

Data Analyst

Getting it Right: Three techniques for improving data quality

Increasingly, charter LEAs are asked to provide more granular data to authorizers and other local, state, and federal oversight agencies. As data are publicly reported at more granular levels, ensuring data quality and accuracy when working with data both at its atomic level and in aggregate becomes an increasingly complex task.

This workshop provides one framework for approaching the aforementioned task. Specifically, we break down the task into three processes:

- Mapping data flows to understand data origin and use
- Using statistical and data normalization techniques to evaluate data quality
- Developing minimally reproducible examples to communicate data quality issues. Laptops with Microsoft Office required for this session.

Target Audience: Intermediate/Advanced Data Users

Speaker(s): Adam Bethke, Brandon Sibilia

Session 1

Tidy Data - How to Structure your Data for Easy Analysis & Schema Building

This workshop is meant to give beginning or intermediate data analysts a strong framework for how to best structure their data. Well structured data is the important foundation that allows users to do fancier things, like data visualizations, analysis, and reporting. If anyone has ever spent a really long time on their analysis or found their data hard to work with, it's probably because they ignored these fundamental elements of data design. The talk is inspired by Hadley Wickham's article on tidy data, good database design, and my own experience working with common types of educational data. A laptop is required for this session.

Target Audience: Beginning Data User, Intermediate Data User

Speaker(s): Adam Dowell

Session 2

Learning how to "Function" (Intermediate Excel Workshop)

The goal of this workshop will be to equip school leaders, teachers, and data coaches with some common (and some not so common) formulas and functions in Excel that will make their work more efficient and their subsequent analyses more robust. The hope is that, by learning some useful tips, tricks, and skills, education stakeholders will feel more comfortable performing analyses in Excel and feel more confident in using their findings for decision making. To accomplish this goal the training workshop will be separated into three segments: Data Manipulation Functions, Data Analysis Functions, and Automation.



Target Audience: Intermediate Data User

Speaker(s): Dereck Norville

Session 3

Data Visualization

Visualizing Data and Communicating Information

This session will introduce participants to the fundamentals in data visualization and information communication. They will learn what data visualization is, why it's important, and different visualization methods.

They will also learn how to target their visualizations to a specific audience, develop proper metrics, and effectively communicate the key conclusions. By the end of the session participants will:-Learn how to choose the most effective metrics for measuring goals -Learn how to choose the proper visualization -Learn how to tell a story with their data -Learn how to tailor their visualization to their audience

Target Audience: Beginning Data User, Intermediate Data User, Advanced Data User

Speaker(s): Larry Jerome

Session 1

Advanced Qlik Skills to Visualize Common Assessment Data

This session will cover advanced Qlik skills, like using set analysis to create complex metrics and value lists to support displaying categorized data, in order to create comprehensive dashboards using raw assessment data. We will use sample PARCC, NWEA MAP, and Fountas & Pinnell datasets as source information. Those attending this session must already have a license to the OSSE online Qlik Sense tool or have previously downloaded and feel comfortable working with Qlik Sense Desktop software. Attendees will learn concepts such as: 1) finding the percent of students at or above the 40th percentile, 2) calculating and displaying percent of students achieving at various F&P levels, 3) creating a metric that finds statistical significance, 4) customizing visualization colors, and 5) customizing reference lines and x/y-axis ranges.

Target Audience: Advanced Data Users

Speaker(s): Josh Boots

Session 2

Dashboards 101

This session will support data users who need to create Google Sheets or Excel dashboards for their data sets, from the selection of data to alignment with PCSB and OSSE standards and writing dynamic formulas that will support constantly expanding datasets (e.g., attendance, discipline, or enrollment). Participants should be proficient with formula writing (how to choose



ranges and criteria) or attend an earlier session on. This session will rely heavily on COUNT and SUM functions, and will cover VLOOKUP and INDEXMATCH in depth. At the end of this session, participants will have created a dashboard for a dataset of their choosing (please feel free to bring your own) or a practice dataset that analyzes attendance or student achievement data.

