

# From Evaluation to Impact: Transforming Assessment into a Tool for Learning

Michelle Odemwingie and Kimberly Cockrell



# From Evaluation to Impact: Transforming Assessment into a Tool for Learning

Michelle Odemwingie and Kimberly Cockrell



## Abstract

This chapter examines the evolving role of assessment, moving beyond rigid measurements toward a more dynamic, learning-centered approach. Traditional assessment models often prioritize evaluation over instructional impact, but research and practice show that assessments can do more—guiding teaching, informing student learning, and strengthening instructional coherence.

The Achievement Network (ANet) works alongside schools to design assessments that emphasize transparency, alignment, and student agency. By integrating high-quality instructional materials with assessments that provide timely, meaningful feedback, ANet supports educators in making informed instructional decisions that drive student growth.

Key areas discussed include:

- **Transparency**, ensuring educators and students can understand purpose and design of assessments and act on results.
- **Coherence**, aligning curriculum, instruction, and assessment for a more structured learning experience.
- **Student-centered design**, fostering engagement and self-efficacy.

This chapter also explores challenges such as testing overload and assessment quality, emphasizing the importance of curriculum alignment and actionable insights. Case studies from Madison Metropolitan School District, Carlsbad Municipal Schools, and Honey Dew Elementary highlight how these principles lead to meaningful instructional improvement.

Ultimately, effective assessment is about supporting—not just measuring—learning, and this chapter shares insights on how ANet is designing solutions alongside schools to make that shift.



## Introduction

Imagine a classroom where assessments do more than measure learning—they propel it forward. Where students see assessments as a tool for their own growth rather than a high-stakes judgment. Where teachers receive real-time insights that inform instruction, rather than overwhelming data that offers little guidance.

For decades, assessments have been treated as tools of measurement rather than instruments for learning. Standardized tests and traditional summative assessments provide snapshots of student performance—lacking the insights educators need to guide instruction. Too often, assessments are imposed on classrooms rather than embedded within the learning process, reinforcing a system that prioritizes evaluation over growth.

Achievement Network (ANet) believes assessments should do more than measure learning—they should improve it. Over the past 20 years, the organization has been at the forefront of the data-driven instruction movement, helping schools envision a system where assessments are transparent, coherent, and student-centered, providing educators and students with the timely, actionable information they need to drive instruction forward. The approach to assessment design anchors on them being tools that do more than just evaluate knowledge but also enhance the teaching and learning process.

At the heart of this approach is a belief that assessments should be most accountable to the student, enabling a dialogue between the learner and what is to be learned, revealing what has been accomplished and how far there is to go to achieve mastery. This vision is more than theoretical. Through partnerships with schools across the country, ANet has developed assessments that are embedded in instructional cycles, offering teachers the feedback they need when they need it. By aligning our assessments with high-quality curricula and instructional best practices, we ensure that they are not just accountability measures but catalysts for deeper learning.

This chapter explores the Achievement Network (ANet) approach to assessment, the critical challenges facing educators today, and the ways in which well-designed assessments can transform classrooms. Our goal is to push the dialogue forward, challenging outdated assessment models and outlining how ANet is reshaping assessment to center learning. To do this, we start with our theory of action: a commitment to making assessments transparent, coherent, and student-centered.

## Theory of Action

ANet advocates for a fundamental shift in assessment, moving from static measurement to dynamic tools that actively support learning. Our approach integrates high-quality instructional materials with assessments designed to inform and enhance instruction in real time. By embedding assessments into instructional cycles, ANet provides educators with timely, detailed feedback, allowing them to make informed decisions that directly impact student growth and achievement.

ANet's Theory of Action maintains that assessments should improve learning and the teaching cycle that supports instruction. This approach is rooted in three guiding principles:

- **Transparency:** Educators and students need clear access to items, design, and results. When teachers understand the rationale behind assessment design and can easily interpret results, they are better equipped to use data effectively.
- **Coherence:** Assessments must align with instructional goals and curricula to create a seamless learning experience. Rather than being separate entities, assessments should serve as integral tools that reinforce the curriculum and provide actionable insights.
- **Student-Centered Design:** Assessments should be fair and accessible to all students, ensuring that diverse learning experiences are accounted for. ANet prioritizes the development of assessment tools that reduce bias and support all students in achieving their full potential.

ANet emphasizes that assessment should be more than a compliance exercise. It should drive deeper learning. Our work develops assessments that foster deeper learning, support instructional adaptability, and empower students, teachers, and leaders. Drawing on research in socio-cognitive and sociocultural learning models, we design assessments that measure knowledge and promote higher-order thinking and student agency. By equipping educators with the insights needed to refine instruction, we ensure that assessments are used as instruments of progress rather than barriers to learning. By collaborating closely with school leadership teams, we enhance instructional leadership and support effective use of curricula and assessments. This holistic approach ensures that design, strategy, and implementation operate in concert, driving substantial improvements in educational outcomes.

Through this approach, ANet envisions a future where assessments are fully embedded in the learning process, driving both instructional excellence and student success. Grounded in research and real-world practice, ANet's approach demonstrates how well-designed assessments can transform education, shifting assessments from tools of evaluation to instruments of learning.



# **ANet's Assessment Design: Transparency, Coherence & Student-Centered Design**

## **Transparency in Assessment: Building Clarity, Trust, and Instructional Impact**

*"I have concluded that building upon a long and extraordinary history of achievement in the assessment OF education, the future of assessment in education will likely be found in the emerging interest in and capacity for assessment to serve, inform, and improve teaching and learning processes and outcomes. Shall we call that assessment FOR education in addition to the assessment OF education?"—Edmund Gordon (2013)*

From its inception, ANet has designed assessments as an integral component of the teaching and learning process. ANet's assessment system is anchored on formative interim assessments designed to provide educators with timely, actionable insights that inform instruction. The goal is to create assessments that reflect rigorous academic standards while also offering a practical framework for teachers to diagnose student learning needs, adjust instruction, and support student growth.

Despite the growing emphasis on high-quality instructional materials, opportunities for formal peer review of interim assessments remain limited. Unlike summative assessments, which undergo extensive evaluation processes, interim assessments are rarely subject to the same level of scrutiny and external validation. This gap makes third-party reviews, such as the Louisiana Department of Education's (LDOE) Tier One rating system, a critical benchmark for ensuring quality and alignment. At the core of ANet's assessment design is a commitment to ensuring that teachers have visibility into what students know, where misconceptions arise, and how instruction can be adapted accordingly. To achieve this, ANet has continually refined its approach, ensuring alignment with rigorous college- and career-ready standards and state-level expectations, as reflected in its Tier One rating from LDOE.

### **Approach to Design Structure: Content**

ANet assessments are intentionally structured to balance rigor, alignment, and usability, ensuring that teachers receive meaningful data without disrupting the flow of instruction. To support instructional coherence, assessments are designed for real-time classroom use, allowing teachers to adjust instruction as needed. The structure ensures that assessments serve as a seamless part of the learning process—providing actionable insights without overshadowing instruction.

