



2018

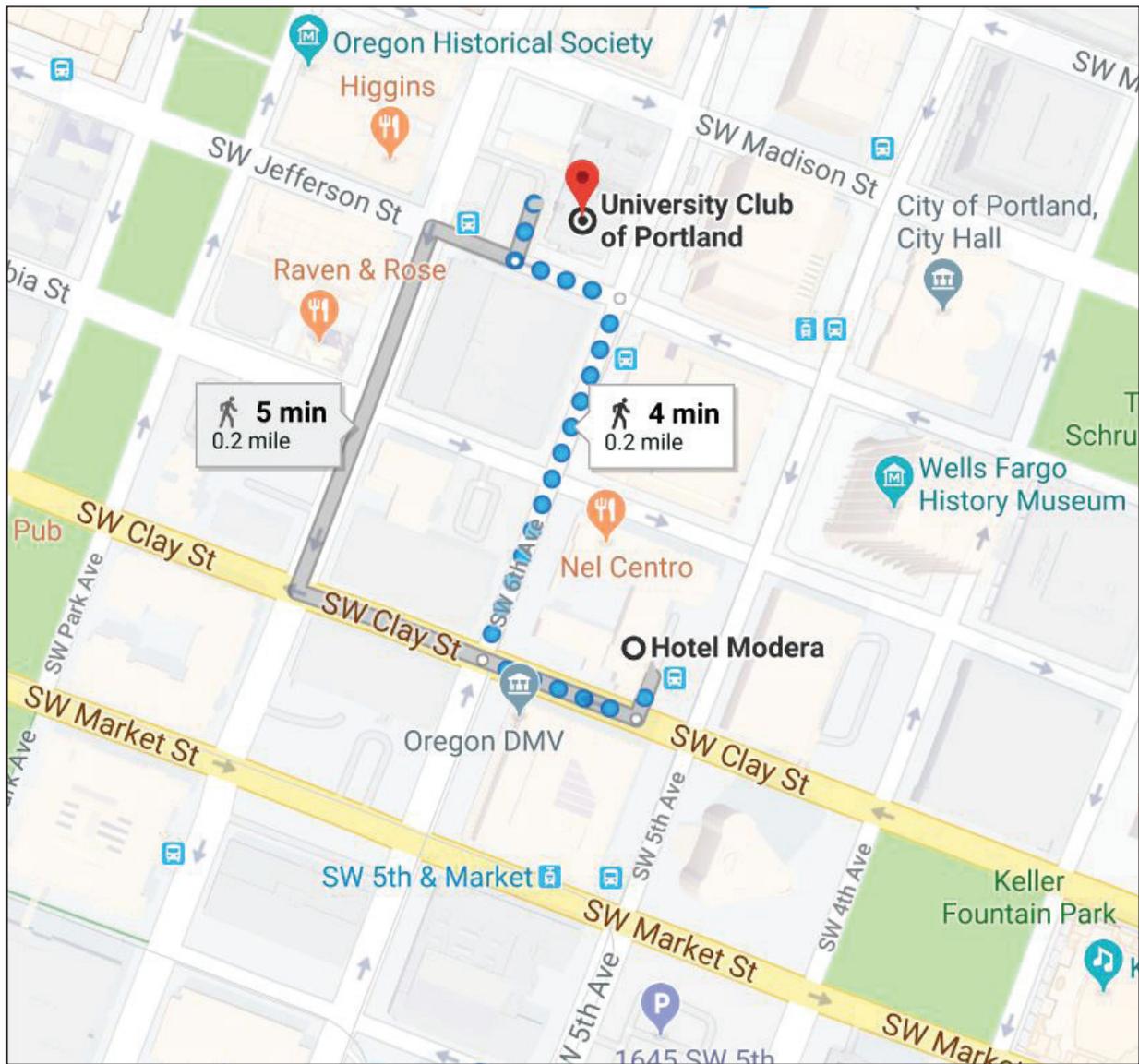
**PNAIRP
CONFERENCE**

**November
14-16**



**UNIVERSITY CLUB
OF PORTLAND**

1225 SW 6th Avenue, Portland , OR 97204



DIRECTIONS:

From University Club of Portland to Hotel Modera:

- Head south toward SW Jefferson Street
- Turn left onto SW Jefferson Street
- Turn right onto SW 6th Ave
- Turn left onto SW Clay Street
- Hotel Modera will be on the left



1225 SW 6th Avenue
Portland, OR 97204

From Hotel Modera to University Club of Portland:

- Head south toward SW Clay St
- Turn right onto SW Clay St
- Turn right onto SW 6th Ave
- Turn left onto SW Jefferson St
- University Club Portland will be on the right



515 SW Clay Street
Portland, OR 97201

2018 SCHEDULE OVERVIEW

Wednesday, November 14, 2018

8:00 AM – 11:30 AM	IPEDS: Human Resources - <i>NEW*</i>	UC, Lower Lounge
8:30 AM – 12:30 PM	Project Management for Non-Project Managers*	UC, Main Dining Room
8:30 AM – 12:30 PM	R You Kidding Me? How IR Professionals Can Utilize R*	UC, Fireside Room
12:00 PM – 4:00 PM	Conference Registration	UC, Upstairs Lobby
12:30 PM – 4:00 PM	IPEDS: Financial Aid - <i>NEW*</i>	UC, Lower Lounge
3:00 PM – 3:45 PM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
3:45 PM – 4:00 PM	Cookies and Coffee	UC, Library
4:00 PM – 4:45 PM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
5:00 PM – 6:00 PM	Conference Registration	Hotel Modera, The Colosseum
5:00 PM – 6:30 PM	Conference Welcome Kick-Off Appetizers and Cash Bar	Hotel Modera, The Colosseum

