



***OKLAHOMA  
ASSOCIATION FOR INSTITUTIONAL RESEARCH***

**SPRING 2020  
CONFERENCE PROGRAM**

*Hosted by  
University of Central Oklahoma  
Nigh University Center  
March 6, 2020*

Parking information coming soon.

## Schedule at a Glance

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8:00-9:00 a.m. Registration and Continental Breakfast (Ballroom C)

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9:00-9:10 a.m. Welcome Address (Ballroom C)

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Regents Data Dashboard Updates (Ballroom C)

9:15-10:00 a.m. Cultivating an Effective Culture of Student Learning Outcomes Assessment  
(Henry Bellmon 314)

Impact of Oklahoma State University's Residential Housing Living Options on First-Year  
Student Retention (Room 320C)

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How Does Unmet Need and Income Influence Retention and Student Success  
(Ballroom C)

10:15-11:00  
a.m. Data Sciencing the Easy Way: Utilizing Python to Automate and Speed up Analytics  
(Henry Bellmon 314)

Evidence-based Student Learning Outcomes from Curriculum Alignment of the Research  
Process and Complex Systems (Room 320C)

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High School GPA as a Placement Indicator (Ballroom C)

11:15-noon Utilizing Institutional Research as a Needs Assessment for Strategic Planning and  
Academic Research (Henry Bellmon 314)

Document Processes? No budget for software? Where do we begin?! (Room 320C)

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Noon-1:00 p.m. Network Lunch and Vendor Presentation (Ballroom C)

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An Introduction to PowerPivot: Microsoft's Free Business Intelligence Tool (Ballroom C)

1:00-1:45 p.m. Open Forum Discussion: Connection between Assessment and IR (Henry Bellmon 314)

Class Participation as Predictor of Student Performance (Room 320C)

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An Algorithm to Improve Outcomes for Students and Universities (Ballroom C)

2:00-2:45 p.m. Assessing the Campus Climate Surrounding Sexual Violence (Henry Bellmon 314)

Assessing Library Impact on Student Success: Collaborating with Institutional Research  
(Room 320C)

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3:00 p.m. Raffle Bonanza, Business Meeting, and Closing Remarks (Ballroom C)

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8:00 – 9:00 a.m.

## Registration and Continental Breakfast (Ballroom C)

9:00 – 9:10 a.m.

### Welcome Address

**Room:** Ballroom C

**Presenter:** TBA

9:15 – 10:00 a.m.

### Regents Data Dashboard Updates

**Room:** Ballroom C

**Presenters:** Matt Eastwood, Assistant Vice Chancellor for Workforce and Economic Development, & Cody Ruiz, Workforce and Economic Development Analyst, Oklahoma State Regents for Higher Education

**Abstract:**

During this session, the Oklahoma State Regents will review updates to the 2018-19 Workforce and Economic Dashboards. Special attention will be given to updated data and reformatted Employment Outcomes Dashboard as well as updates and changes to the Workforce Trends and Associated Credentials Dashboard. Finally, some time will be allocated to highlight our new Fall and Annual Enrollment Dashboards available within our traditional data and reports areas of the website.

### Cultivating an Effective Culture of Student Learning Outcomes Assessment

**Room:** Henry Bellmon 314

**Presenters:** Dr. Ryan Chung, Director of University Assessment and Testing, & Kelva Hunger, Assistant Director of Assessment and Analysis, Oklahoma State University

**Abstract:**

Academic chairpersons often experience frustration or a lack of support when helping their faculty/staff develop and administer assessment processes. Such frustration builds tension between these groups as they cannot achieve success without the support of others. Therefore, the purpose of this presentation is to provide IR professionals who may need to assist with academic programs and faculty to better develop assessment processes, evaluate data, reporting, and use their findings for continuous program improvement. In this interactive presentation, IR and assessment professionals will explore the importance of ascertaining the quality of student learning and designing assessment processes from which continual improvement follows. Participants will learn to develop qualities encompassed in a culture of assessment including (1) a belief that assessment of student learning is an essential element in higher education; (2) the primary purpose of assessment is improvement; (3) student learning assessment must reflect the application of knowledge and the development of cognitive skills, dispositions, and workplace readiness; and (4) an understanding of the interrelationships of IR and assessment amongst academic program, and institutional student learning.