### **Structuring Literacy Assessments: A Text-First Approach**

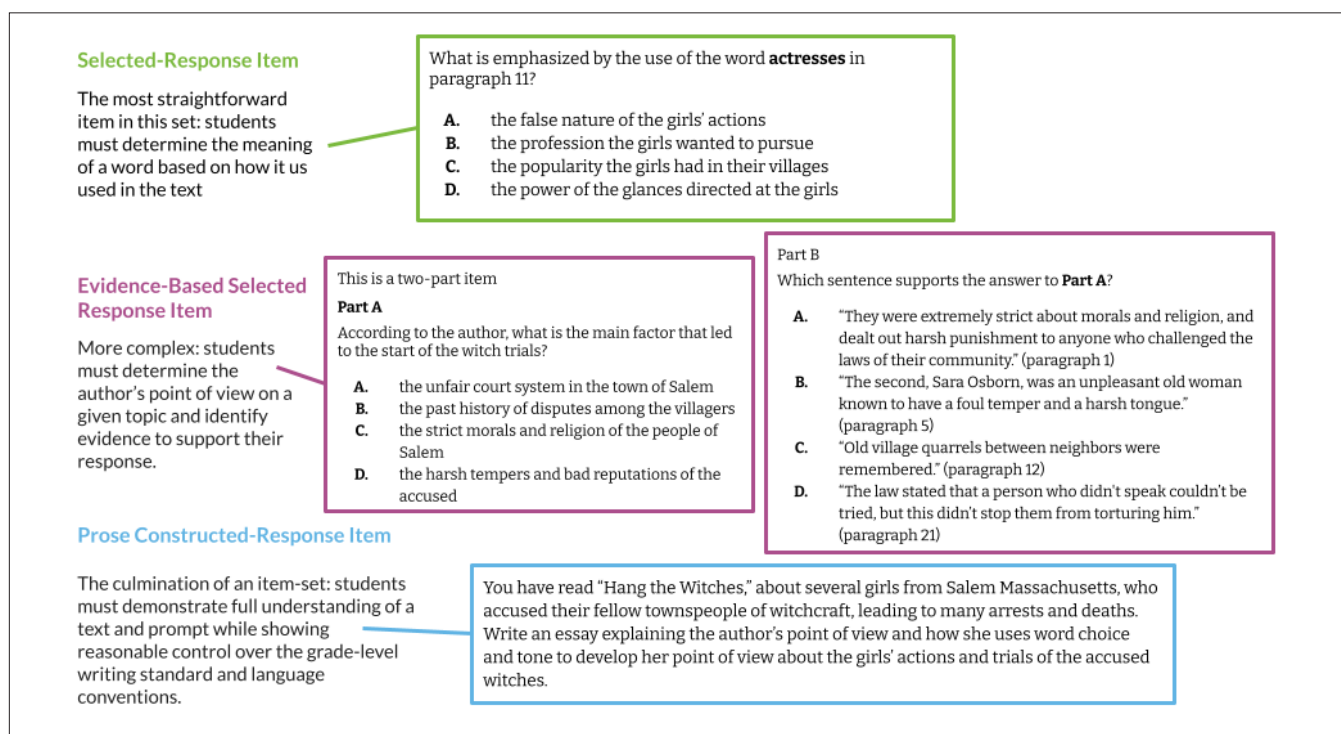
In English Language Arts (ELA), ANet prioritizes a text-first approach that mirrors the depth and complexity of high-quality reading instruction. Instead of isolating individual skills, the assessments are structured to evaluate students' ability to:

- Comprehend and analyze complex literary and informational texts
- Use text-based evidence to support reasoning
- Apply higher-order thinking to interpret and respond to questions

## Key Features of ANet's Literacy Assessments:

- **Authentic Text Selection:** Over 90% of texts are previously published, high-quality selections, covering a balance of literary, nonfiction, poetry, and technical texts.
- **Standards-Based Item Development:** Each machine-scored item aligns with state level reading and/or writing standards, ensuring precision.
- **Variety of Question Types:** Questions include multiple-choice, evidence-based selected response, and constructed-response tasks that require synthesis of evidence across texts (See Figure 1).
- **Writing to Sources:** Assessments integrate tasks requiring students to analyze, compare, and synthesize ideas from multiple texts.

Figure 1: ELA Item Sets Including Item Types and Ranges of Difficulty (7th grade)



These features earned ANet's ELA Interim Assessments a Tier One rating from LDOE, recognizing their alignment, rigor, and design. The review highlighted:

- **Text quality and complexity:** The assessments feature Lexile-appropriate texts that support deep comprehension.
- **Text-dependent questions:** Nearly all questions require direct textual evidence, ensuring students engage deeply with reading material.
- **Comprehensive writing assessments:** Students are required to craft well-defended arguments, synthesize research, and analyze literary themes, making these assessments a robust measure of college and career readiness.

This design moves literacy assessments beyond recall, emphasizing analytical thinking and engagement with complex texts.

## Mathematics Assessment: Balancing Rigor and Conceptual Understanding

ANet's math assessments evaluate students across three dimensions of rigor:

- **Conceptual Understanding:** Deep comprehension of mathematical principles
- **Procedural Skill & Fluency:** Accuracy and efficiency in computation
- **Application:** Applying math skills in real-world contexts

### Key Features of ANet's Mathematics Assessments:

- **Aligned to state standards and Mathematical Practice Standards:** Ensuring consistency with state and national expectations.
- **Emphasis on Major Work of the Grade:** At least 65%-80% of score points target priority standards, reinforcing mastery of key mathematical concepts.
- **Innovative Item Types:** Multi-part questions, coordinate plane graphing, number line activities, and interactive technology-enhanced items assess depth of understanding (See Figure 2).
- **Misconception Analysis:** Incorrect answer choices target common misunderstandings, providing insight into student learning gaps.

Figure 2: Math Item Sets Including Item Types (4th grade)

**Standard - 4.OA.A.3**  
Solve multistep word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.

**Selected-Response Item**

Louis earns \$20 each day for washing cars and \$15 each day for walking dogs. Last week he washed cars for 4 days and walked dogs for 3 days.

How much money did Louis make washing cars and walking dogs last week?

A. \$35  
B. \$95  
C. \$125  
D. \$245

**Technology-Enhanced Item**

Jake and his two brothers complete chores for their neighbors during the summer. They make \$467 in June and \$514 in July. They pay \$243 for supplies. Jake and his two brothers share remaining money equally.

**Part A**  
Use the drop-down menus below to create an equation that represents M, the amount of money each brother will receive.

(467  514  243) ÷  = M

**Part B**  
How much money will each brother receive?  
\$

**Constructed-Response Item**

Alexis is ordering dairy products to sell at her three grocery stores. Prices of the items she orders are shown in the table below:

| Dairy Products | Price per Case |
|----------------|----------------|
| Cheese         | \$57           |
| Milk           | \$30           |
| Ice Cream      | \$50           |

Alexis orders 18 cases of cheese, 90 cases of milk, and 66 cases of ice cream. She then puts an equal amount of each dairy product in each of her three grocery stores.

**Part A**  
How much money, in dollars, does Alexis on cheese? Show your work.

**Part B**  
How much money, in dollars, does Alexis spend on dairy products for each of her three grocery stores? Show your work.

**Selected-Response Item**

Mr. Baker buys 6 pizzas. Each pizza has 8 slices of pizza. My Baker gives 4 slices of pizza to another teacher. The, Nr. Baker gives out slices to the 9 students in his tutoring group. Each student receives the same number of slices.

What is the greatest number of slices of pizza eah student could receive?

A. 1  
B. 4  
C. 5  
D. 8

ANet's Math Interim Assessments earned a Tier One rating from LDOE for their strong alignment, rigor, and instructional value. The evaluation highlighted:

- **High alignment to grade-level standards:** Over 90% of test items fully reflect standard intent.
- **Balanced rigor:** Integrates conceptual understanding, procedural fluency, and real-world application.
- **Diverse item formats:** Includes multiple-choice, multiple-select, numeric response, and constructed-response tasks.

This multi-dimensional approach transforms math assessments from procedural drills into opportunities for deep mathematical reasoning.