**Pre-registration required*

UC = *University Club*

Thursday, November 15, 2018

7:30 AM – 8:45 AM	Breakfast Buffet	UC, Main Dining Room
7:30 AM – 9:00 AM	Conference Registration	UC, Upstairs Lobby
8:00 AM – 5:00 PM	Conference Sponsors	UC, Library
9:15 AM – 10:30 AM	KEYNOTE SPEAKER: Stephen Few	UC, Main Dining Room
10:45 AM – 11:30 AM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
11:30 AM – 11:45 AM	Fresh Fruits, Granola Bars	UC, Library
11:45 AM – 12:30 PM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
12:30 PM – 1:30 PM	Lunch Buffet	UC, Main Dining Room
1:30 PM – 2:30 PM	Dessert Roundtables	UC, Main Dining Room
2:45 PM – 3:30 PM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
3:30 PM – 3:45 PM	Popcorn, Chips and Nuts	UC, Library
3:45 PM – 4:30 PM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE

UC = *University Club*

Friday, November 16, 2018

8:00 AM – 9:00 AM	Breakfast Buffet with Quiche	UC, Main Dining Room
8:30 AM – 10:00 AM	Annual General Meeting	UC, Main Dining Room
10:15 AM – 11:00 AM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
11:00 AM – 11:15 AM	Pastries and Coffee	UC, Library
11:15 AM – 12:00 PM	CONCURRENT SESSIONS	SEE DAILY SCHEDULE
12:00 PM – 12:30 PM	Conference Adjourns, PNAIRP Executive Board Q & A	UC, Library
12:00 PM – 12:30 PM	Box Lunches to go	UC, Library

UC = *University Club*

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- Proactively manage enrollment, retention and programs.
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FREE 2019 Conference Registration



Wednesday, November 14, 2018

8:00 AM – 11:30 AM
UNIVERSITY CLUB,
LOWER LOUNGE

IPEDS: HUMAN RESOURCES - NEW!*

This workshop prepares individuals to accurately complete the IPEDS Human Resources (HR) survey. It is designed for IR and human resources professionals, as well as other researchers or administrators who want to increase their understanding of these data. Topics include preparing data to increase consistency within the survey, understanding data definitions, classification of employees and alignment of employee function with Bureau of Labor Statistics Standard Occupation Classification (SOC) codes, coordination of effort between stakeholders in and outside of an institution, and planning for efficacy of data beyond the IPEDS HR survey itself. Exercises cover classifying employees properly, preparing for and completing the IPEDS HR survey, and benchmarking with commonly used employee metrics.

**Pre-registration required*

8:30 AM – 12:30 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

PROJECT MANAGEMENT FOR NON-PROJECT MANAGERS*

Elizabeth Young, Director of Project Management, Lewis & Clark College

As technology on campus gets more and more complex, so do information technology projects. IT staff are frequently asked to apply proper Project Management methodology to these projects, yet those techniques can feel like a bunch of pointless hoops to jump through when you'd rather just focus on getting things done. In reality, learning Project Management skills and applying them to your initiatives, both low-impact and campus-wide, can save you time, resources, and relationships.

In this workshop, you will learn how to cut through the jargon and seemingly stringent processes to develop your own understanding of Project Management techniques so you can get things done AND benefit from strong planning, communication, risk assessment and documentation. Session participants will explore all aspects of project management from idea to completion and will gain the following skills and resources:

1. Defining what a project is at your institution
2. Understanding the unique issues of technology projects and some strategies to overcome them
3. Techniques for “managing” people over whom you have no authority
4. Tools to help with the planning process
5. Templates for getting started with documentation
6. The workshop will be organized into activities, brief content presentations, group brainstorming, and interactive demonstrations. There will be Lego building.

**Pre-registration required*

Wednesday, November 14, 2018

8:30 AM – 12:30 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

R YOU KIDDING ME? HOW IR PROFESSIONALS CAN UTILIZE R*-

Joshua Farrell, Assistant Director of Institutional Research
Zoe Hanley, Institutional Research Analyst, Whitman College

Why is there always a new program to learn in IR? Program R is an open-source statistical package increasingly being used for data manipulation and modeling. In this introductory workshop, you will learn how to navigate RStudio, import and manipulate data, and you will learn useful R tools and resources to get you started on your journey.

**Pre-registration required*

12:00 PM – 4:00 PM
UNIVERSITY CLUB,
UPSTAIRS LOBBY

CONFERENCE REGISTRATION

12:30 PM – 4:00 PM
UNIVERSITY CLUB,
LOWER LOUNGE

IPEDS: FINANCIAL AID - NEW!*

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. Topics include an overview of financial aid concepts and how they intersect IPEDS, how to effectively create frozen data files from enrollment and financial aid systems, how to use these files to answer the respective sections of the survey, and how the files can be leveraged to address additional internal reporting needs. The workshop concludes with exercises focused on how IPEDS financial aid data are used for external purposes as well as for internal benchmarking.