Target Audience: Intermediate Data Users (We recommend that you attend Intro to Google

Docs prior to this session.) Speaker(s): Amanda Lumnah

Session 3

Family and Community Engagement

Talking Data with Families: Context, Clarity and Consistency

This session will focus on best practices for sharing and talking about student data with parents. Specifically, we will look at DQC's parent polling and focus group data to better understand what information families want to know about their student(s) and how to translate that into effective communication strategies. Additionally, we will review existing resources that teachers can use to help guide their conversations as well as some state and local examples of effective data communication strategies. Example student data reports will be provided, but you have the option to bring in your own student data report to use during this session.

Target Audience: Beginner Data Users, Teachers, Coaches, Student Support Staff

Speaker(s): Abigail Cohen

Session 1

The Missing Piece: Listening to Our Families through Data

Geared towards individuals who work with students, but are not always able to connect with the parents or caregivers of those students, "The Missing Piece: Listening to Our Families through Data" focuses on survey creation, response incentivizing, and data integration. The session combines a best practice presentation from PAVE staff with interactive and immediate application of concepts learned for attendees. The session will conclude with a presentation from one of PAVE's charter school partners.

Target Audience: School Leader, Operations Director, Family Engagement Staff, Community

Partner

Speaker(s): Maya Martin and Raven Willoughby

Session 1



Family Listening Sessions: Collecting and Analyzing Qualitative Data

During the 2016-2017 school year, Flamboyan Foundation interviewed and analyzed qualitative data from over seventy families at our elementary, middle and high school partner schools. The data from these interviews were illuminating and revealed that families valued ongoing communications and collaborative partnerships with educators. This workshop will allow participants to learn about the power of family listening sessions first-hand through educators and families that participated in the practice. Additionally, this workshop will guide participants on how to design and implement similar listening sessions with families at their schools. Ultimately, participants will leave with an understanding of how to collect qualitative data and analyze findings to better serve families. Laptop computers needed for this session.

Target Audience: Teachers, School Leader and Community Member

Speaker(s): Apeksha Goonewardena

Session 2

Using Census Data to Inform Parent Engagement Strategies

The topic of this session is "Using Census Data to Inform Parent Engagement Strategies." The primary goal of this session is for school leaders to obtain actionable strategies to utilize data from the American Community Survey to inform parent engagement. By the end of the session, participants will be able to access data on the American FactFinder website, analyze data on the website and identify comparable communities for comparison, and identify key trends in data and use it to inform strategy. A laptop computer is required for this session.

Target Audience: School Leader, Operations Director, Family Engagement Staff

Speaker(s): Kaitlyn Walker

Session 3

Instructional

Small Data Matters - Differentiating Learning Through Data

Many schools have an extensive, but largely untapped, amount of data at their fingertips in the products teachers are already using in their classrooms. This data should be used to help teachers understand student needs and improve their learning. And, although data is being collected on a daily basis in instructional technology programs, many teachers are not taking advantage of these small data points to differentiate learning for students.

In this hands-on session, we will present the process we use at KIPP DC to analyze and respond to the data available in instructional technology programs to further differentiate and



personalize learning for students. Then we will guide participants in analysis of their own data, so that they leave the session with a plan and skills they can utilize immediately. You will need a laptop with Microsoft Office and student data for this session.

Target Audience: Instructional Coaches, Education Tech Professionals, School Leaders, Data

Specialists, Teachers Speaker(s): Jessica Peters

Session 1

Looking at Student Work for Actionable Trends

Leaders and teachers will examine real samples of student work against the Common Core math standards, including the Standards for Mathematical Practices (SMP), to build their vision of what the standards truly require of students. They will implement a protocol for analyzing student work which will lead to actionable next steps in their classrooms. By the end of the session, participants will:

- Build their understanding of Common Core-aligned math tasks and grade-level standards
- Analyze student work for actionable trends in order to develop next steps You will need your laptop and school data (interim assessment, budget, etc.), and student work for this session.