## Transparency: Designing Assessments for Instructional Alignment and Actionable Insights

Transparency in assessment is more than access to data—it is about ensuring that educators and students can interpret, understand, and act upon assessment results in ways that drive instructional improvements. When assessment data is clear, accessible, and actionable, it transforms teaching and learning, allowing educators to make evidence-based decisions and students to engage in their own learning progress. ANet's assessment design and data reporting systems are structured to provide deep visibility into student learning, ensuring that assessments both measure learning goals and can be leveraged as instruments for growth.

### An Open Book Approach to Assessment Design

ANet's commitment to transparency begins at the foundational level of assessment design. Every aspect of an assessment—from the rationale behind text complexity to the reasoning behind multiple-choice distractors—is explicitly shared with educators. By offering a full window into assessment choices, ANet ensures that teachers are not only informed consumers of assessment data but also active participants in interpreting and applying results to instructional practice.

Research emphasizes that making assessment criteria explicit is essential for meaningful instructional use. Pellegrino, Chudowsky, and Glaser (2001) argue that educators and students benefit when learning goals, expected performance levels, and assessment criteria are clearly articulated. Transparent assessment materials not only support instructional decision-making but also foster a shared understanding of achievement standards among teachers, students, and the broader educational community.

To demystify assessment design and data reporting, ANet provides structured resources that equip teachers to understand, analyze, and respond to student learning needs:

- **Assessment Design Guides:** ANet provides educators with detailed rationales for text selections, Lexile levels, and question types, ensuring that assessments align with grade-level expectations and learning standards.
- **Rubric and Scoring Clarity:** Educators receive rubric interpretation guides that clarify expectations for written responses, providing explicit scoring criteria and examples to ensure consistent and meaningful assessment of student work.
- **Multiple-Choice Distractor Rationale:** Each incorrect answer choice in ANet's assessments is deliberately constructed to reflect common student misconceptions. ANet provides teachers with detailed explanations of why each distractor exists, allowing educators to diagnose student misunderstandings more effectively (Figures 3 and 4).
- **Student Work Analysis Tools:** Beyond simple correct/incorrect responses, ANet provides tools for analyzing how students approach problems, reinforcing diagnostic insights that support targeted interventions.
- **Reteaching & Instructional Support Tools:** Once educators identify areas of student need, ANet connects assessment data to actionable reteaching strategies, ensuring that every data point leads to an instructional next step.



Figure 3: ANet Distractor Rationale ELA

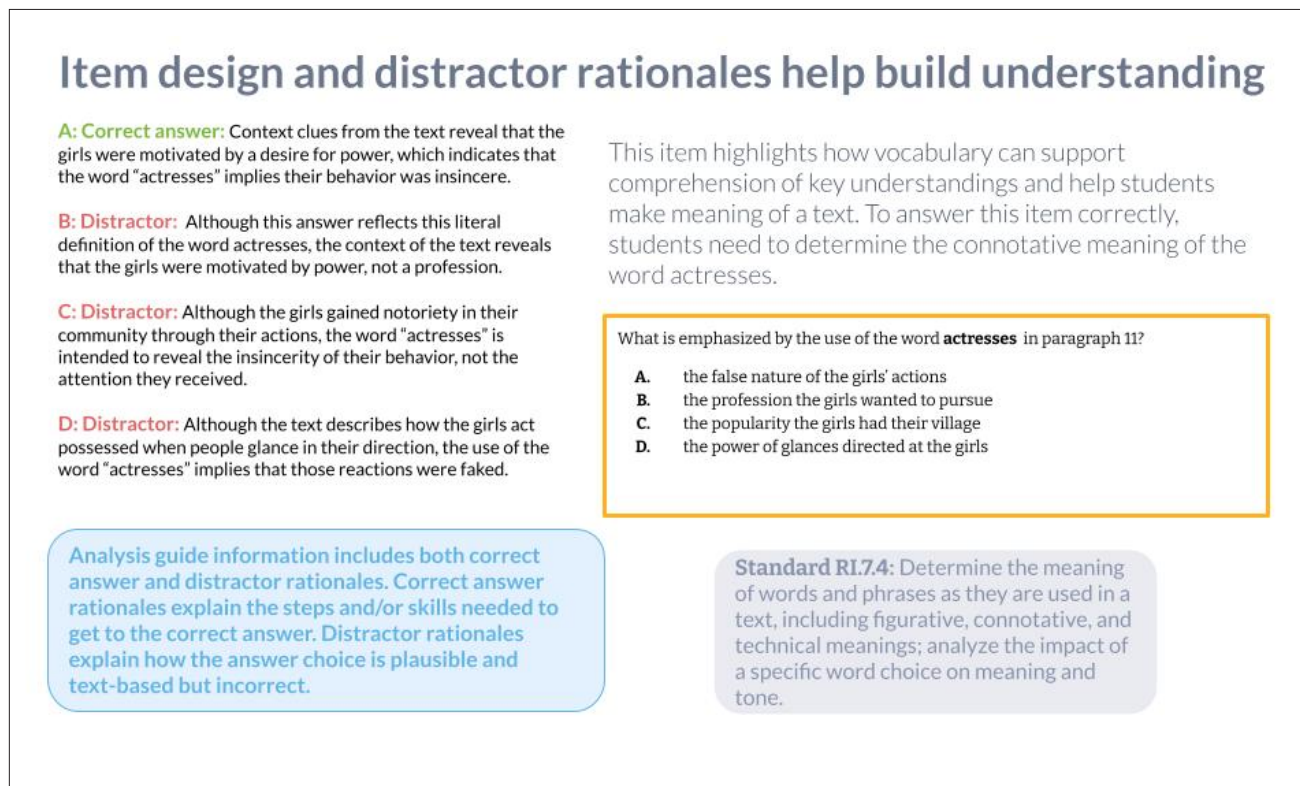
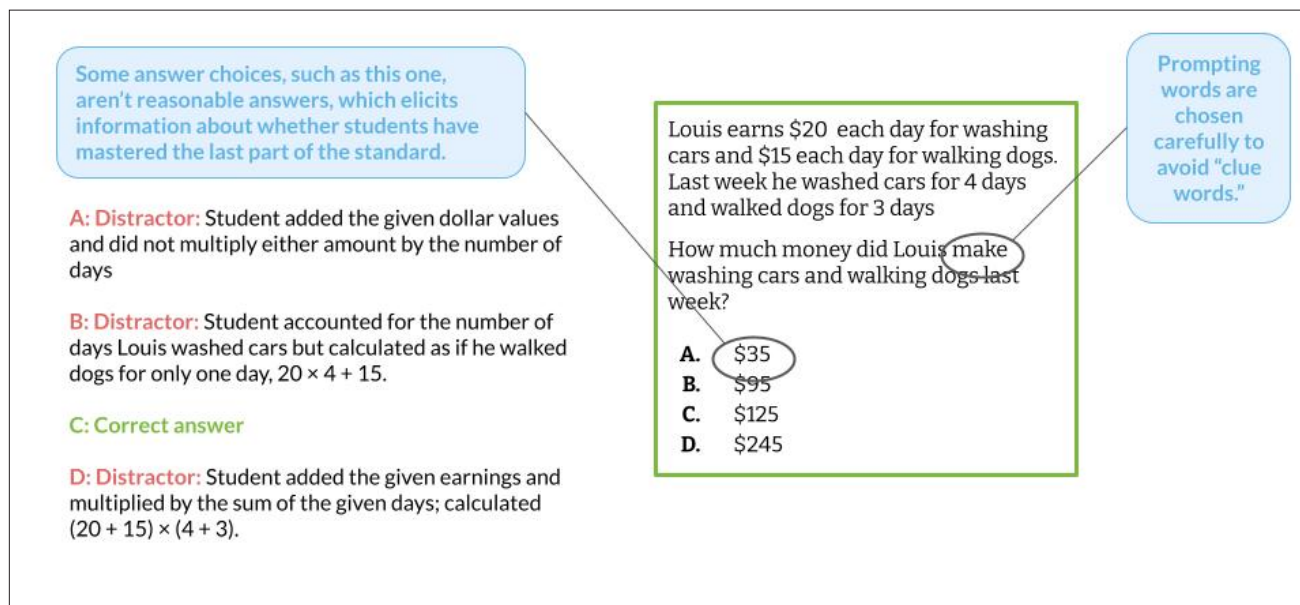