**Pre-registration required*

2:30 PM – 4:00 PM
UNIVERSITY CLUB,
UPSTAIRS LOBBY

CONFERENCE SPONSORS

3:00 PM – 3:45 PM
UNIVERSITY CLUB,
2ND FLOOR LOUNGE

K-12 & COLLEGE DATA-SHARING COLLABORATIONS: IMPROVING TRANSITIONS SUCCESS

Mark Macias, Managing Director of Institutional Research, Community Colleges of Spokane

The Community Colleges of Spokane has a strong history of partnering with high schools in its service area (covering the five counties in northeastern Washington) to identify and mitigate transitional barriers, promote college and career readiness, increase college-going rates, and improve college success. Over the last several years, these collaborations have become more data informed by establishing project-specific data sharing agreements. This presentation highlights the process of creating such projects, negotiating the associated data sharing agreements, and provides specific examples of the benefits of data-sharing.

Wednesday, November 14, 2018

3:00 PM – 3:45 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

UNDER-REPRESENTED GROUPS OF STUDENTS: WHAT ARE THEY TO YOU?

Anna Tikina, Research Officer, BC Council on Admissions and Transfer

Do you track and report data on minority students? Which groups of students do you include? These groups may be different for each institution and/ or jurisdiction. This presentation aims to summarize the sources of information available on the under-represented (or minority, or equity) groups of students in BC and Canada. This study analyzes availability of information in data sources beyond institutional data. With a brief historical look back, I am going to discuss the shifting focus or stable attention for certain groups of such students in BC. Participants will be given an opportunity to share their experiences in tracking these groups of students, and to discuss possible sources of information on these groups. Identifying commonalities and differences between the information collected by US and Canadian institutions will be part of the task.

3:00 PM – 3:45 PM
UNIVERSITY CLUB,
GOLD ROOM

USING MACHINE LEARNING AND GENETIC ALGORITHMS TO OPTIMIZE SCHOLARSHIP ALLOCATION FOR STUDENT YIELD

Lovenoor (Lavi) Aulck, PhD Student, University of Washington

We use machine learning to predict enrollment of domestic non-resident students at a large, public university. We then leverage the outputs of the models to optimize scholarship disbursement via genetic algorithms. Results/implications are discussed.

3:45 PM – 4:00 PM
UNIVERSITY CLUB,
LIBRARY

REFRESHMENT BREAK/SNACKS COOKIES AND COFFEE

4:00 PM – 4:45 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

TABLEAU COMMUNITY DASHBOARDS

Grayson Court, Manager of Institutional Research, Lake Washington Institute of Technology

In Fall 2017 Lake Washington Institute of Technology unveiled a Tableau dashboard system across the college to provide greater access to institutional data for employees. With over 130 employees using 100+ dashboards across the college, institutional data is now easily accessible and utilized on a daily basis to support decision-making on campus. This presentation will provide an overview of steps taken, lessons learned, and best practices to develop and implement this data-sharing system. Topics include, but are not limited to: timeline development, training, stakeholder input, user groups, account creation/management, communications, data activities, targeted initiatives, and ongoing revisions and updates. Time will be available at the end of the session to answer questions from attendees.

Wednesday, November 14, 2018

4:00 PM – 4:45 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

THE CROSSROADS BETWEEN INSTITUTIONAL RESEARCH AND CHANGE MANAGEMENT AT UW-BOTHELL

Adrian Sinkler, *Interim Director of Institutional Research, University of Washington-Bothell*

From academic years 2006-2007 through 2016-2017, enrollments at the University of Washington-Bothell grew rapidly. However, growth opportunities are now limited, as the campus is expected to reach its maximum enrollment capacity in academic year 2018-2019. During the period of rapid growth, decision-makers could tap into a growing revenue pool to fund initiatives and hire new faculty and staff to support student learning. In our new institutional context, which includes a transition from an incremental to a Responsibility-Centered Management budget model, decision-makers must change their resource management and enrollment management practices.

In this session, I discuss how the Institutional Research Office is collaborating with our Planning and Administration Office in an effort to change curriculum and budgetary planning practices from a growth-management focus to a resource optimization focus. Attendees will have a chance to learn from, and comment on, our efforts to facilitate changes in planning behavior that include highlighting potentially difficult trade-offs that decision-makers on campus are not accustomed to making.

4:00 PM – 4:45 PM
UNIVERSITY CLUB,
GOLD ROOM

INVITED SPEAKER: NATIONAL STUDENT CLEARINGHOUSE

Michele Gralak, *Business Analyst, National Student Clearinghouse*
Dannette Sullivan, *Regional Director, National Student Clearinghouse*

After a brief review of the StudentTracker for Colleges and Universities (STCU) product and functionality, we will provide a demonstration of the new Premium service. This will include a run-through of four institution-specific reports, highlighting how each of these benefit the IR community. These reports include the Analysis Ready report (based on the detail file but with only one row per student) and three reports published at the national level by the Research Center (Completions, Persistence & Retention and Tracking Transfer). We will also show examples of visualizations available in the Premium service which display information for students in a request file on gender, race/ethnicity, remedial course enrollment, and institutions attended as well as completion rates by gender from the institution-specific Research Center report.

Wednesday, November 14, 2018

4:00 PM – 4:45 PM
UNIVERSITY CLUB,
LOWER LOUNGE

HOW ‘SOFT’ SKILLS ALLOWED ‘HARD’ RESEARCH ANALYTICS AT THE UNIVERSITY OF ALASKA FAIRBANKS

Adam Watson, Strategic Enrollment Analyst, University of Alaska Fairbanks

We encountered two broad obstacles to developing predictive analytics for research activity at our university:

The first was missing or erroneous data in our research database.

