TAIR Summer Workshops
Summer 2019
August 2, 2019

Morning Session
9:00am-Noon

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**	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. Presenter: Michelle Fitzgerald, IPEDS Program Assistant, Association for Institutional Research (AIR)	Reporting Knowledge & Skills	Beginning/ Intermediate/ Advanced
W2	**Online Survey Design**	This workshop will walk participants through all aspects of the survey design process from helping constituencies articulate the survey goals and related research questions, to the development of survey items to strategies for increasing response rate. Information presented in this workshop is applicable to any survey platform. Presenter: Paula Iaeger, Senior Metrics Analyst, The University of Texas, MD Anderson Cancer Center	Technical Tools and Skills	Beginning/ Intermediate

W3	**SQL: Efficiency is More Science than Art**	Efficient SQL code runs with a low cost on the database resources. Over the years, I've learned that new staff members often know how to extract database information, but have not been trained to write code for efficiency. 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. 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. Presenter: Dean Williamson, Assistant Vice President for Institutional Research, Effectiveness, Analysis & Accreditation, Prairie View A&M University	Technical Tools and Skills	Intermediate/ Advanced
W4	**Mapping Place-based Data: Open Source Tools for Interactive Web Maps**	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. Presenter: John Dinning, MPAFF, Assistant Director – Education Data Center, THECB	Technical Tools and Skills	Beginning/ Intermediate

		Afternoon Session 12:45pm-3:45pm		
Workshop	**Title**	**Abstract**	**Track**	**Level**
W5	**Introduction to Times Series Forecasting**	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 multiples methods for evaluating the accuracy of prediction models, an important step in selecting the most appropriate model for a given set of data. 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. Presenter: Rion McDonald, Senior Data Analyst, University of North Texas	Technical Tools & Skills	Beginning & Intermediate
W6	**Making Maps in Tableau**	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. Participants will need to bring a laptop loaded with Tableau. A free version of Tableau is available at https://www.tableau.com/products/trial. Presenter: Dr. Sharon Bailey, Director of Institutional Research and Effectiveness, University of Houston - Victoria	Presentation Skills	Intermediate

W7	**A Closer Look at Data Used in Support of Academic Success Programs**	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. 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 Presenter: Kristina Beltran, Institutional Research Analysts, Sam Houston State University	Data Analysis & Methodology	Beginning/ Intermediate
W8	**THECB Data Tools**	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. Presenter: THECB Education Reporting Data Staff	Reporting Knowledge & Skills	Beginning, Intermediate, Advanced
W9	**Common Planning**	In our workshop, we will focus on efforts to effectively establish, implement, measure, and complete the planning process. With three time frames 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	Institutional Effectiveness & Assessment	Beginning/ Intermediate

		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. Presenter: Richard Plott, Director, Texas Southern University		
W10	**Visualizing Data with Tableau**	This workshop is designed to provide attendees with the skills necessary to create visualizations of both enrollment and survey data in Tableau. Through a series of hands-on exercises, we will explore the process of importing and transforming your data into a Tableau friendly format using Tableau Prep, creating basic and advanced visualizations, creating basic calculations, and building interactive dashboards. Sample datasets will be provided. Attendees should have Tableau Prep and Tableau Desktop installed on their laptop prior to the workshop. Trial versions of the software can be downloaded at: https://www.tableau.com/products/trial Presenter: G. Marc Turner, Texas State University	Technical Tools & Skills	Beginning & Intermediate

	Morning 9:00am – 12:00pm				
	W1	W2	W3	W4	W10
Title	**IPEDS Data & Benchmarking**	**Survey Design & Development**	**SQL: Efficiency is More Science than Art**	**Using Open Source Tools for Making interactive Web maps**	**Visualizing Data with Tableau**
Level	All	B/I	I/A	B/I	B/I
Track	Reporting Knowledge & Skills	Technical Tools & Skills	Technical Tools & Skills	Technical Tools & Skills	Technical Tools & Skills

	Afternoon 1:00pm - 4:00pm				
Session	**W5**	**W6**	**W7**	**W8**	**W9**
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**
Level	B/I	I	B/I	All	B/I
Track	Technical Tools & Skills	Presentation Skills	Data Analysis & Methodology	Reporting Knowledge & Skills	Institutional Effectiveness & Assessment