

Connecting the Dots: Building Coherent Systems to Support Student Success

Innovative Accountability Systems to
Support School Improvement



Meet the Team



Benjamin Boer

EdSystems
Senior Director of
Data



Mel Wylen

WestEd
Research Manager



Mitch Herz

WestEd
Research Manager

Agenda

Accountability Framework

Chicago Public Schools' Case Study

Connecting the Dots

Closing

Purpose

The education sector has worked to identify schools that need additional support and to intervene effectively to improve outcomes. We're still working out the kinks.

Research has focused on two topics recently:

- coherence across systems, particularly accountability and school improvement; and
- reciprocal accountability that aims to create systems that respond to the needs of schools.

Reciprocal accountability generally requires coherence, which accountability systems often lack.

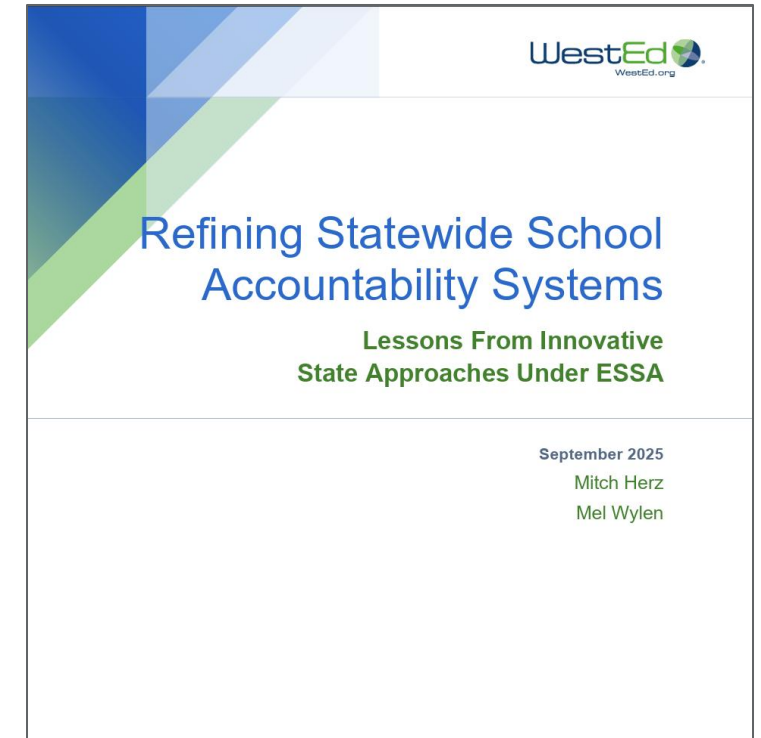


Measuring Student Growth to Support Organizational Learning Using the Academic Progress Indicator (API)



Research Report

Our paper examines prior attempts at accountability system innovations and identifies themes and lessons learned.



[Link to Report](#)



Framework: Responsibilities of a School Accountability System



- It builds on the assumption that accountability systems should drive improved student outcomes.
- It identifies specific responsibilities of the accountability system in increasing levels of complexity.

Level 1: Establish Vision and Purpose

- States establish a purpose and vision for the education system (often through a strategic plan or similar document) that identifies key priorities.
- States articulate key elements that will produce outcomes in line with the vision for the education system.



Kentucky's community-driven accountability work began with a broader vision that accountability should reflect local priorities and community values, not solely state-defined metrics. The state explored ways to align accountability policy with locally developed measures of success while maintaining statewide expectations.

Level 2: Design the Accountability System

- States design (or refine) the accountability system to reflect the priorities and measure key elements for success.
- System design must
 - balance several tensions (nuance vs. complexity, statewide requirements vs. local flexibility, etc.); and
 - address technical specifications in a way that builds trust in the system and limits burden on educators and administrators.



Utah designed an accountability indicator that measures the growth of the lowest-performing 25 percent of students within each school. This design choice intentionally directs attention toward students who may need additional support while ensuring every school has a meaningful improvement target.

Level 3: Communicate Information Clearly

- Differentiated communication strategies are needed to address the needs of the many groups interested in accountability data.
- Communication can be both
 - **implicit:** what data is and is not included, for example; and
 - **explicit:** specific messages about the goals of the accountability system, for example.



