

Texas Association for Institutional Research
**Professional Development
 Summer Workshops**



August 2, 2019
 Austin Community College-Round Rock Campus
 Austin, Texas

Schedule Overview					
Check-in Opens at 8:15am					
Morning 9:00am-Noon					
Session	W1	W2	W3	W4	
Level	All	B/I	I/A	B/I	
Track	Reporting Knowledge & Skills	Technical Tools & Skills	Technical Tools & Skills	Technical Tools & Skills	
Title	IPEDS Data & Benchmarking	Survey; A Noun, a Transitive Verb, and a Tool in the Hands of a Professional	SQL: Efficiency is More Science than Art	Using Open Source Tools for Making interactive Web maps	
Lunch: 12-12:45					
Afternoon 12:45pm-3:45pm					
Session	W5	W6	W7	W8	W9
Level	B/I	I	B/I	All	B/I
Track	Technical Tools & Skills	Presentation Skills	Data Analysis & Methodology	Reporting Knowledge & Skills	Institutional Effectiveness & Assessment
Title	Introduction to Times Series Forecasting	Making Maps in Tableau	A Closer Look at Data Used in Support of Academic Success Programs	THECB Data Tools	Common Planning

Workshop Descriptions

**Participants are asked to bring a laptop to all sessions. Please see workshop description of specific software requirements.
Wireless connectivity will be available during sessions**

Workshop	Title	Abstract	Track	Level
W1	IPEDS Data & Benchmarking: Supporting Decision Making and Institutional Effectiveness	<p>This workshop introduces the fundamentals of benchmarking as a measure of institutional effectiveness. It is designed for individuals with little to no experience in benchmarking studies. Participants use data from the IPEDS Surveys, Data Feedback Reports, and the “Use of Data” section of the NCES website to learn about the types of comparison groups that can be constructed. Exercises demonstrate the establishment of key performance indicators (KPIs) and identification of variables to refine comparison groups.</p> <p>Presenter: Michelle Fitzgerald, IPEDS Program Assistant, Association for Institutional Research (AIR)</p>	Reporting Knowledge & Skills	Beginning/ Intermediate/ Advanced
W2	Survey: A Noun, a Transitive Verb, and a Tool in the Hands of a Professional	<p>Quality Improvement, Assessment, Program Evaluation, Research and Data Gathering require quality instruments. Knowing how to measure, what you intend to measure, and how to secure that data necessary to generate actionable data is critical to create effective surveys. Institutional effectiveness and institutional research specialists need to critique, consult, and build with confidence.</p> <p>This active learning workshop will focus on general concepts of survey design. Samples are built in Qualtrics that can be reviewed in the free version of the software. Resource lists will be included and several online free courses will be made available.</p> <p>Presenter: Paula Jaeger, Senior Metrics Analyst, The University of Texas, MD Anderson Cancer Center</p>	Technical Tools and Skills	Beginning/ Intermediate

Workshop	Title	Abstract	Track	Level
W3	SQL: Efficiency is More Science than Art	<p>Efficient SQL code runs with a low cost on the database resources. Over the years, I have learned that new staff members often know how to extract database information, but have not been trained to write code for efficiency.</p> <p>This session is an interactive session where you should be able to input the code into your database and understand how the code could be improved through Explain Plan output and the use of proven strategies. Participants will learn to use tools to reduce the cost of running SQL queries and to establish a process for evaluating and reviewing SQL code. Tips will be provided on how to speed up sluggish code, whether the purpose is for the code to be archived for the next time it is needed or if the query will be set to generate scheduled reports.</p> <p>Participants from Banner schools who have a laptop with access to their ODS environment will have sample scripts they will be able to run to show how the tips can be used to make their SQL coding more efficient.</p> <p>Presenter: Dean Williamson, Assistant Vice President for Institutional Research, Effectiveness, Analysis & Accreditation, Prairie View A&M University</p>	Technical Tools and Skills	Intermediate/Advanced
W4	Mapping Place-based Data: Open Source Tools for Interactive Web Maps	<p>This hands-on workshop will cover tools and techniques for creating web maps from publicly available datasets. It will include a look at open source tools such as the Jupyter Notebook for making data visualizations reproducible and shareable. We will look at examples of web maps built with the Mapbox GL javascript library, and show participants how they can get started building their own.</p> <p>Presenter: John Dinning, MPAFF, Assistant Director – Education Data Center, THECB</p>	Technical Tools and Skills	Beginning/Intermediate

