2016 MI/AIR Conference

Schedule at a Glance

Room and Event Locations

Session Locations		
Bil Mar	Donnelly	Transmatic/ Gentex

Other		
Lobby-South	Etheridge/ Fifth Third	Offsite

Wednesday, November 2, 2016

11:30 AM – 1:00 PM	Registration
1:00 PM – 5:00 PM	Pre-Conference Workshop: National Student Clearinghouse
5:00 PM – 6:00 PM	Registration
6:00 PM	Dinner Opportunities

Thursday, November 3, 2016

	Bil Mar	Donnelly	Transmatic/Gentex
7:30 AM – 8:15 AM	Registration & Breakfast		
8:30 AM – 9:00 AM	2016 Conference Welcome!		
9:15 AM – 10:00 AM	Student Success (Ning & Chen)	Student Satisfaction Data (Oren)	One Metric (Ternes)
10:15 AM – 11:00 AM	Propensity Score Matching (Roe & Gyasi)	Project Win Win (Ives)	
11:15 AM – 12:00 PM	Business Meeting		
12:00 PM - 1:00 PM	Lunch and Networking		
1:15 PM – 2:00 PM	Closing Pandora's Box (Bray & Drew)	Data Visualization (Chelesvig)	Using Carnegie Program (Graessle)
2:15 PM – 3:00 PM	Regression-Based Nursing (Marsh)	Assurance Argument (Hartz & Farina)	Tracking Student Progress (Byrd, Yan, & Perkins)
3:15 PM – 4:00 PM	Snacks & Roundtable Discussions 2- Year	Snacks & Roundtable Discussions 4- Year Public	Snacks & Roundtable Discussions 4- Year Private
4:15 PM – 5:00 PM	Trend Analysis STEM (Kijek & Ning)		Retention and Grad rates (Gyasi, Meier, & Roe)
5:00-5:30	Break		
5:30 PM – 6:30 PM	Shuttles to Boatwerks and Social Hour		
6:30 PM – 8:00 PM	Dinner and Activity (Boatwerks)		
7:45 PM - 8:30 PM	Shuttles to Haworth or New Holland		
8:00 PM- Midnight	Game Night (New Holland Brewery)		

Friday, November 4, 2016

	Bil Mar	Donnelly	Transmatic/Gentex
7:30 AM – 9:00 AM	Breakfast		
9:00 AM – 9:30 AM	Hotel Checkout		
9:30 AM – 10:15 AM	Using HGLM (Chen & Ning)	Crawling Career (Peterson & Gonzalez)	Reporting (Heckert, Edmonson, & Anderson)
10:30 AM – 11:15 AM	Unmet Financial Need (Byrd, Yan, & Jiang)	Assessing Responsibility (Logan & Graessle)	Reporting Q&A (Heckert, Edmonson, & Anderson)

Pre-Conference Workshop

National Student Clearinghouse
Joe Bloom, Research Analyst
Location: Transmatic/Gentex

Institutional researchers use the National Student Clearinghouse StudentTracker system to obtain subsequent enrollment and degree data for students who have graduated or transferred. And with the StudentTracker detail file – a comprehensive enrollment and degree history with one row per student, per term, per institution – researchers can calculate a broad range of outcomes for their chosen student cohorts. With the Summer 2016 upgrade of StudentTracker, users will now benefit from a streamlined user interface, real time searchable file tracking, and automated file review. Hands-on exercises will assist workshop participants in achieving error-free file submission, as well as practicing data transformation and computation techniques in Excel to unlock the versatility of the StudentTracker detail file for calculating a diverse array of student outcomes.

Participants in this workshop will:
- Gain a thorough understanding of the source, data definitions, and values for each variable in the StudentTracker detail file
- Learn the most efficient way to transform the detail file from a "long" format file with many rows per student, to a de-normalized "wide" format file with one row per student
- Learn about metadata and lookup tables on the NSC Research Center website that can enhance the usefulness of the data in the StudentTracker detail file, while saving the user many hours of manual coding

Additional Information: Participants attending this workshop are required to bring a laptop with Microsoft Excel installed.