Nebraska's AQuESTT system was developed as a companion accountability framework that communicates school quality through multiple domains rather than relying exclusively on federal accountability measures. The framework was designed to provide richer information about school performance and improvement efforts.

Level 4: Link Accountability to Action

- Measurement and reporting alone do not create the conditions for school improvement.
- States must take many steps to build connections between the outputs of the accountability system and explicit actions that lead to school improvement.
- Adequate support is necessary because the capacity to act on accountability data varies widely across schools and districts.



Ohio incorporated an Early Literacy Indicator into its School Quality and Student Success measures. By elevating early literacy within the accountability system, the state created a direct connection between accountability reporting and instructional improvement efforts focused on foundational reading skills.



Measuring Student Growth to Support Organizational Learning

A Study of the Early Implementation of
Chicago Public Schools' Academic Progress Indicator

Need for a New Accountability System

- Chicago Public Schools (CPS) implemented a multi-measure accountability system prior to the Every Student Succeeds Act (ESSA) called the School Quality Rating Policy (SQRP).
- Unlike No Child Left Behind (NCLB)—and similar to many state ESSA systems—it incorporated growth metrics; in particular, Student Growth Percentiles (SGP).
- Despite the inclusion of growth, the system disproportionately labeled low-income and minority schools as “low-performing.”



School Quality Rating	Overall Weighted Score
Level 1+	4.0 or more
Level 1	Between 3.5 and 3.9
Level 2+	Between 3.0 and 3.4
Level 2	Between 2.0 and 2.9
Level 3	Less than 2.0

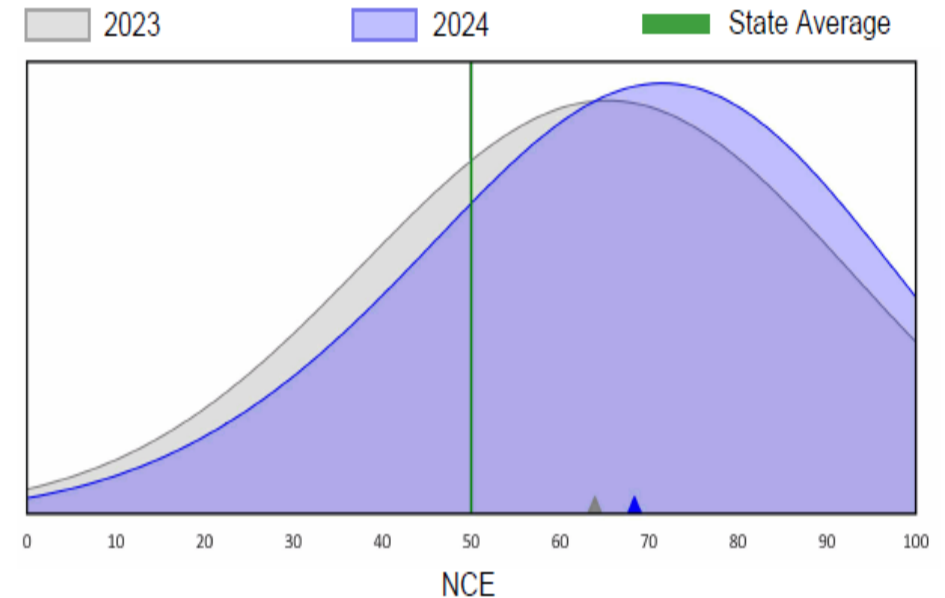
Continuous Improvement and Data Transparency Policy

- The Academic Performance Index (API) is part of CPS's new accountability system, the Continuous Improvement and Data Transparency (CIDT) Policy.
- CIDT is a multi-metric accountability system that does not provide an overall score for schools (unlike previous policy). Rather, it provides a range of metrics on context, conditions, and student outcomes that allow school and district leaders to evaluate schools' needs.
- Student proficiency, the API, and “effect size” are reported as part of the accountability system.



API Goals

- Create a connection between student progress and student achievement.
- Support organizational learning rather than an accountability culture.
- Help school leaders assess the quality of their programs and understand the progress of their students.
- Provide formative information on school programming.



Clarify the link between achievement and growth.

API Development and Rollout

- The API was developed based on the insight that normative progress in Illinois aligned with progress on the National Assessment of Educational Progress (NAEP).
- This aligns with the analysis by the Center for Educational Policy Analysis at Stanford that placed CPS in the 96th percentile of schools for student progress.
- CPS contracted with the ECRA Group to develop reporting and provide technical expertise on the implementation of the metric.
- API reporting has been released to school leaders, and public reporting is under development.