9:15 – 10:00 a.m. (Continued)

### **Impact of Oklahoma State University's Residential Housing Living Options on First-Year Student Retention**

**Room:** 320C

**Presenters:** Emily Gilley, Master's student in Higher Education and Student Affairs and Graduate Assistant for Career Services, & Dr. Leon McClinton, Jr., Director of University Housing, Oklahoma State University

**Abstract:**

Retention is at the forefront of institutional initiatives, where universities and colleges are seeking to understand how they can retain most of their freshman student enrollment for financial obligations, campus existence, and a positive experience for the student (Routledge, 2018). Because most first-year students live on-campus and spend a majority of time in their residential halls, student affairs professionals and researchers have begun to study the impact of residential community on students, including the design and architecture of a residential hall (Brown et al., 2019). Because of these trends, a mixed-methods assessment was conducted in Fall 2019 at Oklahoma State University, where retention data and feedback from first-year students was gathered and compared based upon the students' living styles. This presentation will introduce the most "effective" living option in residential halls, recent findings and themes about current higher education students, and what motivates students to stay at their institution.

10:15 – 11:00 a.m.

### **How Does Unmet Need and Income Influence Retention and Student Success**

**Room:** Ballroom C

**Presenters:** Patti Otto, Senior Systems Analyst, & Yan Zhou, Data Scientist, The University of Oklahoma

**Abstract:**

Our Provost office had seen a study of the effect of unmet need and income, on success rates, within the undergraduate student population. They were interested in seeing how our institution's student success rates, and also retention, were affected by those same forces. This presentation follows our journey in creating the requested reports and their results.

### **Data Sciencing the Easy Way: Utilizing Python to Automate and Speed up Analytics**

**Room:** Henry Bellmon 314

**Presenter:** Patrick Kubier, Research Analyst, University of Central Oklahoma

**Abstract:**

Importing, sorting, and analyzing data can be a time-consuming and tedious process. There are many ways to analyze data and create meaningful data including SPSS, R, and SAS. However, it is also possible to have data downloaded, sorted, analyzed, and presented with graphs, tables, and statistics automatically using Python programming language. Python allows for the importing of many types of data, and using various modules, can automatically refresh data connections and create graphs and statistics with only a little programming work. The initial investment in creating a program can save numerous hours later in the year.

10:15 – 11:00 a.m. (Continued)

### **Evidence-based Student Learning Outcomes from Curriculum Alignment of the Research Process and Complex Systems**

**Room:** 320C

**Presenter:** Dr. Amber Manning, Ouellette, Assistant Professor, Higher Education and Student Affairs, Oklahoma State University

**Abstract:**

Developing student's competence in the research process builds their capacity to discern information in complex, adaptive situations. This research paper will explore student learning outcomes from a capstone course focused on curriculum that aligns learning adaptive leadership approaches with a full-scale research project (Heifetz, Grashow, & Linsky, 2009). Findings suggest that students develop three predominant competencies through learning the research process and complex challenges including 1) learning and reasoning, 2) group dynamics, and 3) self-awareness and development. Recommendations include developing strategies to design similar course assessments that contribute to student outcome achievement across curriculum and programmatic objectives.

11:15 a.m. – Noon

### **High School GPA as a Placement Indicator**

**Room:** Ballroom C

**Presenters:** Justin Porterfield, Research & Assessment Analyst II, & Jason Featherngill, Educational Researcher, Tulsa Community College

**Abstract:**

Trying to determine the correct placement of students as "college ready" has been left to the realm of standardized test. Nationally recognized tests have been the benchmark and are supplemented by assessment given at the local institutions when a student fails to demonstrate "college readiness" through the national tests. There is evidence that prior student performance, including high school GPA (HS GPA), may be a good indicator of future student success. Tulsa Community College (TCC) is moving toward using HS GPA as a placement indicator. The presentation will provide information about the process of choosing HS GPA as a placement indicator as well as the data used at TCC to support the decision making process. There will be discussion time at the end of the presentation.

### **Utilizing Institutional Research as a Needs Assessment for Strategic Planning and Academic Research**

**Room:** Henry Bellmon 314

**Presenters:** Dr. Lori O'Malley, Assistant Professor, & Dr. Mary Millikin, Associate Vice President for Academic Affairs, Accountability & Academics, Rogers State University

**Abstract:**

This workshop will report the development of a needs assessment for the Student Affairs division within a four year university. Discussion includes narrowing of focus, the survey development process and networking for survey delivery. In addition, steps for writing an executive summary to be used for strategic planning will be provided. Special issues with the IRB will be discussed as well. The executive summary and academic research products will be compared and contrasted.

## 11:15 a.m. – Noon (Continued)

### **Document Processes? No budget for software? Where do we begin?!**

**Room:** 320C

**Presenter:** Terry JacobsDavis, ERP Module Manager, Tulsa Community College

**Abstract:**

Document Processes? No budget for software? Where do we begin?! TCC's ERP Module Manager and Module Analyst embarked on a simple and cost-effective way to document processes within that office. You'll hear about the starts and stops, what worked, what did not, changing approaches in the middle, and how Excel, a WIG, and a fast approaching deadline finally helped us pull it all together for our team.