Figure 4: ANet Distractor Rationale Math



## Empowering Educators with Clear, Actionable Reports

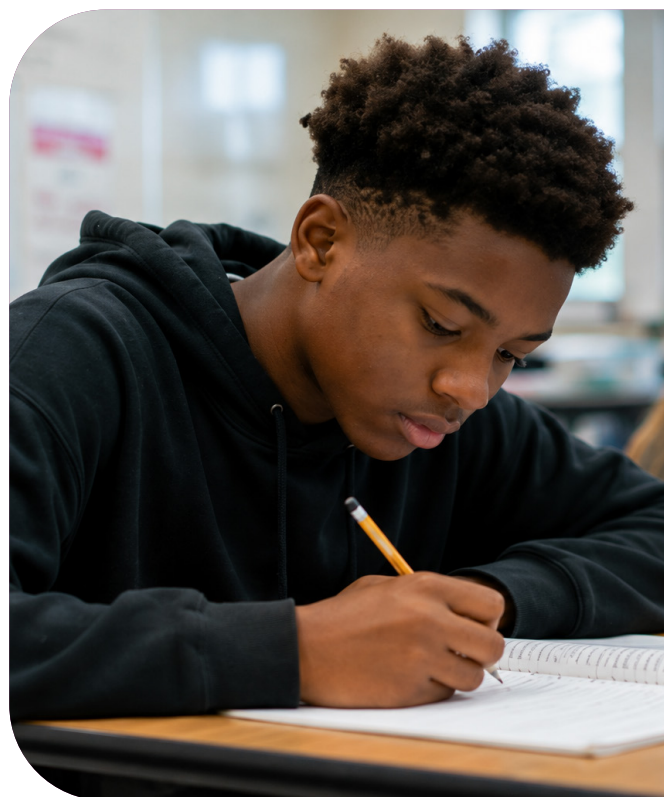
For assessment transparency to meaningfully support instructional decision-making, results must be clear, timely, and directly applicable. Transparency in assessment design is only one piece of the puzzle. Equally important is ensuring that educators can easily interpret and act on assessment results through clear, structured reporting. Without structured, educator-friendly reporting, even the most well-designed assessments risk becoming stagnant data.

Research underscores that transparent reporting enhances instructional coherence by making assessment insights actionable across both classroom and system levels (Marion, Pellegrino, & Berman, 2024). When assessment results explicitly reveal student reasoning processes, teachers can identify misconceptions, interpret patterns in student thinking, and adjust instruction accordingly. Transparent reporting that includes descriptive feedback and contingent actions supports teachers in making real-time instructional decisions, enabling them to address learning gaps as they emerge rather than waiting for summative results. As Marion et al. (2024) emphasize, formative assessment must be an ongoing process, providing teachers with structured evidence to guide instructional adjustments, deepen student engagement, and support self-directed learning.

To operationalize these principles, ANet's reporting system is designed with usability in mind, ensuring that teachers can quickly and effectively interpret assessment insights to inform instruction. Administered online, ANet's assessments provide fast, data-rich feedback, allowing educators to act on insights without delay. Rather than providing generic performance summaries, reports offer detailed, item-level analysis that helps educators pinpoint student reasoning, identify misconceptions, and adjust instruction accordingly. By emphasizing assessment as an ongoing instructional tool rather than a post-instructional evaluation, ANet's reports support responsive teaching and help educators take timely, targeted action to close learning gaps. ANet's reporting system is designed to be intuitive and meaningful, ensuring that teachers can:

- **Identify Specific Misconceptions:** Teachers can pinpoint patterns in student errors to understand not just what students got wrong, but why. This insight supports more targeted reteaching and intervention strategies.
- **Filter Student Performance by Key Indicators:** Reports allow teachers to sort and analyze student responses by standard, question type, and response patterns, enabling precise instructional targeting. This granular visibility helps educators adjust lessons in real time, ensuring that every student's needs are met.
- **Integrate Qualitative and Quantitative Data:** A combination of numerical scores, item rationales, and student work analysis provides a holistic view of student understanding, helping educators make data-driven decisions with confidence.

Research underscores the importance of presenting assessment results in a way that fosters instructional dialogue. Pellegrino et al. (2001) emphasize that assessment data should clearly define learning expectations and provide explicit criteria for student success. By including explanations of student work, reports enable teachers to engage in meaningful discussions about student progress and instructional next steps.



## Collaborative Data Analysis Through Professional Learning Communities

Rather than reviewing data in isolation, educators can use ANet reports to facilitate professional learning conversations, leveraging reporting capabilities that enable item-level analysis, data disaggregation, and the creation of custom student groups. These tools allow teachers to facilitate professional learning conversations, discussing:

- What misconceptions are most common across student groups?
- Which instructional strategies have been effective, and where do adjustments need to be made?
- How can educators ensure that assessment insights translate into immediate instructional action?

*"The data reports from ANet help us to target student strengths and weaknesses. Also, the assessments...give teachers and leaders examples of what students should know and be able to do if they have mastered a standard."* —Instructional Coach, Massachusetts

For many districts, the ability to analyze assessment data in collaborative PLCs has strengthened instructional coherence and decision-making. Madison Metropolitan School District (MMSD) serves as a powerful example of how transparency in assessment reporting can drive system-wide instructional improvement.

### Case Study: Madison Metropolitan School District—Building a System of Data Transparency and Instructional Alignment

The Madison Metropolitan School District in Wisconsin serves over 27,000 students across 52 schools. Despite a strong commitment to improving student outcomes, the district faced significant challenges with assessment strategy and data use.

#### The Challenge: Fragmented Assessment Systems and Unclear Data Use

Before partnering with ANet in 2018–2019, MMSD lacked a cohesive and transparent approach to assessment. Teachers administered multiple assessments, yet the data provided little instructional value, making it difficult for them to adjust their teaching effectively. Additionally, district departments operated in silos, causing misalignment between assessment practices, curriculum goals, and instructional priorities.

District leaders recognized that to improve instruction, they needed a transparent and aligned assessment system that provided:

- Clear and accessible data that teachers could interpret and apply in real time
- A shift from data collection for accountability to data that actively informed instruction
- Stronger collaboration across departments to ensure a unified approach to assessment and instructional support.



### The Solution: Creating a Clear and Actionable Assessment Strategy

MMSD took a multi-year, strategic approach to restructuring its assessment practices. With ANet's support, the district launched a comprehensive assessment strategy focused on transparency, alignment, and usability.

One of the district's first steps was conducting a district-wide assessment audit. The Assessment Priority Project working group, led by Caroline Racine Gilles, Executive Director of Integrated Supports and Assessment for Learning, evaluated every assessment in use across grade levels. Through this process, they identified redundant, misaligned assessments and prioritized those that best supported instructional decision-making.

*"We recognized that we had a glut of evaluative assessments, which indicated the need to incorporate assessments closer to instruction. We want data to inform instruction, and we want to use data—both qualitative and quantitative—to engage students and families."*  
—Caroline Racine Gilles, MMSD

MMSD also standardized data reporting structures to ensure teachers could analyze student work, track performance trends, and make informed instructional choices. Instead of receiving broad performance summaries, educators were provided with detailed, item-level analysis that helped them understand not just what students got wrong, but why.