The second was a lack of open dialogue among research institutes, research administration offices, and institutional research offices. This was in part due to a long-standing centralized, top-down approach to dealing with research data and reporting that didn’t accommodate feedback from campus research administration and research institutes.

In the first part of this presentation, I will discuss the still ongoing process of establishing trust and long-term collaboration with UAF’s Office of Grants and Contracts Administration and research institutes to begin addressing data quality issues. We are still in the early stages of the evolution of this critical feedback loop, and the benefits we’ve seen so far are encouraging, both for expanded research analytics and as a model for improving data quality and analysis in other areas of university operation.

In the second part, I will present the predictive analytics that were enabled by the outcomes of that collaboration. Most notably those outcomes allowed us to begin forecasting grant-funded research expenditures “with fairly high confidence” up to three fiscal years into the future.

5:00 PM – 6:00 PM
HOTEL MODERA,
THE COLOSSEUM

CONFERENCE REGISTRATION

5:00 PM – 6:30 PM
HOTEL MODERA,
THE COLOSSEUM

CONFERENCE WELCOME KICK-OFF APPETIZERS AND CASH BAR Sponsored by



Thursday, November 15, 2018

7:30 AM – 8:45 AM
UNIVERSITY CLUB,
MAIN DINING ROOM

BREAKFAST BUFFET

Breakfast service will end promptly at 8:45 AM and all dishes will be picked up by 9:00 AM.

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7:30 AM – 9:00 AM
UNIVERSITY CLUB,
UPSTAIRS LOBBY

CONFERENCE REGISTRATION

7:30 AM – 4:30 PM
UNIVERSITY CLUB,
UPSTAIRS LOBBY

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9:15 AM – 10:30 AM
UNIVERSITY CLUB,
MAIN DINING ROOM

KEYNOTE SPEAKER: *STEPHEN FEW*

Stephen Few is on a mission to help organizations squeeze real value from the mounds of data that threaten to bury them. Through his consultancy, Perceptual Edge, Stephen teaches simple, clear, and practical techniques for exploring, making sense of, and communicating quantitative information. With 35 years of data sensemaking and information design experience, he speaks, teaches, and consults internationally and is the author of five popular books: *Show Me the Numbers: Designing Tables and Graphs to Enlighten*, *Information Dashboard Design: The Effective Visual Communication of Data*, *Now You See It: Simple Visualization Techniques for Quantitative Analysis*, *Signal: Understanding What Matters in a World of Noise*, and *Big Data, Big Ruse: A Little Book About a Big Bunch of Nonsense*. You can learn more about Stephen's work at www.perceptualedge.com.

10:45 AM – 11:30 AM
UNIVERSITY CLUB,
FIRESIDE ROOM

NOW WHAT? ORGANIZING THE STAFF OF AN IR OFFICE

Maxwell Kwenda, *Director of Institutional Research, Gonzaga University*
Erin Holmes, *Associate Vice Provost for Institutional Research, University of Alaska Anchorage*

Whether faced with re-organizing staff for efficiency or adding positions, an IR Director needs a framework to develop an office. This presentation will outline how two Institutional Research offices approached organizing the work of their staff members and the frameworks used to maximize efficiency.

Thursday, November 15, 2018

10:45 AM – 11:30 AM
UNIVERSITY CLUB,
LOWER LOUNGE

CLOSING THE GAP BETWEEN RESOURCING AND PROJECT DELIVERY WITH DATA WAREHOUSE AUTOMATION

Kristen Handley, Director of Institutional Effectiveness, University of Alaska Southeast
Ben Cunha, WhereScape

To unite data across systems and create a single version of data truth for college leaders, the Whitman College Enterprise Technology team began to build the college's first data warehouse on its own. It soon discovered that with limited resourcing and a steep learning curve ahead, the challenge and project timeline would be much greater than anticipated. In this session, hear from Kristen Handley, previously the project lead at Whitman College, how the team elected to use automation software to close the gap and the results they witnessed. Kristen will also share lessons learned helpful to any team beginning its first data warehousing project.

10:45 AM – 11:30 AM
UNIVERSITY CLUB,
GOLD ROOM

CHOOSING THE RIGHT SIZE FOR A TEXTBOOK ALLOWANCE

Gordon R. Bower, Director of Institutional Research, Flathead Valley Community College

Colleges report an estimated textbook cost to IPEDS, and include this cost in students' budgets when preparing financial aid packages. There is pressure to keep this number as low as possible, to minimize excessive borrowing by students and to keep cost of attendance competitive, even as textbook prices rise steeply.

To better understand the true cost of textbooks and how students obtain their books, we began a 3-part investigation in the 2017-18 school year: we combined the bookstore's price list with our registration records to calculate what the sticker price for textbooks was for each student's schedule; for those students who used financial aid dollars to buy their books, we looked up how much they actually spent in our bookstore; and we added optional questions to this year's CCSSE, asking students where they obtained their course materials.

There is a wide gap between the sticker price of books and the amount a student typically spends. This makes it hard to set a fair textbook allowance. We don't want to punish students who want to buy a full set of textbooks but also don't want to enable students who over-borrow and default on their loans.

