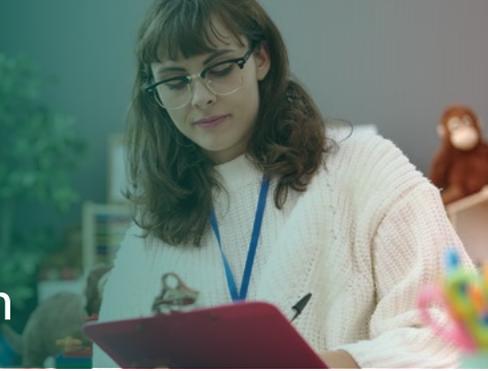




# DATA LITERACY CHECKLIST

## Turn K-12 Information Into Action



Data can tell a vital story about your district’s challenges and how to solve them. K-12 leaders need data to identify disparities across their districts. Teachers need data to inform instruction and assess student learning. But data alone isn’t enough: Educators must know how to use it effectively.

Become a data champion for your district by strengthening your data literacy skills. Here are some best practices for how to use K-12 data to effectively measure changes, discern patterns, and increase positive outcomes for students.

### INCREASING DATA PROFICIENCY

K-12 educators understand the need for data but may lack the time and training it takes to apply it confidently and accurately to their work.



The percent of teachers who agree their school leaders encourage employees to use data in their jobs



The percent of teachers who agree their school leaders regularly model data use



The percent of teachers who report they learned how to use data in their educator preparation program

### THE DATA LITERACY IMPERATIVE

Data literacy – the ability to effectively access, interpret, use, and share data – is a critical skill for K-12 educators. Whether at the classroom, school, or district level, making solid decisions requires going beyond perceptions and relying on evidence and facts. Data literacy empowers you to:



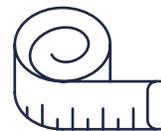
RECOGNIZE AND QUANTIFY NEEDS



BUILD CONSENSUS AROUND SOLUTIONS



MAXIMIZE EFFECTIVENESS AND ENHANCE OUTCOMES



MEASURE CHANGES OVER TIME



DEMONSTRATE RESULTS WITH COMMUNITY MEMBERS

Luckily, you don’t need to be a data scientist to use data effectively or successfully. Developing sound practices for collecting and interpreting data can help you make better decisions, communicate findings, and achieve positive outcomes for students, staff, and families.

# MAKING GOOD USE OF YOUR DATA

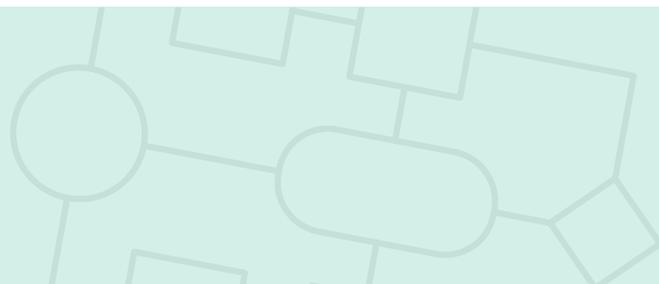
Get clear insights by following a six-step protocol to collect and evaluate data in your district or school systematically and accurately.

## SIX STEPS FOR EFFECTIVE DATA USE

<b>1.</b>	<b>Form a Team</b> This team investigates a specific issue and is responsible for managing the data inquiry, analysis, monitoring, and communication. The team should include two key members – an experienced data user and a data manager – in addition to diverse staff from relevant departments.	NOT COMPLETE	IN PROGRESS	COMPLETE
<b>2.</b>	<b>Identify Research Questions</b> Identify the questions you need to answer and your research goals. Choose the metrics you will use to measure your goal completions.	NOT COMPLETE	IN PROGRESS	COMPLETE
<b>3.</b>	<b>Identify and Gather Data</b> Consider what data you will need regarding enrollment, outcomes, processes, resources, demographics, and perceptions. Conduct an inventory to determine what data is available and what's missing. Collect quantitative and qualitative data using various methods.	NOT COMPLETE	IN PROGRESS	COMPLETE
<b>4.</b>	<b>Discuss</b> As a team, take time to review and discuss the data set, make observations, refine questions, and determine if further data is needed.	NOT COMPLETE	IN PROGRESS	COMPLETE
<b>5.</b>	<b>Analyze</b> Convert raw data sets into insights by performing a deeper analysis to detect patterns, inconsistencies, and changes over time; draw comparisons to other district data; or uncover root causes.	NOT COMPLETE	IN PROGRESS	COMPLETE
<b>6.</b>	<b>Plan and Evaluate</b> Use the results of your data analysis to develop an action plan to set a path for improvement, using SMART goals. Then regularly monitor and evaluate progress on these goals to ensure positive results.	NOT COMPLETE	IN PROGRESS	COMPLETE

