Streamlining Tools and Reducing Noise on Instructional Data

How districts can reduce observation burden and focus on the data that matter most

Molly DePasquale & Amreena Hussain

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INSTRUCTIONAL DATA SYSTEMS

Six Tools, One Classroom: When More Observation Tools Mean Less Instructional Insight

More is not More: Missteps in Measuring Student Achievement

10 years ago, on the heels of the Council of Great City Schools paper on over-testing and the Department of Education's recommended 2% cap on standardized testing, Molly DePasquale, began advising districts on how to streamline their assessment systems. Districts were spending way too much time collecting distracting data and lacked a coherent approach to using those data to improve instruction and ultimately student achievement.

Over the years, tackling this difficult work alongside hard-working and well-intentioned leaders, Molly has noticed how much easier it is for a system to **buy or add a new assessment product than it is to agree to eliminate an existing one.** The unfortunate end result is most systems are still 'data rich and information poor'. Leaders struggle to sort through the mixed signals from their varied assessment tools and are burdened by the task of aggregating the disparate data points into one place. Teachers are stressed out and students are spending too much valuable instructional time taking tests.

Another Measurement Tool falls into the Same Trap

Fast forward to 2026, most leaders would agree that we have not succeeded in streamlining our assessment systems and unfortunately another key measure of instructional quality is repeating these familiar missteps. In addition to the multitude of classroom, interim and summative assessments in schools – Molly is observing a proliferation of classroom observation and walk thru tools. Ask any leader and they can rattle off a list of at least **6** (**six**) unique tools that they are expected to use to observe instruction in any given week.

Similar to the challenges schools face with assessment data, these observation tools often produce redundant data that vary in quality and add unneeded complexity to efforts aimed at improving instructional quality. As Dylan Williams cautions, 'Weighing the pig doesn't fatten it'. When leaders spend precious time measuring instructional quality, using 6+ different tools, they have scarce time left to dedicate to analyzing that data and planning for how to respond to the trends that they see by designing intentional professional learning and/or providing coaching to their staff.

Here are some common types of observation tools found in most schools.

- **Formal Evaluation tools – Comprehensive, often state-mandated rubrics used to rate a teacher's overall performance for personnel and accountability decisions, typically across many domains of practice.**
- **General pedagogy tools – Broad, subject-agnostic tools that look at teaching moves/practices – like classroom management, engagement, or questioning – regardless of what content is being taught.**
- **Content-specific tools – Tools that zero in on the quality of instruction within a particular subject area, examining whether the teaching reflects best practices specific to that discipline. These tool can be used across instructional materials.**
- **HQIM fidelity tools – Checklists that measure whether a teacher is implementing HQIM as intended, following the lesson structure and largely asdesigned. Often publisher-created or developed by an external professional learning/coaching organization.**
- **HQIM integrity tools – Tools that assess whether a teacher is delivering strong instruction while honoring the intent and rigor of their HQIM, even if they've enhanced materials for their unique classroom context. Often publisher- created or developed by an external professional learning/coaching organization.**
- **State-required tools – Observation tools mandated by a state education agency to monitor a specific initiative or compliance requirement, such as the presence of science-backed literacy practices approach.**

How did we get here?

Why might this pattern be repeating itself? Molly thinks it comes down to competing interests. Similar to classroom assessments, classroom observation tools are each designed with a different end user in mind. And every user has their own unique set of questions they want their classroom observation tool to answer. Instead of using a tool they already have, the inclination is to create or introduce a brand-new tool. Adding to the mix, state leaders have their own tools they want districts to as part of their initiatives, such as science of reading policies or state coaches.

6+

different tools used to measure instructional quality

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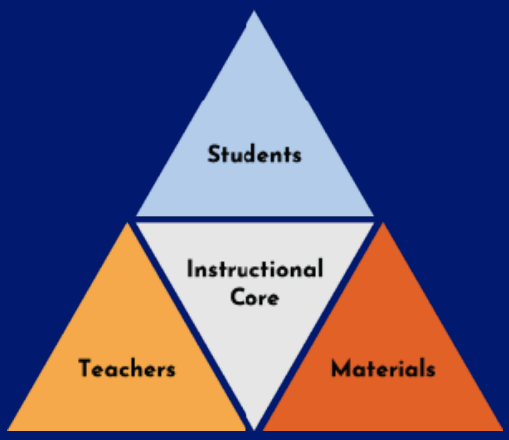
The Missed Opportunity

Amreena, CEO of EdBetter, has seen this play out in her work with school districts and state education agencies aimed at improving classroom observation systems.

