



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 Data User, Advanced Data User

Speaker(s): Adam Bethke, Brandon Sibilia, DC Public Charter School Board

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 the presenter's 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, DCPS

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, National Board for Professional Teaching Standards

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: Data Users at All Levels

Speaker(s): Larry Jerome, InterWorks

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.



A laptop is required for this session.

Target Audience: Advanced Data Users

Speaker(s): Josh Boots, EmpowerK12

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 have attended the earlier session on Google Docs (Session 2). 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 Introduction to Google Docs prior to this session.)

Speaker(s): Amanda Lumnah, Ingenuity Prep

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 The Data Quality Campaign (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: Beginning Data Users, Intermediate Data Users, Teachers, Coaches, Student Support Staff

Speaker(s): Abigail Cohen, Data Quality Campaign

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, this workshop 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 Leaders, Operations Directors, Family Engagement Staff, Community Partners

Speaker(s): Maya Martin and Raven Willoughby, PAVE (Parents Amplifying Voices in Education)
Session 1

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 reports 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: Data Users at All Levels, School Leaders, Student Support Staff, Teachers

Speaker(s): Laura Dallas McSorley, Raise DC
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 70 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.

A laptop is required for this session.

Target Audience: School Leaders, Teachers, Community Members



Speaker(s): Apeksha Goonewardena, Flamboyan Foundation
Session 2

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, Ampersand Education

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.

A laptop with Microsoft Office is required for this session. Please bring student data from a blended learning program (ie. usage, progress, mastery, and or alerts). Sample data sets will be available for participants that do not have their own data.

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

Speaker(s): Jessica Peters, KIPP DC
Session 1

Let the Data Do the Work!



From dashboards offering “at a glance” views of information to deeper dives into performance reporting, data is your road map to drive targeted instruction. Pre-K through 3rd grade is THE most important time for learners to receive personalized instruction to learn to read and stay on level in math. See how KIPP DC and Prince George’s County use data to make sure their early learners are on track and engaged.

Target Audience: Data Users at All Levels, Instructional Coaches, Early Childhood Educators, Education Tech Professionals, School Leaders, Data Analysts

Speaker(s): Candra Morris, Waterford Research Institute

Session 2

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

A laptop, school data and student work for this session.

Target Audience: School Leaders, Teachers, Instructional Coaches

Speaker(s): Lysa L Scott, Achievement Network

Session 2

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 those data is telling them about the Social Emotional Learning initiatives at their schools.

Target Audience: School Leaders, Teachers, Student Support Staff

Speaker(s): Caitlin Daly, Move This World



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 the Model for Improvement, Applying the MFI in our Own Context, and Practice using the MFI.

Target Audience: Data Users at All Levels, Teachers, School Leaders, Administrative Teams

Speaker(s): Dereck Norville, National Board for Professional Teaching Standards

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 that 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.

A laptop is required for this session.



Target Audience: Intermediate Data User, Instructional Leaders, School Leaders, Teacher Leaders, Deans, Coaches

Speaker(s): Patrick Byrnett, Chris Daniels, TNTP

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.

A laptop is required for this session.

Target Audience: Intermediate Data Users, Advanced Data Users, School Leaders, Instructional Coaches

Speaker(s): Rebecca Kimport and Amponsah Nkansah, Appletree Early Learning PCS

Session 3

Using Data to Ease Student Transitions to High School

In DC, roughly a quarter of the variation in high school graduation outcomes can be explained by 8th grade characteristics, and approximately half of our students are off track by the end of their first year of high school. As students make the critical transition from middle to high school, how can schools collect, analyze, and use key data to serve rising 9th graders more effectively? In this session, participants will: 1) Become familiar with DC’s cross-LEA Bridge to High School Data Exchange; 2) Explore both local and national examples of how schools are setting up for and integrating student-level data into early and ongoing decision-making to support students to and through 9th grade; and 3) Define promising practices and prioritize opportunities for improvement within their respective schools.

Target Audience: Beginning Data Users, Intermediate Data Users, School Leaders, Data Managers, and School Support Staff (Middle and High School)

Speaker(s): Celine Fejeran, Raise DC; Kun Ye Booth, Friendship PCS Kristofer Comeforo; Cardozo

Education Campus; Janice Eldridge, Building Assets, Reducing Risks Center

Session 2

Using Data to More Effectively Guide Students into the Right Programs



Explore how real measures of aptitudes through ‘brain games’ are allowing educators, counselors and parents the ability to more effectively engage and guide students’ curriculum and post-secondary choices. Data from a recent Georgia Governor’s Office of Student Achievement (GOSA) pilot shows that after using YouScience students are more likely to connect relevance of school to career. The data also indicate that current interest based surveys artificially limit student career choices especially for minority, female and low-income students.

Target Audience: Beginning Data Users, High School Administration, Teachers and Counselors

Speaker(s): Rich Thompson, YouScience

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 everyday 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. Practice data sets will be provided for this session.

A laptop with Microsoft Office is required for this session.

Target Audience: Beginning Data Users, Teachers, School Leaders, School Staff

Speaker(s): Angela Morgan, KIPP Foundation

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 required for this session.

Target Audience: Beginning Data User, Intermediate Data User

Speaker(s): Katie Newmark, KIPP DC

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 and how to share and organize them in Google Drive. The presenter will 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: Beginning Data Users

Speaker(s): Amanda Lumnah, Ingenuity Prep

Session 2