**Interested in developing a logic model to turn your district's data into action?**

Download Hanover's logic model template.



# YOUR DATA PLANNING TOOL

When your data team has a project in mind, use this tool to outline the scope and plan what will happen after the data are collected and analyzed.

## OBJECTIVES



List any specific objectives or purposes you have for conducting the data analysis.

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## DATA TO EXAMINE



List the quantitative (e.g., test scores, attendance rates) and/or qualitative (e.g., staff perceptions survey responses) data you will examine related to the goals listed above.

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## GROUPS TO COMPARE



Record the criteria or characteristics you wish to disaggregate and compare to one another (e.g., male vs. female students, students with and without disabilities, observed vs. expected values, differences across points in time).

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## COMMUNITY MEMBER IDENTIFICATION



Identify specific individuals or groups who should be involved in this analysis.

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## COMMUNITY MEMBER COMMUNICATION



To ensure accountability and transparency, list how and when you will share the findings with other community members (including key staff and families).

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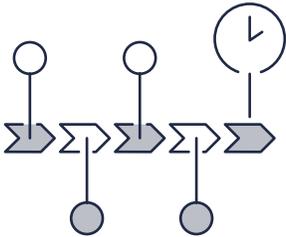
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## TIMELINE



Record deadlines and actions for completing different components of the analysis and its communication.

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## ADDITIONAL CONSIDERATIONS



Record any additional considerations or special circumstances to be mindful of when completing the above-listed process.

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**Use data to get the outcomes your students and teachers deserve.**

Partner with Hanover for comprehensive data analysis and research expertise.

Sources: "Teacher Data Literacy: It's About Time." Data Quality Campaign. 2014. <http://2pido73em67o3eytaq1cp8au.wpengine.netdna-cdn.com/wp-content/uploads/2016/03/DQC-Data-Literacy-Brief.pdf>; D'Ignazio, C. and Bhargava, R. "Approaches to Building Big Data Literacy." 2015. [https://dam-prod.media.mit.edu/x/2016/10/20/Edu\\_D'Ignazio\\_52.pdf](https://dam-prod.media.mit.edu/x/2016/10/20/Edu_D'Ignazio_52.pdf); Stobierski, T. "Data Literacy: An Introduction for Business." Harvard Business School Online. February 23, 2021. <https://online.hbs.edu/blog/post/data-literacy>; Mandinach, E.B. and Gummer, E.S. "Every teacher should succeed with data literacy." Phi Delta Kappan. May 1, 2016. [https://kappanonline.org/mandinach-gummer-data-literacy-essa/#:~:text=Data%20literacy%20for%20teaching%20is,to%20help%20determine%20instructional%20steps](https://kappanonline.org/mandinach-gummer-data-literacy-essa/#:~:text=Data%20literacy%20for%20teaching%20is,to%20help%20determine%20instructional%20steps;); "Data Literacy 101." Data Literacy Campaign. <https://dataqualitycampaign.org/resource/data-literacy-101/>; "The Human Impact of Data." Accenture. [https://www.accenture.com/us-en/insights/technology/human-impact-data-literacy#:~:text=Improve%20employees%20self%2Dconfidence%20to,trusted%20to%20make%20better%20decisions](https://www.accenture.com/us-en/insights/technology/human-impact-data-literacy#:~:text=Improve%20employees%20self%2Dconfidence%20to,trusted%20to%20make%20better%20decisions;); "Examining and Acting on Data to Promote Equity Toolkit." Hanover Research. 2020; "Data Review Protocol Toolkit." Hanover Research. 2021.