Classroom observation data is an invaluable asset because it provides a real-time view of the instructional core in action. Rigorous, grade-level curriculum and effective teachers are the most important drivers of student outcomes. And classroom-level data on instructional quality allows leaders to examine the intersection of these two elements. Assessment data can tell us what students have learned, and classroom observation data can help us understand how well instruction is being delivered. And when done well, they can also surface real time data about student learning.

Individual observations provide insight into a single classroom. But if we are intending to implement change at scale, the power of these data aggregated across schools, grades, and content areas, can be transformative for a district's instructional leadership team. Think of this aggregated data as providing direct evidence of how teachers manage classrooms, leverage instructional materials, and implement instructional practices the district seeks to promote, and we have one of the most valuable sources of information available to instructional leaders. It helps them identify patterns in instructional practice that can facilitate a better understanding of instructional quality across the system.

THE INSTRUCTIONAL CORE



"There are only three ways to improve student learning at scale: You can raise the level of the content that students are taught. You can increase the skill and knowledge that teachers bring to the teaching of that content. And you can increase the level of students' active learning of the content. That's it. Everything else is instrumental."

– Richard F. Elmore, Improving the Instructional Core (2008)

We must focus on quality over quantity...

Data is not inherently useful. Asking instructional leaders to observe instruction with a variety of poorly designed tools will result in unhelpful data and wasted time and effort. We want data that results in transformative practice. That kind of seismic shift is predicated, entirely, on the quality of the questions.

Often observation tools combine multiple constructs into a single question, without clearly drawing a connection between these constructs, thereby rendering unclear what was actually being measured. Many others focused on surface-level indicators that were only loosely connected to evidence-based instructional practice. Earlier this year, EdBetter's team analyzed data from tens of thousands of classroom visits from EdBetter's pilot districts. But unfortunately, we were forced to exclude a substantial portion of the observation items from our analysis because they were not designed to generate meaningful insight into instructional quality.

15 well-designed questions, asked 20,000 times, can provide powerful insight into instructional practice across a system.

Consider student discourse, for example. One observation question asked whether students were given opportunities to engage in discussion during a lesson. The resulting data informed us only whether (and how frequently) discussion occurred. It did not tell us about the quality of those student discussions - were students grappling with concepts presented in the text, using evidence to support their thinking, were they building an understanding through conversation, or were they simply discussing the text?

A stronger question would examine whether students were engaging in text-centered discussion that helped them build understanding of important concepts. Here, we would gain clarity of the purpose and quality of the discourse, not simply whether it happened.

Imagine a district with 30 schools where district and campus teams are normed on a single 15-question observation tool. That district could easily generate 20,000 observations in a single school year. The opportunity for impact is significant. 15 well-designed questions, asked 20,000 times, can provide powerful insight into instructional practice across a system. But the opposite is also true. If those questions are poorly constructed, or not clearly connected to evidence-based practice, they can produce data that can be distracting, and difficult to interpret and act on.

The goal of the observation system should not be to collect more data, rather it should be to generate better evidence that is meaningful to instructional leaders. Our push, therefore, is for instructional leaders to build clear and streamlined observation tools that are grounded in evidence-based instructional practices.

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Importantly, streamlining observation instruments is complex work. School systems often need expert guidance to balance two critical considerations: whether an item captures an important aspect of practice and whether it functions as a sound measure capable of producing reliable, meaningful data.

A Path Forward

The goal is not to standardize everything into a single instrument, instead Molly and Amreena advocate for reducing the noise and time burden on tired leaders. **The goal must be to determine the minimum number of tools needed to generate the maximum amount of actionable information.** A pilot looks at altitude and speed data in one way while an air traffic controller looks at the same data organized differently for their purposes. Similarly, the evidence a coach collects during an observation and uses to support an individual teacher should roll up so principals have a clear picture of school-wide instructional trends and roll up farther so district leaders can compare trends across schools and monitor implementation. Just like our pilot, air traffic controller, and an airport administrator might, each role in a district system uses the same information differently. And all stakeholders are aligned on consistent look fors/signals of instructional quality.