11:30 AM – 11:45 AM
UNIVERSITY CLUB,
LIBRARY

REFRESHMENT BREAK/SNACKS FRESH FRUITS, GRANOLA BARS

Thursday, November 15, 2018

11:45 AM – 12:30 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

HOW TO MEASURE THE IMPACT OF LARGE-SCALE MULTI-STAGE INSTITUTIONAL TRANSFORMATION

Igor Kuznetsov, Research Analyst

*Warren Code, Associate Director, Science Centre for Learning and Teaching,
The University of British Columbia*

In 2007, UBC launched the Carl Wieman Science Education Initiative (CWSEI; cwsei.ubc.ca) the goal of which is to achieve highly effective, evidence-based science education for all post-secondary students by applying the latest advances in pedagogical and organizational excellence. The role of Planning and Institutional Research (PAIR) at UBC in this project is to estimate the impact of this initiative on students' outcomes. In particular, we evaluate the impact of new teaching approach and other corresponding changes on students grades and retention rates in the Faculty of Science.

The goal of this presentation will be to share with PNAIRP members a statistical approach to evaluating wide-scale education initiatives that do not have a clear comparison group.

11:45 AM – 12:30 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

AI + IR: ARTIFICIAL INTELLIGENCE AND INSTITUTIONAL RESEARCH

William O'Shea, Director, Institutional Research & Assessment, Pacific University

It may be tempting to dismiss artificial intelligence (AI) as irrelevant hype. While this may be appropriate for some of what we hear about AI, it may be hard to tell which parts. Regardless of hype or not, AI may already be appearing on our campuses in perhaps surprising ways and it seems that there is more to come.

What does this rising wave of AI mean for our students, our particular types of institutions, and institutional research? What are some of ethical issues around AI? What does AI even mean? This presentation will attempt to define and clarify AI and related concepts, explore current trends regarding AI in higher education, and suggest some implications, risks, and opportunities of AI from an IR perspective.

As stewards of data and information and as educators of information producers, users, and consumers, we need to develop our understanding and thinking about AI to best advise and help our institutions navigate a new and evolving landscape. My hope is that this presentation can help facilitate this development of understanding about AI by informing and sparking some conversations and sharing of knowledge, experiences, and concerns.

Thursday, November 15, 2018

11:45 AM – 12:30 PM
UNIVERSITY CLUB,
LOWER LOUNGE

DETERMINING CRITICAL COURSES IN THE PRE-NURSING PATHWAY

Evan Picton, Associate Director of Research & Planning, Skagit Valley College

A surplus of pre-nursing students enter Skagit Valley College (SVC) every year with the intention of eventually enrolling in the Nursing program. The majority of these students don't enroll in this program and instead attrite out of the college before completing all of the pre-nursing program requirements. SVC's Institutional Research office analyzed the pre-nursing pathway to discover where students are dropping out. Estimated cohorts of entering pre-nursing students were established. An acceptance rate into the nursing program for these cohorts was calculated using Nursing program admissions data. This acceptance rate was then bifurcated by pass rate of pre-nursing pathway courses on a student by student basis. Decision Trees analysis was performed to streamline the process of identifying the pre-nursing course that best differentiated successful pre-nursing students from unsuccessful pre-nursing students. Results were further broken down to identify where Perkins non-traditional populations were leaving the program. A happy side result of this study was the development of a research design that could be used to identify critical courses as part of a guided pathway for a given field of study.

12:30 PM – 1:30 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

LUNCH BUFFET

Sponsored by



1:30 PM – 2:30 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

DESSERT ROUNDTABLES

- **Assessment/Accreditation:** Summer Kennesson
- **Data Governance:** Jennifer Ballard
- **Data Governance:** Kristen Handley
- **IR Career Development:** Erin Holmes
- **Excel Tips and Tricks:** Renee Orlick
- **IR and IT Collaboration:** Mike Tamada
- **Qualitative Data/Interviewing:** Neal Christopherson
- **Newbie to IR:** Wendy Olson
- **Selecting the Right Statistical Tests:** Gordon Bower
- **Culture Change:** Naina Eshwar
- **Alumni Outcomes:** Elizabeth Lee

Watch for more to be announced during the conference!

Thursday, November 15, 2018

2:45 PM – 3:30 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

THE ROLE OF RELATIONSHIPS AND COMMUNITY IN CREATING TRANSFORMATIVE EXPERIENCES FOR UNDERGRADUATES

Neal Christopherson, Director of Institutional Research, Whitman College

The Whitman Study of Student Learning Experiences (WSSLE) is a longitudinal study of a single cohort of students at Whitman College. Seventy-five students from the class of 2016 were randomly sampled to participate and were interviewed 5 times during their four years at Whitman. One goal of this research is to identify the most influential aspects of an undergraduate education—the transformative experiences that lead to personal and academic growth, changes in perspective, or that affect plans for after graduation. This presentation will summarize key results from this research, using interview data to show how seven different aspects of an undergraduate experience lead to transformative experiences for students.

2:45 PM – 3:30 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

GETTING TO THE HEART OF IT; UNDERSTANDING WHAT THEY NEED INSTEAD OF WHAT THEY ASK FOR

Elizabeth Young, Director of Project Management, Lewis & Clark College

End users often come to you with requests for reports or data without explaining what question they're trying to answer. Learn some tips and tricks about eliciting and analyzing user requirements, and helping your community get the answers they need!