Target Audience: Teachers, School Leaders and Instructional Coaches

Speaker(s): Lysa L Scott

Session 2

Using Data Wisely: Connecting Goals to Instruction

This workshop is for deans who are tasked with achieving goals that seem as arbitrary as they are immeasurable. It's for instructional coaches who are tired of seeing innovative teaching in August that fades away by October. And it's for exhausted department heads who can't shed an ineffective program because it hasn't yet been implemented "with fidelity." Through case studies, interactive problem-solving, and self-reflection, participants will identify the gaps between their systemic goals, the instructional practice that supports them, and the data that measures them. Even the most "data-savvy" leaders will benefit from the cycle of deliberate inquiry that connects granular data to long-term planning. Leadership teams will leave the session ready to examine their instructional program with fresh eyes, data-driven discipline, and renewed purpose.

Target Audience: School leaders, Instructional Coaches

Speaker(s): Adam Labay

Session 2



Actionable Data for All Roles: Using i-Ready Data to Inform Instruction

In this workshop, we will explore i-Ready implementations and the application of data at KIPP DC and EL Haynes Public Charter School. After sharing an overview of our implementation models, we will dig into the data we use with school leaders, teachers, and specialists. Participants will then experience our data dive model including reviewing real data from the program, informing response to intervention cycles (RtI), designing small groups, and developing appropriate next steps for various stakeholders. Participants will have the opportunity to explore data on their own laptop and spreadsheet software during the session.

Target Audience: Instructional Coaches, Education Tech Professionals, School Leaders, Data Specialists, Teachers

Speaker(s): Jessica Peters, KIPP DC; Lauren Marar, E.L. Haynes

Session 3

The How, What and Why of Measuring Social Emotional Learning

While Social Emotional Learning (SEL) is generally accepted as being an essential component of a student's education, there is less of a consensus on how to measure the success of an SEL program. Many schools collect and use data to better understand where their students' social emotional learning competencies lie in order to set goals and to grow. This session will explore the complex topic of measuring such "soft skills" as self and social awareness, self-management, relationship skills, and responsible decision making. Participants will discover what information to measure, how to track it, and what that data is telling them about the Social Emotional Learning initiatives at their schools.

Target Audience: School Leaders, Student Support Staff, Teachers

Speaker(s): Caitlin Daly

Session 3

Leadership

What Using Data for Continuous Improvement Actually Looks Like: An Introduction to the Model for Improvement

Educators and administrators across the country all have one goal in mind: to positively impact student outcomes. To get there, educators and administrators try different methods, tools, processes, and ideas with the explicit intent of creating the right conditions for learning, student growth, and positive student outcomes to thrive. To aid in this mission, data are usually collected to assess progress. However, educators and administrators are all too often left grappling with an important question: How do I know that the changes i'm implementing are



actually leading to improvement? Developed in the healthcare industry (and slowly being adopted in the education sector) the Model for Improvement (MFI) offers concrete methods and tools to help schools and districts determine if the changes they implement are actually leading to an improvement, for whom, and under what conditions. To help participants determine if what they are trying is actually leading to improvement and be able to accurately detect improvement in the data collected, this session will be broken into 3 segments: Introduction to Improvement Methodology, Using Data for Improvement, and Understanding and Learning from Variation in Data.

Target Audience: All Data User Levels, School Leaders, Teachers, Adminstrative Teams

Speaker(s): Dereck Norville

Session 1

Is Your Professional Development Working - and How Do You Know?