Additionally, the district embedded data conversations into PLCs. Rather than treating assessment data as a one-time event, teachers engaged in ongoing discussions about how to apply insights to daily instruction.

### Looking Ahead: Connecting to Coherence

MMSD's commitment to assessment transparency improved data use and laid the foundation for deeper instructional coherence. By ensuring that assessment, curriculum, and instruction were aligned and mutually reinforcing, the district moved beyond transparency to create a more unified and effective educational system.

Sustaining this level of coherence requires more than visibility into assessments—it demands an intentional focus on instructional time, strategic assessment design, and alignment with high-quality instructional materials (HQIM). This balance between clarity and coherence is key to ensuring that assessments serve learning rather than disrupt it.

### The Impact: Strengthening Educator Confidence in Data Use

The district's focus on data transparency and instructional alignment led to measurable improvements in educator confidence and instructional clarity.

- **93% of school leaders** agreed that the district had clearly stated instructional priorities, up from 56% before the initiative.
- **97% of school leaders** supported the district's vision for how assessments should be used in their schools, compared to only 44% previously.
- **100% of school leaders** supported the district's vision for using data in decision-making, an increase from 67% before the strategy was implemented

This shift meant that teachers spent less time assessing for compliance and more time using data to inform instruction. Educators now had the tools to make "just in time" adjustments to their teaching, ensuring that students received the support they needed when they needed it.

### Lessons Learned: Key Takeaways from MMSD's Data Transformation

MMSD's experience underscores several essential lessons for districts looking to strengthen data transparency and instructional alignment:

- Clear assessment data enables teachers to make instructional decisions with confidence.
- Assessment must be embedded within professional learning structures so that data is not just collected but actively used.
- Coherence between assessment, curriculum, and instructional goals is critical to ensuring that data serves as a tool for learning rather than compliance.

## Designing for Coherence: Reducing Testing Overload and Strengthening Instruction

One of the most powerful lessons from our work with districts has been that transparency is only the beginning. Initially, providing educators with clear, accessible assessment resources and design structures helped schools understand what students would be tested on and why. This approach ensured that assessments were not a mystery but a meaningful part of the instructional process.

However, transparency alone does not guarantee coherence. True instructional coherence depends on more than assessment alignment—it requires a learning climate where instruction, not excessive testing, is the focus. When schools are oversaturated with assessments, instructional time becomes disrupted, leaving little room for deep learning experiences. Teachers struggle to find meaningful takeaways from overwhelming amounts of data, and students experience assessments as interruptions rather than opportunities for growth.

To build a stronger learning environment, districts must first reduce the number of assessments that compete for instructional time. By streamlining assessment systems, ANet helps districts shift their focus from excessive measurement to actionable insights, ensuring that assessments serve learning rather than disrupt it. As Caroline Racine Gilles of MMSD observed, many districts face a *glut of assessments*, which creates unnecessary testing burdens without providing meaningful instructional value. This effort of ensuring that data informs teaching begins by tackling the Volume Problem.

### The Volume Problem: Fewer, Better Assessments

In K–12 education, assessments are designed to serve many purposes, from enhancing learning to ensuring accountability. While they aim to cover various educational needs—diagnostic, formative, summative—the sheer proliferation of assessments has led to an unintended consequence: over-testing that drains instructional time while offering little actionable insight.

Despite increased spending on assessments (Simba Information, 2019), the anticipated improvements in educational outcomes have not materialized. The Council of Great City Schools (Hart et al., 2015) reported that K–12 students spend an average of 20 to 25 hours per year taking standardized tests—a figure that does not account for test preparation time, which can push the total to over 100 hours annually when including interim and locally developed assessments.

Additionally, while most educators are not data scientists, they rely on assessment data to inform instruction. However, the volume and variety of assessments, ranging from interim to high-stakes summative testing, creates a chaotic landscape where teachers sift through excessive data that often lacks coherence and alignment.

As a result, instead of supporting student learning, assessments risk becoming obstacles, consuming valuable class time without always providing meaningful insights that drive instructional improvement.

### Streamlining Assessment: How ANet is Reducing Testing Time While Enhancing Insights

ANet's early assessments were designed to cover the full depth and breadth of academic standards, ensuring alignment with rigorous instructional goals. However, as schools implemented these assessments, a clear challenge emerged: ensuring that assessment length remained practical in an already oversaturated testing environment. Many sessions took longer than a single class period, disrupting instruction rather than supporting it. This raised a fundamental question: How can we maintain rigor while reducing assessment time?

Recognizing the need to balance depth with efficiency, ANet began developing streamlined assessments—shorter in length but equally rigorous and instructionally meaningful. The goal was to reduce testing time while maintaining instructional value, ensuring that assessments were a tool for learning rather than an interruption.

While these improvements made assessments more manageable, another challenge remained: teachers needed time and capacity to analyze student results and make instructional decisions.

Even though ANet provided teachers with insights into assessment design and common student misconceptions, acting on this information required time—an increasingly scarce resource for educators. This led to a new phase of experimentation: Could assessments be further optimized to provide the same depth of insight in significantly less time? ANet is currently exploring ways to leverage adaptive assessment models and predictive insights to create assessments that are not only shorter but also more precise in identifying student needs. While early efforts show promise, this work remains ongoing, with a focus on ensuring that any reductions in assessment length enhance instructional value rather than diminish it.

## Reimagining Math Assessments

For nearly two decades, ANet has been collecting and analyzing student misconception data, allowing for a deeper understanding of the predictable errors that hinder math proficiency. Through this extensive dataset, ANet can now anticipate where students are likely to struggle, shifting the role of assessment from a reactive tool for remediation to a proactive tool for prevention.

ANet is redesigning math assessments to provide more actionable insights in less time. Traditional math assessments often focus solely on correctness, missing the opportunity to understand *why* students make errors. By leveraging misconception trends alongside adaptive diagnostics and machine learning technology, ANet's next generation of math assessments aims to:

- Predict when and why students will struggle through adaptive diagnostic assessments, allowing teachers to plan student-level interventions and system-wide supports.
- Track student growth and mastery in real-time with short, monthly assessments that are standards-based and formative, helping educators measure how well students internalize instruction.
- Take significantly less time than traditional testing, freeing up instructional hours while still delivering deep insights.
- Provide students with immediate feedback on their strengths and areas for growth, fostering confidence and engagement.

By integrating machine learning, adaptive diagnostics, and real-time progress tracking, ANet's math assessments will provide a clearer, more efficient picture of student learning. Teachers spend less time testing and more time teaching, while still getting the insights they need to drive instruction forward.

As we continue to refine assessment practices, a key question remains: How can we innovate while preserving the quality and depth that make assessments valuable? Reducing testing time is an important step, but true instructional impact depends on more than efficiency.

Even when assessments are well-timed and structured for ease of use, their true impact depends on deeper factors—whether they accurately capture student thinking, generate meaningful insights, and align with instructional goals. Without these elements, assessments serve as compliance exercises rather than powerful levers for student success.

To be truly effective, assessments must do more than exist within structured timelines; they must be designed with precision—asking the right questions, uncovering student reasoning, and guiding instructional decisions. Yet, too often, assessments fall short. Gaps in alignment, ineffective item design, and static reporting structures weaken their value, leaving educators without the insights they need to foster student growth. Addressing these gaps requires a fundamental shift—one that ensures assessments are not just efficient, but instructionally powerful, fully aligned to curriculum, and responsive to the way students learn.