The strongest systems use their instructional vision as a starting point to design their observation tools. The observation tools are simply a mechanism for collecting evidence about whether a district's instructional vision is coming to life in classrooms. That vision should be crystal clear about the instructional shifts the district expects to see, whether that is stronger alignment to materials, more rigorous student discourse, targeted differentiation practices, or another set of instructional priorities. The observation tool should then embody those shifts, translating the district's vision into observable look-fors. If the instructional vision is the north star, then observation data is a critical tool at every level of the districts' plan to get there, helping leaders see whether key instructional shifts are taking hold across the system. Before selecting, revising, or adding another tool, districts should first ask: What do we need to know to determine whether our instructional strategy is working? The answer to that question should drive the design of the observation system, not the other way around.

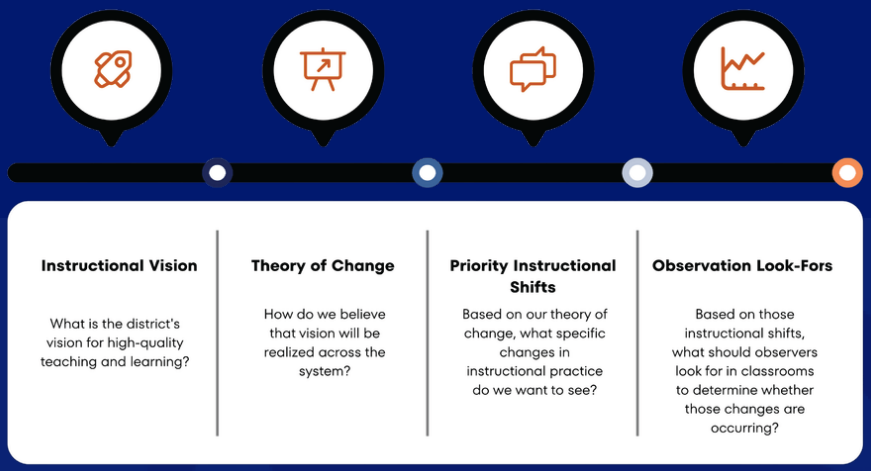
Every question a state, district or school leader seeks to answer should not require a new tool. Here are practical steps leaders can take to fix their system. The goal of this exercise is to ensure that a district's tooling is directed at collecting the right data in the first place and eliminating measures that produce distracting information. Depending on the size and complexity of the system, leaders may find it helpful to create a committee to tackle this work, so a range of voices are heard and inform the outcome.

Align Observation Systems to the Instructional Vision

One way to evaluate an observation tool is to trace it back to the district's instructional priorities. Every observation measure should connect to a specific instructional shift, each shift should support the district's theory of change, and the theory of change should advance the district's vision for teaching and learning. The framework below provides a simple way to assess that alignment before conducting a tool audit.

Grounded in the Instructional Vision

Every observation measure should connect to a specific instructional shift, each shift should support the district's theory of change, and the theory of change should advance the district's vision for teaching and learning.



Practical Steps Towards Stronger Observations

Step 1:

Determine the questions you need observation data to answer derived from your Theory of Change

Reflection questions:

- What are your top tier instructional shifts needed to achieve your ToC?
- What evidence will you need to collect to know if those shifts are occurring?
- What gaps in your tools do you see?
- Which questions truly require different evidence?

Note: You will likely need data to capture instructional trends, target support and measure implementation of quality materials.

Step 2:

Inventory your tools. List the purpose of each tool. If you are unsure of the purpose of a tool, record that. If a tool does not have a clear purpose, note that as well.

Reflection questions:

- Which tools generate overlapping information?
- Where are we creating a collection burden without increasing insight?

Step 3:
Compare the purpose of your existing tools to key questions you identified in Step 1.

Note: This crosswalk can be a helpful communication tool to negotiate with entities (states, grantors, others) requiring redundant tools. You're ensuring your major instructional shifts are present.

Step 4:
Identify what to keep, cut and modify. Each tool should have a clear undeniable `purpose and unique 'use'.