2:45 PM – 3:30 PM
UNIVERSITY CLUB,
GOLD ROOM

FACTORS IN HIGH SCHOOL GRADUATION AND COMMUNITY COLLEGE SUCCESS, INCLUDING RURAL/NON-RURAL HIGH SCHOOL, HIGH SCHOOL SIZE, POVERTY, AND 9TH GRADE GPA

MaryAnne Winniford, Institutional Research Special Projects Manager

Mark Macias, Managing Director of Institutional Research, Community Colleges of Spokane

There is tremendous buzz recently about high school graduation rates. While the country and Washington State are both seeing recent increases in graduation, there are still questions about who is graduating and who is not, and why. Since the majority of college enrollments come from recent graduates, it is appropriate that IR help high schools understand and perhaps improve their rates. The presentation covers two recent studies conducted by the Community Colleges of Spokane “Student Transitions Information Project” (STIP), examining graduation rates of over 40 school districts in central and eastern Washington. The level of analysis includes the individual and the high school. Several perspectives are included: location (rural vs. non-rural), school size, and poverty. For the individual, 9th grade is examined as a pivotal year, largely predicting cumulative high school GPA. Individuals are tracked from 9th grade through 1st year of community college, looking at factors such as dual enrollment and rural/non-rural high schools.

Thursday, November 15, 2018

2:45 PM – 3:30 PM
UNIVERSITY CLUB,
LOWER LOUNGE

CREATING WAREHOUSE ARCHITECTURE TO SUPPORT ANALYTICS

Michael Smith, Senior Institutional Research Analyst

Alison Nimura, Business Intelligence Team Manager

Karla Crawford, BI ETL Data Analyst, Portland State University

Student success analytics presents unique opportunities for institutional researchers to explore cutting-edge techniques while adding tremendous value to the “real work” of higher education. But often the prep work needed to realize that potential happens on individual analysts’ desktops, and opportunities for cross-institutional synergy and labor-saving are wasted. In a bid to address these issues, the Portland State University Business Intelligence team partnered with the school’s IR office to create a set of data structures that had as much of the hard work baked-in as possible. Representatives of both offices will discuss the assembling these data, the process of documenting them and their assumptions, the ethical implications of creating these large-scale structures, and ways to sustain and grow the work.

3:30 PM – 3:45 PM
UNIVERSITY CLUB,
LIBRARY

REFRESHMENT BREAK/SNACK BREAK POPCORN, CHIPS, AND NUTS

3:45 PM – 4:30 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

SETTING THE STAGE FOR INSTITUTIONAL TRANSFORMATION TO DRAMATICALLY INCREASE STUDENT SUCCESS

Patrick Rossol-Allison (Bill & Melinda Gates Foundation)

Sukhwant Jhaj (Portland State University)

Moderator: Russell Cannon (PNAIRP)

How to successfully lead an institution through the necessary changes that dramatically increasing student success remains a difficult and frustrating endeavor at most colleges and universities. This panel will discuss promising practices on how to successfully set the stage for institutional transformations based on work of the national initiative Frontier Set and the specific case of Portland State University.

Thursday, November 15, 2018

3:45 PM – 4:30 PM
UNIVERSITY CLUB,
LOWER LOUNGE

THRESHOLDING INTELLIGENTLY: THE TYRANNY OF THE NO-INFORMATION RATE

Michael Smith, Senior Institutional Research Analyst, Portland State University

Many common classification-based modeling techniques (such as logistic regression, decision trees, neural networks, and so on) produce probabilities rather than explicit classifications. The process of turning these probabilities into predicted outcomes is crucial in order to appraise and operationalize such a model, particularly when one outcome occurs at a much higher rate than the other, a situation that institutional researchers often encounter when studying student retention. This presentation will discuss graphical and numerical methods for evaluating fit and tuning probability threshold values in the context of a retention modeling problem. The content will be applicable to a wide variety of model types and analysis programs.

3:45 PM – 4:30 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

THE AIR NATIONAL SURVEY OF INSTITUTIONAL RESEARCH OFFICES

Darlana Jones, Director of Assessment and Research, Association for Institutional Research

The National Survey of IR Offices documents the characterizations of IR Offices, including scope of work, reporting lines, and staffing. Guiding questions included: How many people work in the IR Office? What tasks are assigned to the IR Office? What investments do institutions make in their IR Offices? Who are the stakeholders of the IR Office? This session provides summary findings and a discussion of the use of these data for benchmarking.

3:45 PM – 4:30 PM
UNIVERSITY CLUB,
GOLD ROOM

BREWING AND GUNSMITHING AT FVCC: USING GOVERNMENT ECONOMIC DATA TO BUILD A BUSINESS CASE FOR UNUSUAL DEGREE PROGRAMS

Gordon R. Bower, Director of Institutional Research, Flathead Valley Community College

Part of a public institution's mission is to offer programs of study that are tailored to the local area's needs. Two unique programs have emerged at Flathead Valley Community College, beginning as community-interest courses, then becoming for-credit electives, certificate programs, and ultimately associate degree programs. We present a brief history of the development of our Brewing Science AAS and Firearms Technology AAS.

In order to obtain permission to start these unusual programs, it was necessary to demonstrate to our state commissioner of higher education that we were confident both that a demand for the new degrees existed, and that our graduates would be employable after obtaining these degrees.

The bulk of this presentation will be a guided tour of the U.S. Census Bureau's freely-available County Business Patterns data, and how it can be used to uncover information about the employability of a degree in a college's service area.