## The Quality Problem: Strengthening Alignment for Meaningful Assessment

The quality of assessments in education is a layered challenge, impacting how well they enhance learning rather than just measure it. Research shows that assessments often fail to align with curriculum, capture student thinking, or provide actionable insights for educators. These issues fall into three interrelated dimensions:

### Misalignment Between Assessments and Learning Goals

Despite increasing adoption of HQIM, many assessments remain disconnected from curriculum limiting their instructional value. Pellegrino et al. (2001) argue that valid assessments must align with both curriculum standards and cognitive learning processes. Davidson, Shepard, & Penuel (2017) further highlight the need for coherence across curriculum, instruction, and assessment to avoid superficial test-based learning. Without such alignment, assessments become isolated measures rather than integral learning tools.

### Weak Item Design Fails to Surface Student Thinking

Traditional items often fail to diagnose student misconceptions, reducing assessment to a binary right/wrong judgment. Poorly designed questions provide little insight into how students reason through problems, making it difficult for teachers to adjust instruction effectively.

Black and Wiliam (1998) demonstrate that assessments must not only classify student performance but also reveal underlying thinking to inform targeted interventions. Similarly, Heritage (2010) emphasizes the importance of designing assessments that allow educators to identify misconceptions in real time. Without this diagnostic function, assessments risk reinforcing rather than addressing learning gaps.

### Inadequate Reporting Limits Instructional Utility

Even well-constructed assessments lose impact if their results do not provide clear, actionable insights for educators. Traditional reports often emphasize scores over meaningful data, limiting teachers' ability to adjust instruction.

Elmore (2019) critiques large-scale assessments for prioritizing ranking over learning, arguing that assessment systems should provide feedback that enables educators and students to take informed action. The National Research Council (2011) similarly advocates for reporting that translates data into instructional guidance, rather than frozen performance snapshots. Without accessible, transparent reporting, assessment data remains underutilized.

These challenges illustrate that assessment quality is not only about test design. It is a systemic issue. Effective assessments must be coherent with curriculum, diagnose misconceptions, and generate actionable insights. For assessments to move beyond isolated measures of learning, they must be designed within a system of coherence, where curriculum, instruction, and assessment are seamlessly integrated. Without this alignment, even well-designed assessments risk being misused or disconnected from the learning process. Ensuring that assessments work in tandem with instruction requires a system where curriculum, teaching, and assessment reinforce one another. This level of coherence is essential for creating structured, equitable, and effective learning experiences.

## ***Coherence: Building Alignment Across Curriculum, Instruction, and Assessment***

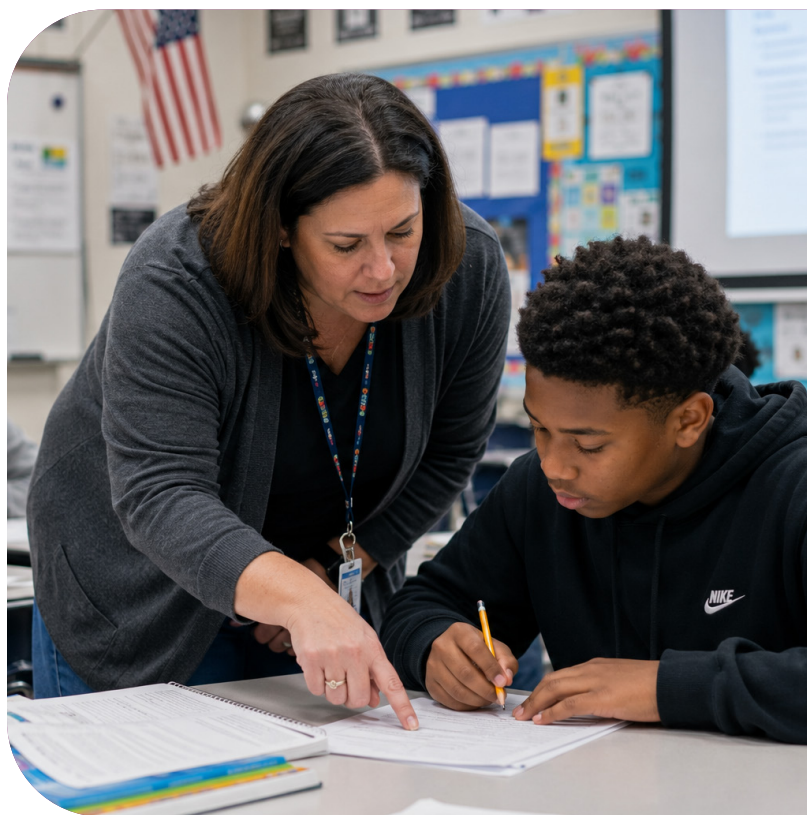
Coherence is achieved when assessments, instructional practices, and curriculum are seamlessly aligned, ensuring that students receive a structured, equitable, and effective learning experience. Research supports this integrated approach, as Marion et al. (2024) emphasize that balanced assessment systems—those that integrate formative assessments with instructional practices—are essential for ensuring all students receive the support needed to achieve excellence. When coherence is present, students progress through a thoughtfully designed system where each stage of learning builds on the previous one, guided by clear expectations and meaningful assessments. However, coherence is often disrupted when curriculum adoption, professional learning, and assessments operate in silos, resulting in incoherent instructional practices that fail to support student learning effectively.

### **Theoretical Framework for Coherence**

A well-designed assessment system does not operate independently of instruction but rather serves as a reinforcing mechanism within a broader instructional model. Pellegrino et al. (2001) argue that the model of learning should serve as a unifying element that brings cohesion to curriculum, instruction, and assessment. Without this cohesion, assessments risk measuring knowledge in isolation, providing data that lacks instructional relevance. When assessments are not synchronized with instruction and curriculum, the learning process becomes fragmented. Pellegrino et al. (2001) note that if any of these components are misaligned, the balance of the system is disrupted, leading to misleading assessment results or ineffective instruction. Achieving coherence requires thoughtful coordination to ensure that assessments not only measure learning but actively support it.

Educational coherence is further complicated by the fact that curriculum, instruction, and assessment operate at multiple levels. State policies may set assessment requirements, districts make curriculum choices, and teachers determine instructional methods. Pellegrino et al. (2001) emphasize that these layers of decision-making require ongoing adjustments to maintain coherence, both horizontally within districts and vertically across state, district, and classroom levels.

Recognizing the necessity of coherence, ANet's approach to assessment design has evolved over time. Initially, assessments were structured around standards alignment, with the expectation that schools would bridge the gap between curriculum and assessment. However, as districts began adopting better instructional resources to guide instruction, it became clear that assessment design needed to reflect these curricular structures more intentionally. Yet, simply aligning assessments with HQIM is not enough. Coherence also depends on how well teachers are prepared to implement these materials in practice.



## Challenges of HQIM Implementation and the Role of Assessment

Quality instructional materials are a critical lever for improving student outcomes, yet research shows that teachers frequently supplement or replace district-adopted HQIM with resources of uncertain rigor or alignment (Steiner, 2024). Steiner argues that this behavior 'ensures that the material a child studies in school differs from classroom to classroom' and that 'the caliber, rigor, and any rational sequencing of that material both within and across grade levels becomes a matter of luck and chance.' Given these inconsistencies, assessments serve not only to measure student proficiency but also to verify whether HQIM is being used as intended, supporting instructional alignment across classrooms.

Achieving coherence requires more than alignment as an idea. It thrives when teachers have the knowledge, resources, and support to bring materials to life in the classroom. Professional learning ensures that teachers can effectively implement HQIM, interpret assessment data, and make informed instructional adjustments that keep student learning on track. By embedding professional learning into the instructional cycle, ANet strengthens the connection between assessments and teaching, helping educators translate insights into action.