Workshop	Title	Abstract	Track	Level
Afternoon Session 12:45pm-3:45pm				
W5	Introduction to Times Series Forecasting	<p>Using education/IR-related data, this workshop will show participants how to develop predictions using several basic models which are used in times series forecasting. Models presented include moving average, linear trend, and simple exponential smoothing. The time series decomposition model--which builds upon fundamental concepts to separate data into seasonal, trend, and cyclical components---will be introduced as well. Finally, the session will cover multiple methods for evaluating the accuracy of prediction models, an important step in selecting the most appropriate model for a given set of data.</p> <p>This workshop is intended for novices and experienced forecasters desiring a review of basic principles. Proficiency with Excel is required, as attendees will be using their laptops and this software to build models and compute error statistics.</p> <p>Presenter: Rion McDonald, Senior Data Analyst, University of North Texas</p>	Technical Tools & Skills	Beginning & Intermediate
W6	Making Maps in Tableau	<p>A picture is worth a thousand words, and Tableau lets you show your institution's Texas story on a map. Participants will make several maps in Tableau, using CB001 data. Topics covered will include cleaning up geographic roles, adding map layers (county lines and city names), loading up the tooltips, animating the map, and creating filter actions. The session will assume that participants are already comfortable connecting to a data source, creating tables, and creating calculated fields.</p> <p>Participants will need to bring a laptop loaded with Tableau. A free version of Tableau is available at https://www.tableau.com/products/trial.</p> <p>Presenter: Sharon Bailey, Director of Institutional Research and Effectiveness, University of Houston - Victoria</p>	Presentation Skills	Intermediate

Workshop	Title	Abstract	Track	Level
W7	A Closer Look at Data Used in Support of Academic Success Programs	<p>Institutional Research staff are often asked to provide data related to academic success programs. This data plays a vital role in the analysis of program effectiveness, and it is used by university leadership for decision-making purposes. Sam Houston ELITE, a program that endeavors to promote the academic development and success of African American and Hispanic male students, asked Sam Houston State University's Institutional Research team for assistance comparing the success of ELITE students to the success of similar SHSU students. In this presentation, I will guide participants through the study that compared four groups: ELITE students, all SHSU minority males, all SHSU males, and a control group. Participants will learn about the design, see the evaluation process from beginning to end, and discuss how methods used by SHSU IR Analysts can be applied to projects at any institution.</p> <p>Participants will need to bring a laptop loaded with SPSS to get the most from this workshop. A free-trial, available at https://www.ibm.com/analytics/spss-trials</p> <p>Presenter: Kristina Beltran, Institutional Research Analysts, Sam Houston State University</p>	Data Analysis & Methodology	Beginning/Intermediate
W8	THECB Data Tools	<p>A whirlwind tour and peak under the hood of the THECB's Texas higher Education Data website. The Coordinating Board has a wealth data and this workshop is geared to anyone who would like to know more about what data are available. Includes a glossary of commonly used Texas higher education terms.</p> <p>Presenter: THECB Education Reporting Data Staff</p>	Reporting Knowledge & Skills	Beginning, Intermediate, Advanced

Workshop	Title	Abstract	Track	Level
W9	Common Planning	<p>In our workshop, we will focus on efforts to effectively establish, implement, measure, and complete the planning process. With three periods for planning commonly identified as short, medium, and long term; each aligns in compliment with the next longest time frame. A plan cements and anchors a group of people with a common purpose, common direction, and a common goal. Plans create this common purpose to accomplish work and it is well known that individuals and groups alike perform better in a purpose-centered environment. As we journey through the Effective Planning Process and investigate how each commonality compliments the other alongside the transition process from one stage to the next in our planning cycle. Plans can reach maturation in as short as 12 months (or less in some instances), though could last for up to 10 plus years dependent on the longevity intended. Once finished, we will have laid a foundation for constructing and coordinating a productive and effective planning cycle.</p> <p>Presenter: Richard Plott, Director, Texas Southern University</p>	Institutional Effectiveness & Assessment	Beginning/ Intermediate