Research Goals

- Document and preliminarily evaluate the design and initial implementation of the API.
- Highlight the need for a new indicator and outline its role in the CPS's new accountability system.
- Assess the API's relationship to other accountability metrics and its interpretation by school leaders.
- Investigate API's validity and connections to school improvement.

Research Approach

Interest-Holder Engagement and Expert Review	Quantitative Comparison of Student Achievement Metrics	Interviews of School Leaders
- Reviewed interviews and focus groups done with CPS interest holders, including families and educators - Reviewed design details of the API with experts including the Center for Assessment and CPS Technical Advisory Committee	- Ran correlation analysis of the API with other achievement metrics - Included mean achievement, proficiency, state student growth percentiles and change in proficiency - Analyzed the API’s relationship with student demographics	- Interviewed school leaders while reviewing the API report that included both the API and effect size, as recommended by experts - Analyzed the interviews using Artificial Intelligence, identifying themes and summarizing reactions to the reporting

Analysis and Findings: Interest-Holder Engagement

- SQRP was not seen as valid:
 - Score fluctuations did not match programmatic quality.
 - Schools had similar ratings regardless of context.
 - Quality and scores were mismatched.
 - Schools were held accountable for measures outside their control.
- Interest holders perceived this could be addressed with more information about context and resources, including:
 - input quality,
 - resources, and
 - additional outputs such as student wellness and agency.



Interest holders found SQRP “less useful” for school improvement, a validity issue that API seeks to resolve.

Analysis and Findings: Expert Review

Based on this feedback, “effect size” was added to reporting in addition to the API.

- API was reviewed by two sets of experts: the Center for Assessment and a Technical Advisory Council (TAC) convened by CPS.
- The Center for Assessment raised concerns about the interpretability of the API and its ability to be compared across a range of student achievement levels.
- The TAC also felt that interpretative guidance was necessary; however, it was more concerned about the ongoing use of proficiency in the accountability system.
- The TAC felt that interpretation could be supported by ongoing cohort analysis.

Analysis and Findings: Quantitative Analysis

Key findings: Achievement and proficiency are highly correlated, but API and Change in Proficiency are only moderately correlated.

The quantitative analysis consists of a descriptive analysis of the API, a correlation analysis of achievement metrics, and an analysis of the API in relation to various school demographic characteristics.

Table 12. Correlation of different achievement and growth metrics for IAR (math)

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
(1) Achievement 2023	1.000								
(2) Achievement 2024	0.977	1.000							
(3) API	-0.215	0.000	1.000						
(4) Effect Size	0.525	0.691	0.700	1.000					
(5) Growth Cohort	0.461	0.619	0.668	0.928	1.000				
(6) Growth Baseline	0.424	0.584	0.679	0.920	0.994	1.000			
(7) Proficiency	0.962	0.972	-0.057	0.604	0.530	0.490	1.000		
(8) Change in Proficiency	0.002	0.109	0.486	0.437	0.430	0.438	0.157	1.000	
(9) Change in Proficiency Cohort	0.018	0.123	0.475	0.436	0.422	0.426	0.170	0.886	1.000

Analysis and Findings: Qualitative Analysis

- The qualitative analysis consisted of interviews with school leaders about their API reports.
- Overall, school leaders found the reports to be helpful for interpreting student progress.
- Principals were more positive about standardized assessment than had been discovered in the interest-holder engagement process.
- Principals understood the API and its relationship to other metrics.
- Principals found the API credible; they still want support to connect it to school improvement.

Average NCE Pre	Average NCE Post	NCE Growth	Typical NCE Growth	Effect Size	
63.88	68.36	4.48	-1.70	+ 0.60	
64.83	67.64	2.80	-2.08	+ 0.45	

Analysis and Findings: Conclusion

- SQRP lacked credibility despite its use of growth metrics.
- API provides an alternative view into student progress; however, it likely works in concert with other student achievement metrics.
- Mean achievement and the percentage of students proficient are highly correlated; it is unclear if proficiency as a metric provides additional information.
- Achievement and change in achievement metrics, like the API, mean that states and districts are less reliant on performance benchmarks.
- School leaders need more support on how to use student achievement data to support school improvement.



