



2019 Annual Conference

Rocky Mountain Association for Institutional Research

Hosted by Utah Valley University

October 30 – November 1
Zermatt Utah Conference Center
Midway, Utah

**The 2019 RMAIR Conference
Is proudly hosted by**



Division of Planning, Budget, and Human Resources
Linda Makin, Vice President

Institutional Effectiveness, Planning, and Accreditation
Support, Jeffrey Alan Johnson, Director

Institutional Research, Tim Stanley, Director

Division of Academic Affairs,
Wayne Vaught, Provost and Vice President

Academic Quality Assistance, Quinn Koller, Director

2019 Conference Committee

Jeffrey Alan Johnson
Quinn Koller
Angela Ward
Evelyn Ho-Wisniewski

2019 RMAIR Board:

Christina Drum, President
Lisa Smith, Vice President
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Acknowledgements

RMAIR appreciates the financial support for this conference from the Utah Valley University Division of Planning, Budget, and Human Resources; the Utah Valley University Division of Academic Affairs; Utah Valley University Institutional Effectiveness, Planning, and Accreditation Support; Utah Valley University Institutional Research; Utah Valley University Academic Quality Assurance; and Weber State University Budget Services.

The IPEDS workshop is provided by the Association for Institutional Research with funding from the National Center for Education Statistics. RMAIR appreciates the collaboration of AIR and NCES in offering these educational opportunities, and the support of Meg Andraza and Michelle Fitzgerald of the Association for Institutional Research in coordinating the workshop.

Audio/Visual support is provided through the generous cooperation of Adam Ferguson, PSAV and the Utah Valley University Fulton Library.

The conference committee thanks Jan Zite and Katie Tesch of Zermatt Utah; Jennifer Zabriske and Jessica Frandsen of UVU Institutional Effectiveness, Planning, and Accreditation Support; and Shauna Reher of UVU Academic Quality Assurance for their support of the committee in organizing this conference.

Conference Program

Wednesday, October 30

REGISTRATION

7:00 AM to 6:00 PM, Matterhorn Foyer East

AIR/NCES IPEDS CORKSHOPS: IPEDS FINANCE TRAINING FOR IR PROFESSIONALS AND IPEDS DATA AND BENCHMARKING: SUPPORTING DECISION MAKING AND INSTITUTIONAL EFFECTIVENESS

Michelle Fitzgerald (Association for Institutional Research), Kurt Gunnell (Association for Institutional Research), and Sandra Kinney (Association for Institutional Research)

Pre-Conference Workshop

8:00 AM to 5:00 PM, Davos Room

The benchmarking 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.

The finance workshop is designed for IR professionals who have no training in finance or accounting, and focuses on a general understanding of higher education finance with an overview of where, how, and why IPEDS Finance data are used. Topics include an introduction to higher education finance; Governmental Accounting Standards Board (GASB) vs. Financial Accounting Standards Board (FASB); key accounting concepts; a review of general purpose financial statements and how they relate to the IPEDS Finance survey; and reporting comparison challenges. Exercises provide participants with experience completing the IPEDS Finance survey and benchmarking with commonly used finance variables.

HANDS-ON APPROACH TO USING DATA BLENDING, LEVEL OF DETAILS AND PARAMETERS WITHIN TABLEAU

Sandip Thanki (Nevada State College)

Hands-On Workshop

8:00 AM to 10:00 AM, St. Moritz Room

This session will target consolidating most of the institutional data into one, efficient dashboard with the use of data blending, Level of Detail calculations and Parameters within Tableau. IR professionals like to share as many data insights as possible with an ultimate goal of making this world a better place. This desire quickly leads a large set of reports or dashboards. Keeping them up-to-date along with state and federal reporting takes away most of the much-needed time from for innovation. The presentation will guide the audience into creating a complete dashboard containing major aspects of higher education metrics. A sample dataset containing term level data with student characteristics, enrollment, majors/minors, campus engagement, enrollment, graduation and employment will be shared. The participants are

encouraged to bring their laptops with Tableau (can install a trial at no cost if needed).

