract: Individual first-year and senior survey responses were linked for the Class of 2016. We examined educational values and political and religious views, and found relatively few changes over time. We also analyzed the relationship between perceptions of preparation at entry, participation in high-impact practices, and perceptions of learning. We found support for the benefits of high-impact practices and curricular requirements.

### **Assessment Over Time: Continually Enhancing our Own Process**

*Hawks, Steven.*

Abstract: This session will outline the process that the University of Minnesota implemented early on to assess undergraduate student learning outcomes, and how that process has evolved over the past couple of years, post accreditation site visit. We will also discuss future plans, and new initiatives, to better tell our assessment narrative leading up to our next accreditation review.

### **The IR Skillset: Challenges & Choices in Staffing IR Offices**

*Marson, Wendy; Servi, Angie; Nicholas, Jason.*

Abstract: This moderated discussion will focus on the challenges of finding qualified people to fill IR positions and strategies for ensuring candidates have the right skill set. IR directors from several different campuses in the upper midwest will discuss how this issue has been addressed at their institutions. The panel will also offer recommendations for best practices in professional development.

### **EXCELing in Projection Modeling**

*Meyer, Jill.*

Abstract: With the ever changing landscape of higher education, administration is seeking more data around enrollment and revenue projections and is often reaching out to IR/IE offices for assistance; specifically, AIR recently reported 80-100% of small IR offices (<=3 FTE) are performing this task. This presentation will share methodologies for building and monitoring projection models utilizing Excel; including, integrated data retrieval, model performance tracking, and report creation.

### **Digging into SLEDS: Using the data to inform institutional policy and practice**

*Fergus, Meredith; Dupuis, Danielle; Peterson, Megan.*

Abstract: Minnesota's Statewide Longitudinal Education Data System (SLEDS) provides IR staff with access to reports, data tools and student-level data files. But where do you start? The

presenters will discuss the available resources for IR, give examples on using the data to better inform decisions on campus, and helping IR staff make connection with local area staff to assist in understanding and using SLEDS.

### **Data Democratization and Visualization: A Strategic Alignment Opportunity.**

*Brown, Narren.*

Abstract: This program addresses the effects of visualization suites on the Institutional Research office. This presentation will highlight the advantages and disadvantages of embracing BI tools via a discussion of the redefining of role(s) associated with their adoption. The utilization of BI tools requires a methodological shift in the praxis of IR offices. This shift presents a strategic alignment opportunity of potential significant impact to the field.

### **Research Information Metrics: An Interdisciplinary Approach to Understanding and Reporting What We Do**

*Lydell, Lesley; Jones-White, Daniel; Fransen, Jan; Goff, Emily.*

Abstract: Understanding how an institution is performing on one of its key mission areas is a core function of any IR/IE office, yet issues central to mission can be overwhelmingly complex. This session explores that issue of understanding a key and complex component of an institution's mission — research -- through the tools and different perspectives of the library, the research office, and institutional research.

### **Tracking and Reporting on Military Student Outcomes: Lessons Learned & Initial Data**

*Holland, Nicole; Rossow, Katie; Dreschel, Carol.*

Abstract: Military affiliated students are an increasingly sought after population on our campuses. Both internal and external groups are interested military student outcomes and reporting requests are on the rise. Join this panel discussion to hear how two institutions are 1) tracking military students and 2) responding to data requests. We'll share lessons learned and would love to hear yours too!

### **Doing More with Less: The Small Sustainable IR Office**

*DeVore, Cynthia.*

Abstract: As budgets get tighter and institutional accountability increases, it's more important than ever for IR/IE to keep some capacity to do extra projects without extra resources. In this session, the presenter will share tips, tricks, and strategies used to complete and integrate a large project into its service catalog.

## **HLC's Persistence and Completion Academy: Our Experience**

*Erickson, Sue.*

Abstract: The University of Minnesota Crookston is in year 2 of participation in the Higher Learning Commission's Persistence and Completion Academy. This presentation will walk through what we have learned thus far, and provide tips and attempt advice for institutions considering joining.

## **Leveraging Data to Close Equity Gaps**

*Sorenson, Nichole.*

Abstract: Learn about and discuss how data are being leveraged to inform progress toward state attainment and equity goals. We will demonstrate our interactive dashboard that tests methods of reaching the attainment goal and displays corresponding return on investment for increased degree attainment. We will also discuss possible changes to detailed subgroup race/ethnicity data collection and future institution-level reporting.

## **Effective Presentations**

Smith, Caro.

Abstract: In institutional research we spend a lot of time on analyzing data – how we present it is just as important. We'll take a look at how to make presentations more visually appealing, powerful and effective. In this presentation we'll talk through how to jazz up your PowerPoints, present to different audiences and what resources are out there to help.

## ***Sponsored Sessions:***

### **The "New School" Method for Unlocking Graduate Outcomes Insights**

*Equifax*

Abstract: If you're not able to provide your stakeholders with graduate data that's real-time, longitudinal, and free from self-reporting falsehoods, consider your methods "old school". Today, IR professionals have "new school" options available to more effectively gain insight on graduate outcomes and better support on-campus demands for data. In this presentation by Equifax, attendees will learn how to revolutionize their data collection processes used for key research areas such as first destination, mid-career income and industry, and more. Best practices and mini case study examples from current Equifax Graduate Outcomes projects will also be shared during this session.

## **Assessment as Research: Using compelling questions to inspire thoughtful assessment practices**

*Russell, Javarro (ETS)*

Abstract: Our assessment colleagues are often discouraged by the lack of data use from their assessment work. This session asks participants to reconsider their assessment process through a renewed focus on practical research. By brainstorming the compelling questions an institution could ask, and by engaging in targeted data analysis activities, the participants of this session will gain insight into developing assessment processes that address meaning questions about student learning and success.