Concurrent Session - One

Student Success between Honors and Non-Honors Populations: A Comparative Analysis **Bil Mar**
Using Matching Case Method

Bin Ning, Meng Chen, Eastern Michigan University

This study tested whether students in an honors program present higher retention and completion rates than non-honors students, after controlling for several input factors. We conclude that differences for both retention and graduation rates between those two groups exist and the differences are significant and independent from students' starting qualifications.

Student Satisfaction Data: Its Value, and How To Use It **Donnelly**

Kim Oren, Mid-Michigan Community College

Hundreds of colleges currently collect student satisfaction data, and utilize them in outcomes assessment programs, strategic planning initiatives, and other key institutional operations. Satisfied students are the foundation of positive word-of-mouth support, which is especially important at institutions that recruit locally to a large extent. Learn how Mid-Michigan Community College (MMCC) has greatly increased its usage of findings from the Ruffalo Noel Levitz (RNL) *Student Satisfaction Inventory (SSI),* across the past 14 months. Responses to SSI findings can include resource-intensive improvement efforts, but also relatively simple and inexpensive communication campaigns that address students' misperceptions revealed by the data. Receive tips for using RNL's standard html report efficiently, and see MMCC's local analytical strategies. Hear other attendees' accounts of effective usage of SSI data at their institutions. Consider discussions among MMCC faculty and staff on the importance, value, and limitations of satisfaction data, and how those complement other information in our quality improvement efforts.

One Metric to Rule Them All **Transmatic/Gentex**

Reuben Ternes, Oakland University

Is it possible to develop a 'batting average' or 'quarterback rating' for universities? Not a perfect metric, but still a single metric to gauge the quality of every higher education institution in the US? Join me for a discussion on developing a potential framework to do just that.

Concurrent Session - Two

Propensity Score Matching Makes Program Review Easy!   **Bil Mar**
Robert Roe, Emma Gyasi, Central Michigan University

Negative program evaluation outcomes often lead to skepticism of the analyses. This skepticism typically comes in the form of grasping at alternative explanations for the negative outcome by suggesting confounding variables. We show how propensity score matching on confounding variables leads to a better understanding of program evaluation analyses.

Project Win Win - Lessons Learned, Future Opportunities   **Donnelly**
Gail Ives, MCCA-MI Center for Student Success

A session to discuss Michigan college participation in Project Win Win and how the process and principles can be expanded to on-going strategies and practices that any college can use to support students who are Eligible and Potential degree completers.

Concurrent Session - Three

Closing Pandora's Box: Exploring Open Source Statistical Analysis Software as a Viable Alternative to Proprietary Models   **Bil Mar**
Michael Bray, Jack Drew, Mott Community College

This presentation will explore one IR office's transition to using free, open-platform statistical analysis software packages. PSPP is an open source software package used for the statistical analysis of sampled data. KNIME is a powerful analytics tool used for predictive modeling. Presenters will share their experiences using these tools.

Data Visualization: Changing the role of IR?   **Donnelly**
Heath Chelesvig, Grand Rapids Community College

How have concepts like Business Intelligence changed the practice of Institutional Research? This presentation will take a look at the results of the AIR Survey of IR Offices. How can these new tools and concepts change the conversation? This presentation will show how presentation and these new paradigms might create spaces for conversation and improved decision making in Higher Education.

Using Carnegie Program Information in Retention and Graduation Research   **Transmatic/Gentex**
Charles Graessle, Olivet College

Carnegie classifications support institutional comparisons, but analyzing and interpreting academic mix has multiple problems. A method addressing these problems (and appropriate scripts) is shared, followed by examples of how this can help various assessments, including a data mine of comparison groups for postsecondary retention and graduation studies.

Concurrent Session - Four

A Regression-Based Nursing Program Admission System   **Bil Mar**
Robert Marsh, North Central Michigan College

A regression model was utilized to rank order nursing program applicants to aid in the admission decision. Using past nursing students' prerequisite grades and actual nursing (NUR) course performance, we developed a predictive model for performance (NUR GPA) of the applicants. Those students with the highest predicted GPAs were admitted.

Reflections on the Assurance Argument Process   **Donnelly**
Jason Hartz, Siena Heights University

This presentation reviews how Siena Heights University tackled its Assurance Argument as part of the Higher Learning Commission's Open Pathway. Topics include a summary of SHU's process, a discussion of difficulties, recommendations for other institutions preparing for their Assurance Arguments, and the role of the Office of Institutional Research throughout the project.