## Noon – 1:00 p.m.

### **Networking Lunch (Ballroom C)**

Boxed lunches

Brief presentation by Jorge Quintana, Senior Account Manager, Scantron

## 1:00 – 1:45 p.m.

### **An Introduction to PowerPivot: Microsoft's Free Business Intelligence Tool**

**Room:** Ballroom C

**Presenters:** Quinton Thorp, Research Analyst II, Tiffany Bryant, Research Analyst I, & William Scheideler, Director of Institutional Research, University of Central Oklahoma

**Abstract:**

We will offer attendees a brief introduction to this business intelligence tool that is available as a free Microsoft Excel Add-On. PowerPivot offers users the ability to create data models mashing up large volumes of data from various sources. This how-to session will demonstrate the basics of building a data model, including creating table relationships and using dax measures & calculations.

### **Open Forum Discussion: Connection between Assessment and IR**

**Room:** Henry Bellmon 314

**Presenters:** Kelva Hunger, Assistant Director of Assessment and Analysis, & Dr. Ryan Chung, Director of University Assessment and Testing, Oklahoma State University

**Abstract:**

Presenters will using semi-structure leading questions to have open conversation with the audiences. The purpose of this open forum is to use student learning assessment to lead the direction and how IR could enhance the process both program effectiveness and overall institutional accreditation and accountability. Example questions such as (1) In what way that IR data and student learning outcomes data be useful as evidence for institutional effectiveness? (2) Can student learning assessment be effectively implemented on your campus? (3) What assessment processes can improve an institution of higher learning, and (4) How can we align student-learning data with institutional research data to better understand institutional effectiveness?

1:00 – 1:45 p.m. (Continued)

### **Class Participation as Predictor of Student Performance**

**Room:** 320C

**Presenters:** Dr. Theodore Ward, Assistant Professor, Computer Science, & Dr. Ernst Bekkering, Associate Professor, Computer Science, Northeastern State University

**Abstract:**

Student performance can be affected by lack of attendance and lack of attention while in class. We present the use of Zoom, a popular videoconferencing software, to automatically record attendance and attention. Attendance is measured with login and logout times, and attention as the attentiveness score. We then measure class participation as the product of percentage of time in class and the attentiveness score, and student performance with the score on the final exam. We discuss how linear regression demonstrates a relationship between participation and performance, but not in all classes. We make recommendations to increase the strength of the relationship.

2:00 – 2:45 p.m.

### **An Algorithm to Improve Outcomes for Students and Universities**

**Room:** Ballroom C

**Presenter:** Dr. Jacob Dearmon, Professor of Economics, Oklahoma City University

**Abstract:**

Students live in a BIG DATA world. Every day, every semester, information is collected about their experiences. Grades, social networks, financial transactions, surveys, even attendance tracking are all important parts of this data ecosystem that universities create. How might we leverage these observations to generate actionable insights that improve outcomes for both students and the university? The presenter has developed an algorithm targeted at improving retention by identifying at-risk students and generating individualized scholarship amounts using a novel objective based on the twin metrics of retention and financial sustainability. He'll discuss the DATA SCIENCE behind this scholarship allocation effort.

### **Assessing the Campus Climate Surrounding Sexual Violence**

**Room:** Henry Bellmon 314

**Presenter:** Ramya P. Chandrashekar, Undergraduate Admissions International Evaluator, Oklahoma State University

**Abstract:**

Institutions of higher education have increased their focus on the assessment of learning outcomes to effect meaningful change within their institutions. The administration of campus climate surveys is a large and expensive undertaking for institutions using surveys that are frequently lengthy, have lower response rates from students, and provide institutions with limited actionable information. Despite these concerns, institutions avoid creating survey instruments specific to their assessment needs due to the validity provided by established climate surveys. This research and assessment project involved creating a survey instrument to meet the needs of the Student Conduct/ Title IX Department by curating questions focused on understanding student perceptions of safety and sexual violence and utilizing cognitive interviews to increase the validity of the instrument. This methodology allows institutions to develop a survey instrument informed by the ways in which students make meaning that is cost effective, short, informative, and aligns with standards developed by the Council for the Advancements of Standards in Higher Education.

2:00 – 2:45 p.m. (Continued)

**Assessing Library Impact on Student Success: Collaborating with Institutional Research**

**Room:** 320C

**Presenters:** Bob Holzmann, Systems and Digital Technologies Librarian, & Dr. Joe Harris, Research & Assessment Analyst II, Tulsa Community College

**Abstract:**

In a data-informed world, assessment is important for accreditation and demonstrating value. Tulsa Community College Library is working closely with our Institutional Research Team to develop a quantitative assessment that, based on recent research and statistical analyses, will demonstrate the library's impact upon student success.

3:00 p.m.

**Raffle Bonanza, Business Meeting, and Closing Remarks**

**Room:** Ballroom C

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