INSTITUTIONAL RESEARCH IN THE AGE OF ANALYTICS: COMPETING IN A DATA-DRIVEN WORLD

Anupma Singh (University of Wyoming)

Pre-Conference Workshop

8:00 AM to 12:00 PM, Interlaken Room

The RMAIR members will learn about the current trends and changing paradigm of IR; understand how to utilize data mining, forecasting, and predictive modeling techniques, and hands-on experience in putting analytical knowledge into practice; understand how to convey compelling and relevant stories through data visualization to inform decisions; help the participants gain an understanding of the user's need and being able to translate those needs into application; and understand the basics of Power BI (importing data, developing visuals, sharing reports, etc.).

WHAT EVERY INSTITUTIONAL RESEARCH EMPLOYEE SHOULD KNOW: AN IR GUIDE FOR THE PERPLEXED

Angela Ward (Utah Valley University), Jeffrey Alan Johnson (Utah Valley University)

Hands-On Workshop

10:15 AM to 12:00 PM, St. Moritz Room

This interactive session takes inspiration from the Jewish philosopher Maimonides to guide new IR employees, who are very often perplexed, to functional professionals. Through discussions of their own and others' offices, participants will gain an understanding of common projects and responsibilities in institutional research, be able to identify useful resources to aid in their work and professional development, and learn how to develop relationships with other IR professionals.

DEFINING THE "STUDENT TOUCH POINT UNIVERSE"

Mick Haney (Nevada State College), Sandip Thanki (Nevada State College)

Research and Practice Presentation

1:00 PM to 2:00 PM, Interlaken Room

This presentation will present a Student Data Architecture which support abstracting all the "Touch Points" where a student interacts with an institution. This architecture is implemented at Nevada State College and supports four other FA departments in the State. This presentation is first conceptual, defining the architectural levels, and then technical, illustrating how the Universe is populated. The presentation will be preceded by a Tableau demonstration of Architecture utilization and capability.

FACULTY GENDER PAY EQUITY: DIVISION AND ACADEMIC RANK DRIVE INSTITUTION-LEVEL DIFFERENCES

Christopher Wendt (University of Texas at Dallas), Lawrence Redlinger (University of Texas at Dallas)

Research and Practice Presentation

1:00 PM to 2:00 PM, St. Moritz Room

The University of Texas System has directed member institutions to assess differences in faculty compensation by gender, with the goal of eliminating systemic differences within five years. This study analyzes compensation for 533 tenured and tenure-track

faculty employed by the University of Texas at Dallas for the 2016-2017 academic year. We find that the institution-level difference in compensation by gender are accounted for by the distribution of male and female faculty across divisions, such as Management or Arts and Humanities, as well as by academic rank. Trends in gender distribution by rank suggest that institution-level differences in compensation will continue to decline. In addition, we identify possible omitted variables through a review of predicted compensation for faculty in the sample, as well as the need to connect institution-level analyses in compensation to nationwide trends in training and hiring.

THE FAN, THE QUARTERBACK OR THE COACH; IR'S ROLE IN CORE THEME ASSESSMENT

Andrea Brown (Dixie State University)
Research and Practice Presentation
2:30 PM to 3:30 PM, St. Moritz Room

As the role of Institutional Research (IR) offices has changed over the last several years, how have you positioned your office in the accreditation space? What role does your Institutional Research (IR) office play in assessment of Core themes? Are you the fan, that supports the document from the sideline? Are you the quarterback, providing most of the information but allowing another office to lead the project? Or, are you the coach, the leader and strategist in the Core Theme assessment including telling the institutional effectiveness story? See how Dixie State University (DSU) became the leader in telling the institutional effectiveness story through the Core Theme assessment.

THE NECESSITY OF A FORMAL DATA GOVERNANCE SYSTEM

Lawrence Redlinger (The University of Texas at Dallas), Sharon Etheredge (The University of Texas at Dallas)
Research and Practice Presentation
2:30 PM to 3:30 PM, Interlaken Room

Data governance is crucial to managing university data. Often functional units of the university are not aware of what data is available, who is responsible for the data, how sensitive is the data, how are elements defined, what regulations apply, and a host of other considerations. The purpose of this presentation is to discuss the processes by which a formal data governance program, led by key functional units with support from Information Technology (IT), can be established and sustained. Rationales for mounting a governance program (benefits, risk management), engaging senior leadership, and organizational steps will be presented.