An existing tool can often be adapted to meet the needs of multiple stakeholder groups. By retaining a core set of shared measures and adding role-specific components only where necessary, systems can reduce tool proliferation while ensuring that district instructional teams, content directors, principal supervisors, school leaders, coaches, and teachers receive the information they need to support improvement.

Note: **Ideally each stakeholder should only have one observation tool.**

Step 5
Update your inventory so that:

- Each tool has a clear purpose and use.
- You've removed fluff and jargon
- Each end user should have the data they need to complete their responsibilities as defined by the theory of change.

Step 6:
Schedule time for the committee or task force to come back together in a few months and reflect on the process and how it is going.

Reflection questions:

- Is the process of collecting, analyzing and using data on instructional quality efficient?
- Is it easy to aggregate data in order to see trends?
- Is it providing data at the right grain size to support coaching conversations?

Audit tool - Blank

Instructional vision:

- What observation data are essential for determining whether classroom instruction aligns with our vision of quality?
- Who needs this information, and for what purpose? How might the data needs of teachers, coaches, principals, district leaders, and state leaders differ based on their responsibilities within the theory of change?

Stakeholder	Question Types Below are illustrative questions to use as a starting place	Name of Specific Tools	Type (Curriculum specific, content specific, agnostic)	Purpose	Use	Contextual factors
Teachers	*How can I improve my instruction?*					
Instructional Leaders (coaches, teacher leaders, etc.)	*What instructional shifts are most challenging for our teachers? What types of PL and coaching support do my teachers need in order to improve instruction?* *Is the support that I am providing improving instruction?*					
Principals	*Are my teachers effective? Ineffective?* *What instructional shifts are most challenging for our teachers? What types of PL and coaching support do my teachers need in order to improve instruction?* *Are teachers using HQIM?*					
District Leaders	*Are my teachers effective? Ineffective?* *What instructional shifts are most challenging for our teachers? Where do they need the most support? What types of PL and coaching support do my teachers need in order to* *improve instruction? Are teachers appropriately leveraging their HQIM?*					
External Consultants	*What does instruction look like across schools? Are teachers* *appropriately leveraging their HQIM? What does this mean about the* *priority support this district/school needs from me?*					
State Leaders	*What does instruction look like across the state?* *Are teachers effectively leveraging HQIM and how is that impacting instruction?*					

Audit tool - District Math Example

The completed audit below is intended to illuminate the current state of a district's observation system and surface opportunities for improvement. As we can see, too much is happening in this district's math data collection world. The audit is designed to raise important questions about who is collecting data, which decisions those data inform, where blind spots exist, and whether the current tool repertoire is coherent, efficient, and fit for purpose. The example below illustrates the types of findings that often emerge through this process.

Stakeholder	Question	Tools	Type	Purpose/Use	Contextual factors
Teachers	*Is my math teaching reflective of best practices?*	Math IPG	Content-specific	To measure presence of content specific pedagogy practices.	Teachers would need release time and maybe subs to do peer observations
School Instructional Leaders (Coaches, Teacher Leaders, etc.)	*What instructional shifts are most challenging for our teachers? What types of PL and coaching support do my teachers need in order to improve instruction?*	Math IPG	Content-specific	To measure presence of content specific pedagogy practices. To identify trends in instruction in a specific content area to later respond with coaching/support. To use as part of observation and feedback conversations with teachers.	Teachers must trust that this process is separate from the evaluative process of observations by their principals. They must also trust the leader providing them with feedback.
Principals	*Are my teachers effective? Ineffective?*	**Teacher Eval-tools like Danielson**	Agnostic	To measure presence of evidence-based pedagogical practices (flexible groups, scaffolding, visible student thinking). To identify school and district-wide trends in teacher effectiveness for principal supervisors and to make staffing decisions.	Requires extensive calibration/ norming training. And lots of video examples to cover content areas and grade levels.
	Are teachers using the adopted HQIM? *Are teachers using their HQIM to deliver strong instruction?*	**enVision Fidelity Check**	Curriculum-specific	To determine if teachers are using the new adopted materials. To identify individuals and groups of teachers who need additional coaching or support around the use of the adopted HQIM.	In the early stages of curriculum implementation
		enVision Integrity Check	Curriculum-specific	To determine if teachers are using the adopted HQIM to deliver instruction that meets their students' needs. To identify individuals and groups of teachers who need additional coaching or support. Especially helpful when planning PL	In the later stages of curriculum implementation
	Are teachers using the expected instructional strategies/practices?	**Teach Like a Champion Checklist**	Agnostic	To determine if teachers are using the instructional strategies that have been the focus of district PL.	These types of tools may be preferred in smaller schools with leaner generalist instructional leadership teams because they don't require content expertise