Strengths of the API



The district highlighted a vision to better capture student academic progress to drive school improvement efforts (Level 1: Vision and Purpose).



Significant effort was devoted to design API in a way that was technically sound, responded to valid critiques, and made decisions to directly address tensions (Level 2: System Design).



Communication about the system was tied into ways educators already conceptualized improvement efforts and increased trust in the system through transparency (Level 3: Communication).



Connecting the Dots

Building Coherent Systems to Support Student Success

Where Do We Go From Here?

School leaders still wanted additional support in using the data to inform school improvement efforts.

- Coherence between accountability and school improvement systems has not yet been fully achieved.
- A gulf still exists between providing data and translating that data to action.

Improve Coherence and Responsiveness

1. Clarify the purpose and actions accountability systems seek to influence.

- Accountability systems have been expanded to play many roles, which often complicates connecting data to action.
- States can articulate guiding principles to more explicitly highlight priorities.
- Once clarified, guiding principles must be reflected in the system.



[WestEd's Accountability Guiding Principles materials](#)

Improve Coherence and Responsiveness

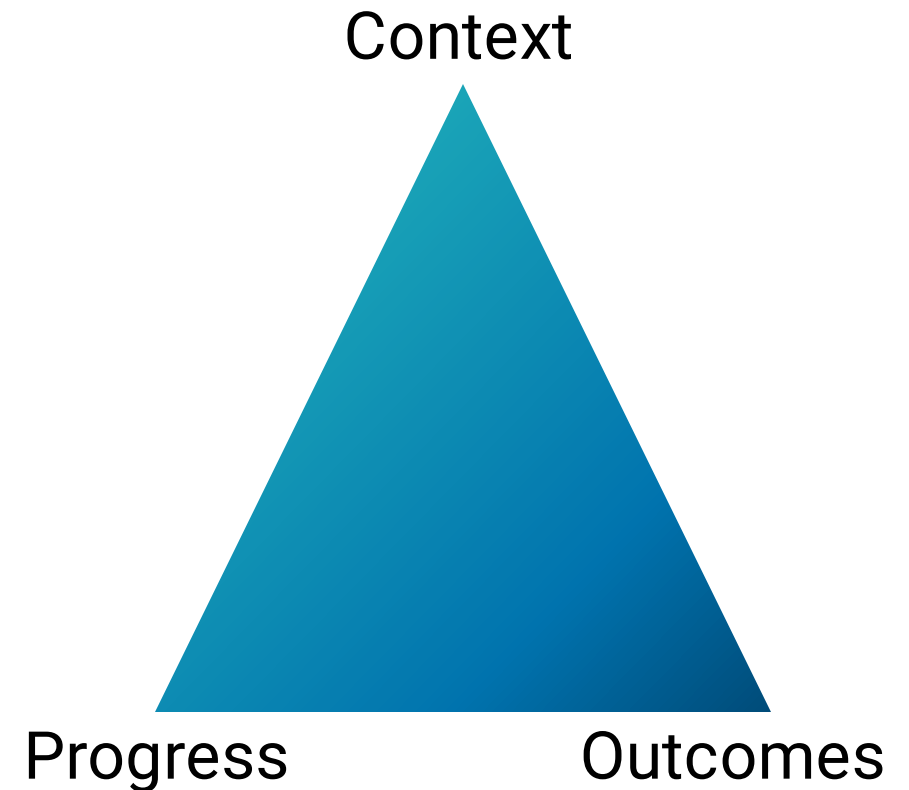
2. Identify clear roles and responsibilities related to accountability.

- This is a prerequisite for coherence and responsiveness.
- Specify actors, roles, and responsibilities at each level (state, region, district, school) of the system.
- Articulate clear processes for how different levels of the system interact and support school improvement efforts.