EFFECTS OF LDS CHURCH MISSIONARY SERVICE AGE REQUIREMENTS ON RETENTION AND COMPLETION

Ben White (University of Utah)
Research and Practice Presentation
3:45 PM to 4:45 PM, St. Moritz Room

In 2012, the Church of Jesus Christ of Latter Day Saints changed the age requirements for missionary service. This change disproportionately affected states in the Mormon Cultural Region of the Mountain West States because of their large Latter-Day Saint population, and the age changes shifted enrollment patterns—and thus IPEDS exclusion patterns—throughout the

region. Now that this change is visible in six-year graduation rates, this presentation reviews its effects on retention, persistence, and completion.

LEVERAGING GIS TO CREATE A NEW LOW SES INDICATOR

John Whitney (Utah Valley University)
Research and Practice Presentation
3:45 PM to 4:45 PM, Interlaken Room

This presentation will demonstrate how to create an alternate to Pell Status as a low SES indicator using ArcGIS Pro. The session will cover some of the basics of working with ArcGIS, where to find publicly available shape files and data, and a step-by-step walkthrough of creating the alternate low SES indicator. No prior experience with ArcGIS Pro is necessary to participate.

WELCOME RECEPTION

Hosted by the RMAIR Board
6:00 PM to 8:00 PM, Matterhorn Room

Please join the RMAIR Board and welcome you colleagues to the 2019 RMAIR Conference. Light appetizers will be provided and a cash bar will be available. Afterward, take advantage of the many dining options at the Zermatt resort and in nearby Midway.

Thursday, October 31

REGISTRATION

7:00 AM to 1:00 PM, Matterhorn Foyer East

BREAKFAST

7:00 AM to 8:30 AM, Matterhorn Room

Start the day with a continental breakfast with colleagues.

THE SURVEILLANCE UNIVERSITY

Chris Gilliard (Macomb Community College)
Plenary Session
8:30 AM to 9:30 AM, Matterhorn Room

Chris Gilliard is a Professor of English at Macomb Community College. His scholarship concentrates on privacy, institutional tech policy, digital redlining, and the re-inventions of discriminatory practices through data mining and algorithmic decision-making, especially as these apply to college students. His current project looks at how popular misunderstandings of mathematical concepts create the illusions of fairness and objectivity in student analytics, predictive policing, and hiring practices. He holds a PhD from Purdue University's Rhetoric and Composition Program.

IMPROVING GRADUATION RATES WITH GRADE DISTRIBUTION REPORTS

Morgan Shuppy (Utah Valley University), Guy McAtee (Utah Valley University), Emmanuel Cardenas (Utah Valley University), Jeremy Christiansen (Utah Valley University)
Research and Practice Presentation
9:45 AM to 10:45 AM, Davos Room

UVU graduation and retention rates are lower than desired. Students are struggling to succeed, but why? We believe it is

because students - especially freshmen - do not know the difficulty of their classes before registering. This could result in them unknowingly taking multiple hard classes which could lead to failure, discouragement, and even dropping out. The IRI has already published data about class difficulty in the form of a Grade Distribution Report. However, not many students are aware of this very useful tool. We are seeking to make this information more readily available to students so they can balance their semester workload and continue quickly along the path to student success.

NO ONE CAN HEAR YOU SCREAM IN SPACE: FACILITIES AND THEIR IMPACT UPON THEIR ORGANIZATION

Nicolas Antony Valcik (UT-Permian Basin), Hector Govea (UT-Permian Basin)

Research and Practice Presentation

9:45 AM to 10:45 AM, St. Moritz Room

Many states have requirements for higher education institutions to report their facilities as well as their usage accurately. This can be problematic for institutions that do not have a culture of keeping an accurate inventory, or optimized scheduling for academic facilities as well as mixing research and instruction in the same rooms. This presentation will focus on how to obtain an accurate facility inventory, what the impact can be to an organization if an accurate inventory is not obtained, and the different metrics used by state and federal reports. This presentation will also attempt to answer the question of does assigning independent studies to classrooms and class labs decrease the amount of F's and Incompletes for these types of courses.