Friday, November 16, 2018

8:00 AM – 9:00 AM
UNIVERSITY CLUB,
MAIN DINING ROOM

BREAKFAST BUFFET

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8:00 AM – 12:30 PM
UNIVERSITY CLUB,
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8:30 AM – 10:00 AM
UNIVERSITY CLUB,
MAIN DINING ROOM

ANNUAL GENERAL MEETING

Enjoy breakfast with PNAIRP!

- Meet incoming executive members
- Congratulate the Best Presentation Award Winner
- Review the PNAIRP annual budget
- Learn about plans for the PNAIRP 2019 Conference
- Have a chance to win Passport prizes and other door prizes

10:15 AM – 11:00 AM
UNIVERSITY CLUB,
FIRESIDE ROOM

HOW TO DO IR WITHOUT DATA

Rebekah Anderson, Chief Information Officer

Nichole Rip, Data Architect, University of Western States

When University of Western States hired its first Institutional Researcher (IR), the hope was that all the arduous work being performed by non-data-informed users across the University of collecting and analyzing existing data would reside in a single role. Unfortunately, the Institutional Researcher encountered obstacle after obstacle related to data access, knowledgeable subject matter experts, functioning or consistent systems and data quality. This situation was frustrating for the administrative staff as much as it was for the Information Technology department and made even the most basic tasks an exercise in the miraculous for the Institutional Researcher. As it happens, our Institutional Researcher had over a decade of experience as a Director of IT at a previous university, experience she applied in conjunction with the Data Architect to develop an organizational structure to support improved access to accurate information housed in the enterprise systems that also served to support the university mission and associated operational tasks.

The information we will discuss in this presentation is the organizational framework proposed, the leadership process to garner buy-in for this proposal, some of the ambient contributing factors that enabled the path to enacting the new organization, how this re-organization cleared the path for additional improvements (such as a centralized IT and Data Governance framework) and ultimately lead the way to delivering more accurate information in a way that reduces the strain on the administrative staff. In this process we also discovered an additional side effect of the role of IR “that of not only collecting information about the university, but also of influencing organizational changes.” Ultimately, we’re hoping that the attendees learn the value the business architecture plays in the ability to obtain valuable data with an eye towards emerging trends in Big Data and Data Science.

Friday, November 16, 2018

10:15 AM – 11:00 AM
UNIVERSITY CLUB,
MAIN DINING ROOM

DEVELOPING A CAMPUS-WIDE STUDENT LEADERSHIP ASSESSMENT PROGRAM

Michael Johnson, Coordinator of Assessment & Accreditation

Navreen Kaur, Research Assistant

Elizabeth Lee, Director of Institutional Research, University of Portland

This presentation outlines the development and implementation of a pilot program to assess student leadership campus-wide at the University of Portland. This effort was motivated by the desire to create a sustainable process for continuous improvement that could also serve as a meaningful, assessable, and verifiable indicator of one of UP's core themes as required by NWCCU accreditation standard 1B2. This discussion will provide context of leadership assessment at UP prior to 2017 and will then detail the process by which we designed a tool for measuring leadership and the obstacles we faced in implementing it across campus. The presentation offers a step-by-step account of our data collection, analysis, and reporting practices and includes a discussion of the data itself with the goal of offering lessons learned as well as where UP plans to modify its efforts moving forward.

10:15 AM – 11:00 AM
UNIVERSITY CLUB,
GOLD ROOM

IDENTIFYING HIGH IMPACT AREAS FOR INTERVENTION

Alyssa Hanson-Eggebrecht, Portland Community College

A primary presenter will demonstrate the application of a multi-framework approach using an evidence-based framework for identifying high impact areas for intervention and using conceptual frameworks for guiding areas of program evaluation. The context of the presentation are two grant-funded projects through the Department of Education's Office of Migrant Education the High School Equivalency Program (HEP) and the College Assistance Migrant Program (CAMP). After the presentation, audience members will be familiar with methods and processes of a multi-framework approach and gain understanding about the development and use of survey instruments, identifying high-value question items or clusters, and using conclusions and results to address targeted research questions. The audience will also have the opportunity to either engage with guest speakers, the directors of the HEP and CAMP programs at Portland Community College - to hear their perspectives on utilizing a multi-framework approach, or be presented with materials reflecting these directors' experiences and impressions. Lastly, the presentation will conclude with a Q&A portion for audience members to participate with thoughtful questions or open the session to a dialogue on topics relevant to the scope of the presentation.

Friday, November 16, 2018

10:15 AM – 11:00 AM
UNIVERSITY CLUB,
LOWER LOUNGE

MAPPING SUBSEQUENT MATH COURSES OF PRE-CALCULUS STUDENTS USING TABLEAU

Uma G Raghavan, *SQL Reporting Analyst, University of Washington – Bothell*

At University of Washington - Bothell, Pre-Major program leaders wanted to understand the impact/efficacy of the changes to the pre-calculus course, by examining three cohorts of students as they progress through the pre-calculus-calculus sequence.

Fall 2015 Cohort - No standardization

Fall 2016 Cohort - Curricular change in Pre-Calculus standardization of texts and curriculum

Fall 2017 - Introduction of Peer Facilitators

Using Tableau, the cohort is fixed to the students who take pre-calculus in the Fall. These students' course grade distribution, repeat course grade, subsequent Math course grades, Major Intent by different student characteristics are all mapped to allow for cohort comparison.

This presentation will address the question posed by pre-major program, how the data extract was arranged for Tableau, the dashboards and the insights Tableau provided, the fixed formulas used in Tableau to create the dashboards.