Clarify Purpose and Action

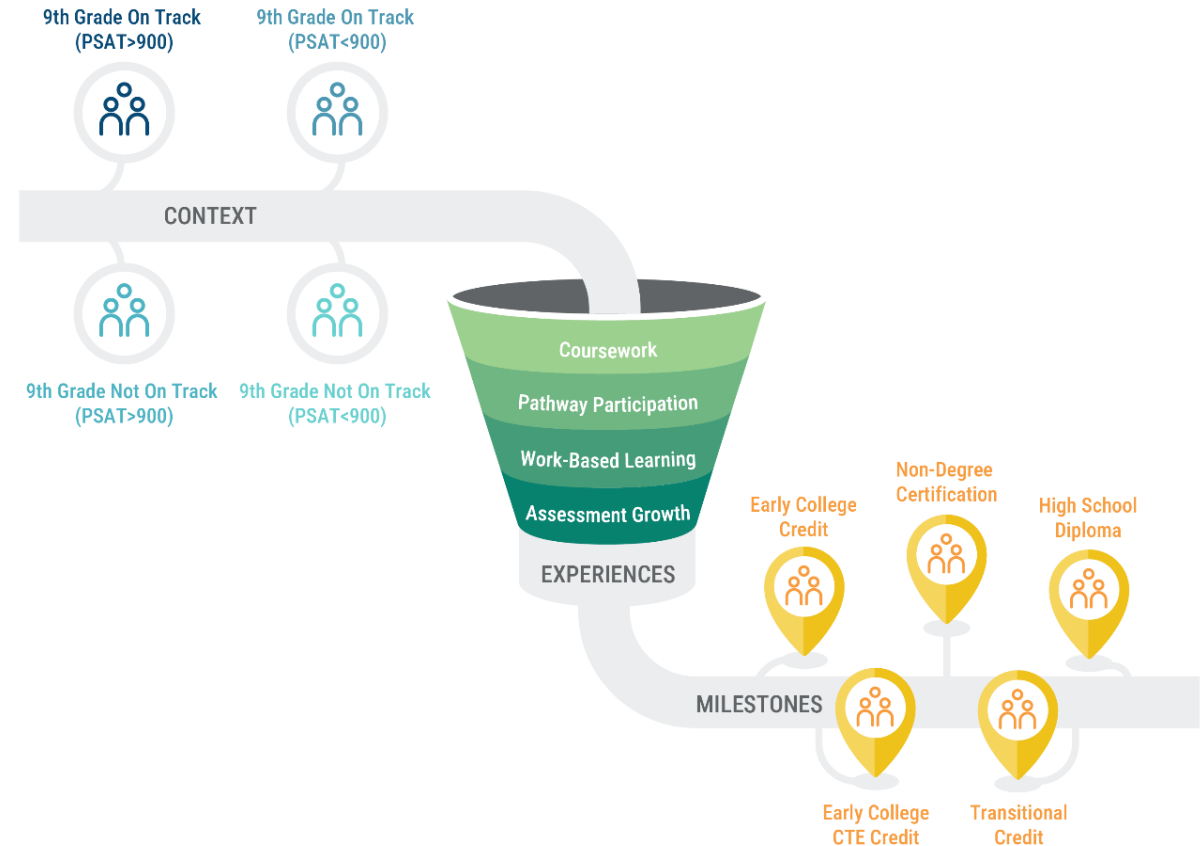
School leaders want standardized assessments to support instruction.

- Many school leaders use existing metrics (i.e., proficiency and change in proficiency) to investigate other data (i.e., grades and school climate).
- Because these metrics are noisy, the results are often inconclusive.
- Using API to triangulate may provide school leaders with an improved understanding of internal measures on accountability metrics.



Clarify Roles and Responsibilities

- **States** use metrics for accountability and identifying schools for support.
- **Districts** need to develop information systems that allow schools to make local decisions.
- **Schools** need processes and capacity to use the data—currently, there is too much burden on leaders to make sense of the data.



EdSystems is developing regional reporting that helps schools better understand students' start, progress over time, and achieved milestones.

Call to Action: Connect Accountability to Improvement

As you reflect on your own accountability system, consider

1. How clearly does your state's accountability system identify high-leverage opportunities for school improvement?
2. Are there clear roles assigned to people who can connect data from the accountability system to concrete actions to improve school outcomes?
3. Are there entities or people who could provide additional support connecting data to school improvement but are underutilized in the current system?



- ✓ Design and refine accountability systems.
- ✓ Build coherence among accountability, assessment, and continuous improvement efforts.
- ✓ Develop data literacy and evidence-use capacity.
- ✓ Translate accountability data into actionable improvement strategies.
- ✓ Strengthen reciprocal accountability and support structures.

Contact Us



Benjamin Boer
EdSystems

bboer@niu.edu



Mel Wylen
WestEd

mwylen@wested.org



Mitch Herz
WestEd

mherz@wested.org

Exit Slip