Schools cannot hire and fire their way to strong, steady instructional staffs; as critical as recruitment, retention, and performance management are, schools build strong instructional teams depend on professional growth by educators. But, how, exactly, do teachers grow in their practice? The answer is "it depends on the teacher." TNTP will share its research, both nationally and specifically across DC, showing what factors seem to influence the effectiveness of professional development, what factors don't, and how schools can more effectively use data to evaluate programs and allocate resources. You will need your laptop and school data (interim assessment, budget, etc.) for this session.

Target Audience: Intermediate Data User (Instructional leaders, teacher leaders, deans,

coaches, and school leaders)

Speaker(s): Patrick Byrnett, Richard Green

Session 2

Data Driven Coaching: Utilizing student and teacher quality data to identify coaching priorities

In this workshop, we will discuss how to build instructional coaching based on data to improve student outcomes. We will discuss the models of "student and teacher centered" coaching that is heavily driven by data and explore the lessons we've learned, as AppleTree implemented an intensive instructional coaching model, based on student achievement data and teacher quality data. Participants will have the opportunity to assess their current approach to coaching and create plans to implement data driven coaching techniques in the upcoming school year. You will need your laptop and school data (interim assessment, budget, etc.) for this session.



Target Audience: Intermediate/ Advanced Data Users, School Leaders, Instructional Coaches Speaker(s): Rebecca Kimport and Amponsah Nkansah

Session 3

Your School and Our Children, Our Community, Our Change

The Early Development Instrument (EDI) data is a new population-level snapshot of children's school readiness that LEAs and charter schools can harness for discussions with their school, neighborhood, and broader community. Generated by pre-K 4 teachers across the city, it's the first Districtwide baseline of developmental outcomes that report back to neighborhoods rather than schools. If you are building stronger comprehensive services or partnerships within your school, seeking ways to communicate with leaders in your community, or trying to understand citywide trends before DC's kids enter school, this is the conversation for you.

Target Audience: All Data User Levels, School Leaders, Student Support Staff, Teachers

Speaker(s): Laura Dallas McSorley

Session 3

Teacher

Beginner Excel

The goal of this workshop is to introduce school and LEA staff members to basic features of Microsoft Excel so that they feel more comfortable using Excel to make every day tasks easier. This workshop will navigate participants through the major components and basic features of Microsoft Excel: freeze panes, sort, filter, basic calculations, creating your own template worksheet and workbook, COUNTIF and conditional formatting. These core skills will allow you to become more comfortable with manipulating data in spreadsheets and enable you to more easily identify trends in student or school data.

Participants do need need to have any prior experience using Excel, but will require a computer with either access to Microsoft Excel. Practice data sets will be provided for this session.

Target Audience: Beginner Data Users, Teachers, School Staff

Speaker(s): Angela Morgan

Session 1

Mail Merge: A Powerful Tool for Communicating Data to Parents

Communicating student data to parents is a powerful component of building parent engagement. In this workshop, participants will analyze exemplars of parent data letters and learn to build their own by using mail merge. By the end of the session, participants will be able



to: - Compile data in Excel to use as template for mail merge, including using if/then logic to customize information - Create a mail merge letter template in Word - Execute a mail merge to create parent data letters or emails. A laptop with Microsoft Office is needed for this session.

Target Audience: Beginning Data User, Intermediate Data User

Speaker(s): Katie Newmark

Session 3

Teacher/Data Analyst

Introduction to Google Docs

This session will introduce participants to how Google Docs can support collaborative work and school-wide data sharing. The session will begin with an overview of types of Google Docs, how to share and organize them in Google Drive, and move on to cover permissions that can be set up (particularly on Google Sheets) to ensure sensitive documents or sections of a document are protected from being edited or accidentally shared, and how to have Google Docs interact with each other (e.g., pull data from one spreadsheet into another, embed images, tables, or data into Slides, etc). This session will also cover some examples of when Google Docs have been especially useful during teacher and staff planning.

Target Audience: Beginner Data Users, Teachers and School Staff

Speaker(s): Amanda Lumnah

Session 2