Audit tool - District Math Example (Continued)

Stakeholder	Question	Tools	Type	Purpose/Use	Contextual factors
District leaders	*Is math instruction strong at each school? Which schools need more support and resources?*	enVision Integrity Check	Curriculum-specific	To determine if teachers are using the adopted HQIM to deliver instruction that meets their students' needs. To identify schools and grade levels where teachers who need additional coaching or support. Especially helpful when planning district PL.	In the later stages of curriculum implementation
State Leaders	*Is math instruction strong? Are best practices present?*	State walk-through tool	Content-specific	For a state agency to collect data on instructional practices across LEAs and see trends in instruction. State leaders can also use these types of tools to reinforce the importance of classroom observations as a part of instructional leadership.	This can require a lot of time from school leaders.

Audit Headlines

The audit identified several disconnects, inefficiencies, and areas of duplication across observation tools. The current configuration is likely generating large volumes of overlapping data, much of which may go unused because of time and capacity constraints. The result is a system that limits the ability of leaders at different levels of the district to make informed instructional decisions. To this end, two major issues are outlined below:

1. Only Campus-Level Instructional Coaches are using a math-specific tool (Math IPG): This limits the district's ability to identify trends in mathematics instruction across schools, grade levels, and teacher groups. As a result, district leaders do not have a systemwide view of math-specific instructional practices. Additionally, it is unclear whether the instructional coaches are calibrated on which major shifts to prioritize and how best to support teachers.

2. Many districts end up with multiple tools of the same type: School and district leaders may find themselves using two curriculum-specific tools, two content-specific tools, and multiple content agnostic tools, all designed to answer similar questions. A leader could reasonably ask: Why am I collecting data on the same instructional practices across multiple tools? The result is mixed or conflicting signals, duplicated effort collecting nearly identical data, and large volumes of information that may go unused. Fewer high-quality tools can serve the purpose of several overlapping instruments.

3. School Leaders are navigating multiple tools with overlapping purposes: Principals are expected to use the Fidelity Check, Integrity Check, and Teach Like a Champion observation tool, each designed to answer related instructional questions. From the perspective of school leaders, the distinctions among these tools may not always be clear. A principal could reasonably ask: What is the difference between the Fidelity Check, the Integrity Check, the Teach Like a Champion tool, and the Math IPG used by my instructional coaches? What am I supposed to be looking for? The audit raises questions about whether the unique purpose of each tool is sufficiently defined and whether some measures could be consolidated to reduce redundancy, simplify data collection, and improve coherence for end users.

Conclusion

The primary purpose of observation tools should be to improve instruction. Bearing that in mind, we should be laser focused on a small set of tools that help educators get there. Districts should avoid overly lengthy tools that can burden already stretched district and campus instructional leaders. Observation tools can place an undue stress on instructional leaders in much the same way that excessive assessment requirements can burden students and teachers. Creating a more efficient observation system therefore requires careful consideration of staffing, resources, and what is realistically sustainable for principals, while maintaining a clear focus on measuring instructional quality.

The work we are describing here is not about how observation findings are communicated or packaged for stakeholders. Although yes, these considerations should be top of mind as district leaders evaluate their observation tools. What we are advocating here is a more fundamental need: we should first ensure they are collecting the right data for instructional improvement, and eliminate inefficiencies, distractions, and redundancies.

This calls for a review of districts' repertoire of observation tooling. We've seen instructionally strong, and change-minded leaders build a coalition to support revisions, adaptation and cuts to their tool suite. In doing so, they are anchored in their district's instructional vision, and their theory of change on how to achieve that vision. Each unique tool should be purposeful, grounded in evidence-based practice and the science of learning, and capable of producing actionable information. Some districts have had success with a modular tool that has a set of core observable indicators and then sections designed for specific stakeholders.

By reducing the number of tools, we think districts can increase the rigor of their classroom observations. And we can get behind this!

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About This Brief

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