A TYPOLOGY OF BRANCH CAMPUS SYSTEMS AT PUBLIC HIGHER EDUCATION INSTITUTIONS

Jessica Frandsen (Utah Valley University), Jeffrey Alan Johnson (Utah Valley University)

Research and Practice Presentation

11:00 AM to 12:00 PM, Davos Room

In search of greater efficiency and effectiveness, many states are turning toward branch campus arrangements. The presentation will review different models of branch campus systems in public higher education, identifying a basic typology of different systems. This typology can guide institutional researchers as they are asked to contribute to state-level policy discussions on restructuring state higher education systems.

MULTIPLE APPROACHES TO ASSESSING THE IMPACTS OF STUDENT SUCCESS INITIATIVES: THREE EXAMPLES AT UNLV

John "Skip" Crooker (University of Nevada, Las Vegas), Qingmin Shi (University of Nevada, Las Vegas), Tina Nelson (University of Nevada, Las Vegas), Shiloh Bradley (University of Nevada, Las Vegas)

Research and Practice Presentation

11:00 AM to 12:00 PM, Interlaken Room

Colleges and universities have implemented a variety of student success initiatives aimed at enhancing student outcome metrics. Therefore, how to measure the impacts of these initiatives has become one of the important focuses of the IR community. However, many of these initiatives suffer from lacking rigorous

assessment plans and may end up simply comparing the students who self-select to participate in the intervention and those who opt to not participate, without matching the participant and non-participant groups or controlling for confounding variables. Using multiple data sources, research methods, and BI and analytic tools, this presentation demonstrates our approaches to assessing the impacts of three campus-wide student success initiatives including identifying at-risk factors for the student outreach specialist program, FYS, and 15-to-Finish. The audience of this section will have an opportunity to learn about these approaches and share the assessment practices on their home campuses.

QUALITATIVE DATA IN IR: A CASE STUDY

Danielle Ryan (Laramie County Community College)

Research and Practice Presentation

11:00 AM to 12:00 PM, St. Moritz Room

This presentation will use a recent qualitative case study completed at LCCC to demonstrate how best to conduct qualitative research and data analysis, including how to employ the qualitative software program, Atlas.ti. Based upon results from a quantitative report in 2018-2019 indicating a decline in students seeking services at LCCC, a qualitative study was conducted from March-July 2019 to further understand why students may not be seeking services. Information about the counseling services was gathered from 131 surveys completed by LCCC students and 32 surveys completed by LCCC employees. In addition, 13 LCCC students and 12 LCCC employees participated in research interviews for 20+ hours of recorded data. Survey and interview data were analyzed utilizing basic descriptive statistics and content analysis, with support from Atlas.ti. A detailed description of the qualitative research design as well as how results and recommendations were constructed will be discussed.

RELAXATION AND RECREATION OPPORTUNITIES

12:00 PM to 6:00 PM

Please take advantage of the opportunities for recreation and relaxation at the Zermatt Resort and in nearby Midway. RMAIR participants receive a 15% discount on resort spa services. A resort shuttle is to take you to nearby locations.

HALLOWEEN PARTY

Hosted by the RMAIR Board

6:00 PM to 9:00 PM, Matterhorn Room

Please join the RMAIR Board and some of the scariest institutional researchers around—costumes encouraged! Is Crystal Reports really better a crystal ball? Does the Socratic Method provide timely decision support? Are those undead students excluded from the IPEDS Graduation Rate Cohort? What is your institution's graduation rate when adjusted for Grades Above Replacement with at least 6 AP credits for athletes in sports where at least 20% of games are played on artificial turf in the rain? Spooky food will be provided and a cash bar will be available.