## Building Proactive Professional Learning

Rather than waiting until students fail assessments to recognize misconceptions, ANet is currently exploring how predictive insights can be integrated into professional learning, testing ways to equip educators with the tools to prevent misunderstandings before they occur. A key part of this approach is ensuring that assessments and instructional decisions are anchored in HQIM, reducing the reliance on inconsistent supplemental resources. By aligning professional learning with HQIM, ANet helps educators maximize the effectiveness of their curriculum, reinforcing instructional coherence across classrooms and grade levels. This process includes:

- Analyzing historical assessment data to pinpoint common misconceptions at each grade level.
- Preparing teachers with targeted professional learning before content is taught, equipping them with strategies to address predictable challenges aligned to current curriculum sequencing.
- Post-assessment reflection, where educators analyze student performance, assess instructional adjustments, and refine teaching strategies.
- Ongoing refinement through teacher feedback, ensuring continuous improvement of instructional approaches.

By embedding misconception-driven Professional Learning (PL) into the teaching cycle, ANet hypothesizes that:

- Teachers who receive PL on guided adaptations of HQIM will make more meaningful adjustments that enhance learning opportunities.
- Students whose teachers implement these guided adaptations will perform better on the targeted math content.
- Teachers will develop a stronger perception of HQIM quality and usability, leading to more effective curriculum implementation.

By combining predictive professional learning with redesigned assessments, ANet is positioning assessments not just as reflections of past learning but as guides for future instruction. This integrated model ensures that students receive the right support at the right time—before misconceptions take hold—helping them build a stronger foundation for long-term success.

Achieving this level of coherence is not simply a matter of aligning assessments with HQIM. It also requires ensuring that teachers are equipped to implement HQIM with fidelity. When assessment data reveals gaps between intended and actual implementation, it signals where professional learning can provide targeted support, reinforcing HQIM rather than replacing it. This approach has been central to district-level successes, such as Carlsbad Municipal Schools, where the alignment of assessments, curriculum, and professional learning created a more coherent instructional system.

## Coherence in Action: The Carlsbad Case Study

### The Challenge of Inconsistency

Before undertaking its instructional transformation, Carlsbad Municipal Schools struggled with instructional inconsistency and low curriculum fidelity. While HQIM had been adopted, teachers often supplemented the curriculum with external resources, leading to significant variation in instructional pacing and rigor across schools. Without clear alignment, assessments were unable to accurately measure instructional effectiveness, reinforcing inequities rather than addressing them.

### A Systemic Approach to Coherence

Carlsbad's leadership recognized that coherence required more than just aligning assessments to HQIM. It required a system-wide shift in instructional priorities. With ANet's support, the district:

- Established a transparent curriculum selection process that engaged teachers and leaders in decision-making, building trust and buy-in.
- Used assessment data and instructional observations to identify where HQIM was not being implemented with fidelity.
- Created an instructional leadership department focused explicitly on coherence, professional learning, and curriculum implementation.

### The Role of Assessment in Verifying Implementation

To ensure fidelity, Carlsbad used a combination of:

- Formative assessments aligned to HQIM to track student progress.
- Instructional walkthroughs to observe whether teachers were delivering grade-level content as intended.
- Targeted professional development informed by assessment data to help teachers adjust instruction while maintaining curriculum integrity.

As a result, instruction became more consistent across schools for the first time. Principal Stacy Rush noted, *"You could go into several Algebra I classrooms, for example, and you would see they were in the same place. Finally, we had coherence and consistency."*

### Sustaining Coherence Through Leadership

To make these changes lasting, Carlsbad established a district-wide instructional leadership team dedicated to supporting strong, standards-aligned instruction. Leaders participated in professional learning and used assessment data strategically to refine instructional approaches, ensuring that coherence was not just a one-time initiative but an ongoing priority.

### Toward a Fully Coherent System

A coherent instructional system ensures that assessments are not separate from, but rather embedded within, the learning process. District and school leaders must work together to create an infrastructure where:

- HQIM is implemented with fidelity through aligned professional development.
- Assessments are streamlined and transparent, providing actionable insights for teachers.
- Instructional leadership prioritizes coherence, ensuring that teachers are not left to navigate curriculum and assessment misalignment on their own.

Carlsbad's transformation underscores a critical takeaway: coherence is not simply about aligning curriculum and assessment on paper. It requires intentional leadership, professional learning, and assessment-informed instructional adjustments. By committing to a more coherent system—where district initiatives, instructional leadership, curriculum implementation, and assessment strategies reinforce one another—schools can create an environment where students receive the high-quality instruction they deserve, and educators are empowered to drive meaningful learning outcomes.

## Student-Centered Design: Elevating Student Experience and Self-Efficacy

Ensuring all students have access to high-quality learning experiences requires a transformation in how assessments are designed and used. Many assessments prioritize prediction over intervention, lack transparency in item design, and can fail to disaggregate data in ways that allow for targeted instructional support (Davidson, Shepard, & Penuel, 2017). These limitations disproportionately impact students who require differentiated learning pathways, making it difficult for educators to address specific needs effectively.

Too often for students who have the hardest time in traditional classroom structures, assessments are used as tools weaponized against them instead of empowering them. Yet, Black and Wiliam (1998) demonstrated that formative assessments—when integrated into instruction—improve student learning outcomes, particularly for historically under-served students. When students engage with assessment as a reflective practice rather than a judgment, they gain agency over their learning, which Elmore (2019) argues is essential for fostering deeper cognitive development. This shift turns assessments from obstacles into pathways for student success. When designed to highlight strengths and guide learning, assessments strengthen student agency, self-efficacy, and a path to growth and achievement.

Assessment must be responsive to students' lived experiences. Ladson-Billings (1995) introduces culturally relevant pedagogy, stating that equitable assessment must affirm students' identities while supporting academic achievement, and when assessments reflect the cultural backgrounds and experiences of students, they are more likely to engage and motivate learners, leading to improved academic performance. Similarly, Paris and Alim (2017) advocate for instructional systems that recognize students' diverse backgrounds, emphasizing that assessments should sustain students' identities rather than impose deficit-based frameworks. To truly serve all students, assessments must reflect the rich diversity of their experiences, languages, and ways of knowing.

Often, traditional assessments lag behind curriculum advancements and fail to provide culturally and linguistically inclusive representations, limiting engagement and missing opportunities for deeper learning. When assessments incorporate culturally relevant content and allow multiple ways for students to demonstrate understanding, they foster deeper engagement and more accurate measures of learning. By designing assessments in this way, we move beyond exclusionary models toward systems that validate, challenge, and support every learner's success.

To achieve truly equitable, student-centered design, assessment must shift from a tool of evaluation to an opportunity for meaningful engagement. This evolution is key to fostering instructional coherence, strengthening leadership accountability, and building transformative school cultures because at its core, assessment must serve and engage students. Achieving this requires assessment design that prioritizes engagement, transparency, and student agency.

### *Shifting from Evaluation to Engagement*

Assessments should serve learning, yet students often experience them as isolated, high-stakes events. Without transparency into why certain content is assessed or how results shape instruction, assessments feel disconnected from the learning process.

When assessment design is transparent, students engage more deeply. They see purpose and relevance in the content, making assessments a continuation of their learning experience rather than a separate, evaluative task. They also develop a greater sense of agency over their learning, as they understand what is being asked of them and why. By designing assessments with transparency in mind, ANet ensures that both educators and students receive actionable insights that drive learning rather than prediction.