Tracking Student Progress: Turning Static Reports into a Data-Driven   **Transmatic/Gentex**
Retention Graduation Action Dashboard Tool for Tracking Student Success
Mark A Byrd, Adam Perkins, Song Yan, Wayne State University

Tracking student success at the aggregate level is nothing new; however, when it comes to keeping track of the subpopulations and the individuals who make up those aggregate numbers, it is often left up to ad hoc requests. OIRA demonstrates how we use visual analytics to solve the problem of static reports.

Concurrent Session - Five

A Trend Analysis in STEM Enrollment and Degree Completion for   **Bil Mar**
Women and Minority Students
Jessica Kijek, Bin Ning, Eastern Michigan University

Using trend analysis, our study looks at the undergraduate level participation and completion for women and minorities in STEM fields between 2004 and 2014. We found there is healthy growth for both populations; Biological and health-related programs grew much faster than other areas; an obvious difference exists among geographic regions.

Retention and Graduation Rates at the Program Level - Part II   **Transmatic/Gentex**
Emma Gyasi, Mary Meier, Robert Roe, Central Michigan University

We present a follow up to a session by Roe/Meier on how to report retention and graduation rates by program. In implementing the solution, the need for an efficient way to present the data became apparent. An Excel dashboard was developed using information from a pre-conference workshop by Rueben Ternes.

Concurrent Session - Six

Using HGLM to Examine the Influence of College- and Student-Level Factors on Graduation   **Bil Mar**

Meng Chen, Bin Ning, Eastern Michigan University

This study explores factors that can affect students' graduation in both college and individual students' levels by applying hierarchical generalized linear modeling (HGLM). Among them, high school GPA, honor college, gender, entry age, percentage of full-time faculty in freshman class, and non-residency have a major effect on graduation.

Crawling Career Outcomes Data from the Web   **Donnelly**

Adam Peterson, John A. Gonzalez, University of Michigan

Maintaining an accurate, up-to-date record of pertinent alumni career outcomes remains a challenge for organizations in higher-education. We present a proof-of-concept online learning tool, *Search-Match-Crawl* (SMC) that utilizes publicly accessible data via Google, LinkedIn and other similar structured online data sources in addition to a statistical classifier to scrape, validate, and ultimately create an up-to-date-record of Alumni region and work information.

Michigan's 2016 Postsecondary Reporting: Creation, Collaboration, and Publication   **Transmatic/Gentex**

Kelsey Heckert, Rachel Edmondson, Trina Anderson, State of Michigan – Center for Educational Performance and Information

MI School Data and the Center for Educational Performance and Information (CEPI) continue to expand its postsecondary reporting exploring entrance and successful exit points with the upcoming CTE Student Pathways, College Enrollment Destination and recently released Success Rates for Michigan's public community colleges and universities. The first half of the presentation will provide a quick overview of what's new for postsecondary on MI School Data and then spend the majority of our time discussing the report creation process, methodology, supporting data collections, and lessons learned from the Postsecondary Success Rates released earlier in July 2016.

Concurrent Session - Seven

Friday, November 4   10:30 am – 11:15 am

**A Deeper Look on Students' Unmet Financial Need and Its Role on   Bil Mar
Student's College Performance**
Mary Byrd, Song Yan, Zhe Jiang, Wayne State University

This session will present a study relating to the impact of four year public university students' unmet financial need. Descriptive statistics and multiple modeling techniques are used to illustrate the influence of unmet financial need on student's year-to- year retention. "Unmet need cliff" will be presented and discussed.

Assessing Responsibility and Ethics in Co-curricular Life   Donnelly
Linda Logan, Charles Graessle, Olivet College

Assessment of nonacademic life is increasingly important, especially when addressing a college's unique values. We describe our current system, modeling integration of institutional research and assessment functions for both practitioners and administrators. We illustrate its use in promoting policy changes in collections and our values in social responsibility and student ethics.

**Q & A for Michigan's 2016 Postsecondary Reporting: Creation,   Transmatic/Gentex
Collaboration, and Publication**
*Kelsey Heckert, Rachel Edmondson, Trina Anderson, State of Michigan- Center
for Educational Performance and Information*

This is a Q & A session to the previous session to clarify any details from the preceding presentation and to encourage collaborative discussion for moving forward.