Friday, November 1

REGISTRATION

7:00 AM to 11:00 AM, Matterhorn Foyer East

BREAKFAST

7:00 AM to 8:30 AM, Matterhorn Room

Start the day with a continental breakfast with colleagues.

LET'S ASK SOME STUDENTS WHAT KIND OF DATA WOULD HELP THEM

Jakell Larsen (Utah Valley University), Tim Stanley (Utah Valley University), Student Panel

Plenary Session

8:30 AM to 9:30 AM, Matterhorn Room

Student Success is the byword of contemporary institutional research, but we rarely ask students directly what they need from us. The roundtable of students will discuss the challenges students experience and what kinds of data students might find useful for them in making decisions about their academic careers. Hearing students' views will help institutional researchers take seriously student-facing data projects and design them to support student success without assuming that institutional researchers and university administrators necessarily understand students better than students themselves.

DATA GOVERNANCE GUIDING PRINCIPLES

Nichole Rip

Research and Practice Presentation

9:45 AM to 10:45 AM, St. Moritz Room

This presentation will review what guiding for data governance principles are, how to build a set of guiding principles, goals to keep in mind, an example of data governance guiding principles, the effect of guiding principles on the data governance group, the effect of guiding principles on technology, and final thoughts.

STUDENT SUCCESS AND ANALYTICAL VISUALIZATION

Anupma Singh (University of Wyoming)

Research and Practice Presentation

9:45 AM to 10:45 AM, Davos Room

Improving student retention, graduation, and completion rates is a fundamental challenge in improving educational delivery. Analytical visualizations of admissions and students data enable the university to measure, monitor and manage their performance more effectively. This paper displays successful examples of analytical Oracle BI visualizations to show Institutional researchers the advantages of using analytical visualizations over the traditional longitudinal reporting of admissions data. This paper will also discuss how, as an institution, we transformed the focus and scope of the dashboard, in support of strategic planning, and continuous improvement. This paper presents the methodology and results of creating innovative and analytical visualizations that will help the user to report and analyze retention. Graduation rate, and admissions trends, to assess admissions performance and to track and compare applied, admitted and deposited periods among programs.

BUILDING TO CHANGE: HOW DIALOGUE HELPED DATA TO IMPROVE SPACE UTILIZATION

Chaz Steimel (Weber State University)

Research and Practice Presentation

9:45 AM to 10:45 AM, Interlaken Room

So you have the data, the insights, and the next steps for campus; now what? This presentation tells the story of Weber State University's journey from having the dashboards, the reports, and the next steps for our state required Space Utilization report from their initial creation to being leveraged by our campus stakeholders to make meaningful changes. This was not a direct, linear line. There were missteps, time, and energy lost. However, when campus leaders turned to active dialogue, then, understanding, communication, and action was realized. Our campus went from being last in state reported measures to showing positive improvements and climbing out of the state's "cellar."

RMAIR BUSINESS MEETING AND LUNCH

Lisa Smith (Vice President, Rocky Mountain Association for Institutional Research)

Plenary Session

11:00 AM to 1:00 PM, Matterhorn Room

Please join the RMAIR board for lunch and the annual business meeting.

SAVE THE DATE

Please join your
colleagues for the

**2020 Rocky Mountain Association
for Institutional Research
Annual Conference**

**Cody, Wyoming
September 30 –
October 2**



The Rocky Mountain Association for Institutional Research (RMAIR) is the premier membership organization for higher education professionals in the fields of Institutional Research, Institutional Effectiveness, Assessment, and Accreditation. Established in 1971, the Association includes members from Arizona, Colorado, Idaho, Montana, Nevada, New Mexico, Texas, Utah, Washington, and Wyoming.

RMAIR strives to create a friendly spirit of unity and cooperation among members.

Members benefit and assist each other by:

- Advancing knowledge and expertise leading to the improved understanding, planning, and operation of institutions of higher education.
- Providing avenues for renewal and professional development by offering annual meetings during which research findings and methods can be exchanged through paper presentations, workshops, and seminars.
- Promoting activities in partnership with the Association for Institutional Research (AIR).