11:00 AM – 11:15 AM
UNIVERSITY CLUB,
LIBRARY

REFRESHMENTS/SNACK BREAK FRESH FRUIT, GRANOLA BARS

11:15 AM – 12:00 PM
UNIVERSITY CLUB,
MAIN DINING ROOM

NWCCU & ACCREDITATION UPDATES

James Wagner, *Coordinator, Data and Records, NWCCU*

NWCCU is in transition. Internally, NWCCU has been enhancing its structure... embracing new technology, establishing NWCCU committees, and piloting new evaluator training formats. Focusing out, NWCCU has taken the opportunity to review NWCCU Standards and Eligibility Requirements with member institutions.

Friday, November 16, 2018

11:15 AM – 12:00 PM
UNIVERSITY CLUB,
FIRESIDE ROOM

WANTING TO BE A COOL KID: LEADING AN IE/IR OFFICE OUT OF DISRESPECT TO POPULARITY

Susan Seymour, Director of Institutional Effectiveness, Bastyr University

Does your Institutional Research and Effectiveness office suffer from low self-esteem? Do you sometimes feel under attack, even though you're only a messenger? If so, you're not alone!

Global data scandals fuel a general sense of data collection fear and distrust that can affect how offices of Institutional Research are perceived. And when perception is negative, for real or imagined reasons, office politics and pressures can have a damaging effect on intelligent people who are simply trying to do their job. This presentation/conversation explores creative ways Offices of Institutional Research and Effectiveness can manage public relations, foster institutional trust, engage diverse constituents and finally become recognized for who we really are... the cool kids!

11:15 AM – 12:00 PM
UNIVERSITY CLUB,
GOLD ROOM

ASSESSMENT OF STUDENT LEARNING GAINS AT A COMMUNITY COLLEGE USING POST TEST ONLY QUASI EXPERIMENTAL DESIGN

Evan Picton, Associate Director of Research & Planning, Skagit Valley College

At Skagit Valley Community College, student proficiency levels in Math, Reading, and Writing were measured using an in class standardized test as part of a multi-year assessment effort. These assessments were used to quantify gains made by students between freshmen and sophomore year with a quasi-experimental post-test only approach and an ordinal regression analysis of the data.

A post-test only design was chosen to circumvent the issue of not being able to post-test every student who pretested since fall to fall retention rates typically range in the 45%-55% range and degree completion rates tend to hover around the 25%-30% range. The post-test only research design allows for an analysis of a large sample of freshmen and a large sample of sophomores. Timing of test administration also resulted a large sample of students about halfway between their freshmen and sophomore years being included in the analysis. An ordinal regression analysis of this data controlling for factors such as English and Math placement (pre-college level vs college level) at entry, key demographic variables, and self-reported family income revealed the contribution of student persistence on assessment performance. Students significantly improved their odds of scoring into the proficient level in Math, Writing, and English with every credit successfully completed. Regression results were visualized on a student by student basis using Tableau. Regression analysis provided a definitive interpretation of the results that descriptive statistics alone cannot. Next steps involve building up existing predictive model of assessment performance to include more specific student milestones as predictors.

Friday, November 16, 2018

11:15 AM – 12:00 PM
UNIVERSITY CLUB,
LOWER LOUNGE

THE APPLICATION OF DATA MINING TECHNIQUES IN SURVEY RESEARCH STUDIES

Ping H Harman, Portland State University

In many cases, data mining and survey research studies seem to be two completely unrelated fields that require two different sets of skills and expertise. However, as higher education institutions strive to achieve their academic goals to enhance student success, it is now critical for higher education institutions to maximize the use of research sources and methodologies to better support student success. Hence, the current study discusses the possibility of applying data mining techniques in survey research studies. Specifically, 2018 Portland State University Senior Exit Survey data files have been merged and cleaned for analysis. Logistic regression and decision tree analysis have been applied to examine the correlation between the outcome variable (PSU_Cumulative_GPA) and the independent variables in the categories of demographics, academic advising, academic programs, interaction with faculty, campus experience programs, financial aid, housing, employment plan and so forth.

12:00 PM – 12:30 PM
UNIVERSITY CLUB,
LIBRARY

CONFERENCE ADJOURNS, PNAIRP EXECUTIVE BOARD Q & A

12:00 PM – 12:30 PM
UNIVERSITY CLUB,
LIBRARY

BOX LUNCHESES TO GO

Notes

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Notes

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THANK YOU PNAIRP VOLUNTEERS!

Thank you 2018 PNAIRP Conference presenters and attendees. The success of this meeting relies on the quality of the presentations.

*A special thank you to all of the presenters featured above, and a special thank you to **Stephen Few** for being our keynote!*

*Thank you to the **2017-18 PNAIRP Executive Committee** whose volunteerism makes this association and meeting possible:*

Russell Cannon, *President*

Kristen Handley, *Vice President*

Summer Kenesson, *Past President*

Zach Markiss, *Secretary*

Elizabeth Lee, *Treasurer*

Erin Holmes, *Member-at-Large*

Wendy Olson, *Member-at-Large*

Renee Orlick, *Member-at-Large*

Lisa Anh Nguyen, *Member-at-Large*

Thank you to the members who helped the association this year, proposal reviewers, moderators and all other volunteers who made the conference possible.

*See you in
British Columbia
for PNAIRP 2019!*



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