## Connecting the Student Experience

To ensure students engage meaningfully with assessments, ANet integrates relevant themes and real-world connections into its content. This approach strengthens the link between learning and assessment, increasing motivation and deepening understanding. By embedding themes that reflect diverse student experiences, ANet ensures that assessment tasks are rigorous, relevant, and connected to students' identities. To support this alignment, ANet designs assessment content to reflect high-quality curriculum standards, reinforcing connections between classroom instruction and assessment outcomes (EdReports, 2021).

In alignment with *EdReports' Gateway 3 - Usability Criteria*, assessments are designed to measure student progress and to promote meaningful engagement through texts that reflect diverse perspectives and experiences (Criterion 3.3). By ensuring that assessments are both rigorous and reflective of classroom instructional materials, students can better connect their learning to their assessments, strengthening engagement. As a result, ANet aligns content to high-quality curriculum standards to reinforce coherence between what students learn in class and what they are assessed on. To foster engagement and accessibility, ANet ensures that assessments feature a diverse range of voices, historical perspectives, and meaningful themes. Nearly half of ELA passages feature female protagonists or historical figures, and a majority highlight individuals from a variety of cultural backgrounds, ensuring that students see themselves—and others—reflected in what they read through the lens of both diverse achievements and everyday life experiences.

When teachers have full visibility into assessment design, they can explain its purpose to students and ensure assessments align with what students have been learning, reducing disconnects in engagement. Black & Wiliam (1998) show that formative assessments integrated into instruction improve student outcomes, particularly for historically underserved students. Students engage more deeply when they see connections between what they learn and what they are assessed on. When assessments reflect diverse perspectives while maintaining rigorous academic standards, all students feel included in the learning experience.

## Assessment as Transparent Dialogue: Looking at Student Work & Misconceptions

Engagement is about more than interaction. It's about ownership. When students understand their own progress, they can set goals, self-reflect, and take an active role in their learning. Transparent assessment reporting transforms assessments from isolated evaluations into dynamic feedback loops that support student agency. Assessment should not be a one-way process where students complete a test and simply receive a score. Engagement doesn't stop at taking an assessment—it must extend into the reporting process. Often, students are given results but no insight into their thought processes, misconceptions, or how their responses connect to future learning. This approach misses a critical opportunity for engagement—one where students learn to analyze their own reasoning and develop greater self-efficacy.

Transparent reporting encourages students to interrogate their own choices: to reflect on their learning, identify patterns in their thinking, and refine their approaches to problem-solving, reinforcing a growth mindset. When students reflect on why they answered a question a certain way, they strengthen self-efficacy and build the metacognitive skills necessary for long-term learning (Elmore, 2019).

Traditional assessment reporting usually focuses on correctness, not on understanding, leaving students without clear next steps. ANet's reporting system provides teachers and students with insight into student reasoning by highlighting misconceptions embedded in incorrect responses so students can reflect on their thinking. The goal is to encourage discussions around student work both within PLCs and directly with students, allowing students to articulate their reasoning and learn from their mistakes, offering real-time insights that connect assessment outcomes to targeted instructional strategies and future learning.

Teachers facilitate classroom discussions that prompt students to ask, “*What was my reasoning for choosing this answer?*” When students actively engage with their results, they take ownership of their learning, recognizing patterns in their mistakes and helping them make adjustments in real time. They become participants rather than passive recipients of assessment outcomes. Students begin to see mistakes as part of their learning process rather than as indicators of failure.

### **From Judgment to Conversation**

Creating an equitable assessment system requires shifting the conversation—from using assessments as final judgments of ability to positioning them as opportunities for growth and reflection. Equitable assessment does not mean lowering expectations—it means ensuring that students understand what is being asked of them, why it matters, and how they can grow from the experience. Student-centered design relies on transparency and coherence. It is essential because it enables students to engage more deeply when they can see themselves in assessment content. Teachers can better support students when they have full insight into how assessments align with instruction.

Assessment must move beyond evaluation. It must engage, inform, and empower. By prioritizing transparency and student-centered design aligned to quality materials, we transform assessments from a system of judgment into a tool for continuous learning and growth.

## **Student Agency: Case Study on Foundational Literacy and Reading Confidence**

Like most traditional assessments, ANet’s assessments are designed to illuminate comprehension mastery, ensuring that students can analyze and engage with complex texts. However, emerging data and research highlight a critical gap: students who struggle with foundational literacy skills—decoding and fluency—may be unable to fully access comprehension-based assessments. Before these students can analyze what they read, they need support in building the skills and confidence necessary for reading engagement.

National trends underscore the urgency of this issue. National Assessment of Educational Progress (NAEP) data indicates that over 60% of 4th graders, 8th graders, and 12th graders are reading below the proficiency level, meaning they have not yet reached grade-level reading expectations (National Center for Education Statistics, 2023). The reality is stark—many older students have not yet developed the foundational skills needed to support comprehension. Without intervention, these challenges compound over time, diminishing students’ motivation to engage with reading altogether.

### **The Intersection of Reading Proficiency and Reading Identity**

Studies show that students who struggle with reading for an extended period begin to internalize a negative reading identity, seeing themselves as non-readers (Learned, Frankel, & Brooks, 2022). The longer students face difficulty with decoding and fluency, the less likely they are to identify as readers, engage with literacy-based tasks, or seek out opportunities to practice. This lack of engagement leads to fewer reading experiences, which in turn makes improving literacy skills even more difficult—a phenomenon known as the “Matthew Effect” in reading development (Stanovich, 1986).

In middle and high school classrooms, this struggle manifests in subtle yet significant ways: students who lack confidence in reading often avoid participation, experience anxiety when asked to read aloud, and disengage from texts that appear too challenging. This loss of reading agency not only affects academic outcomes but also deepens educational inequities, as students with weaker foundational skills are left further behind.

## A New Approach: Pairing Foundational Literacy Assessment with Student Confidence Measures

To address this growing crisis, ANet partnered with Reading Reimagined, supported by AERDF and Stanford University, to launch a pilot program in district middle and high schools. This initiative featured the ROAR assessment—Rapid Online Assessment of Reading—developed at Stanford University, a groundbreaking tool designed to evaluate foundational reading skills in students from grades K–12.

The ROAR assessment provides a comprehensive, gamified online experience, measuring key foundational literacy skills, including:

- Phonemic awareness
- Word-level decoding
- Sentence-reading fluency

The fully online process takes 30 minutes or less, offering quick yet invaluable insights into students' foundational reading abilities. This allows educators to pinpoint gaps in decoding and fluency that might otherwise go unnoticed, particularly among older students who are expected to engage in comprehension-based assessments without adequate foundational support.

At the same time, the **Motivation to Read Profile**, rooted in research from Gambrell (1996), measured students' self-efficacy in reading, providing teachers with critical insight into how students feel about reading, including their confidence in reading aloud and their overall attitude toward literacy tasks.

## The Impact of Reading Confidence on Literacy Development

Early results from the pilot revealed a significant lack of confidence among struggling readers, with many students expressing deep anxiety about reading in front of peers. One student candidly shared:

*"I want my teachers to know that I sometimes [struggle] when I read out loud in class. I get stuck on a word that is hard for me to pronounce. And sometimes I pronounce words wrong, which can be difficult. So, thanks for your understanding."*

This emotional barrier is a key factor in literacy development. Students who lack confidence in their reading ability often avoid engaging with texts, reinforcing the cycle of low literacy and low motivation. However, by pairing diagnostic literacy assessments with measures of self-efficacy, educators can better understand both the skill-based and psychological barriers to reading success.

ANet's work in foundational literacy is still evolving, but the early findings are clear: addressing decoding and fluency is just as important as assessing comprehension, particularly for older students who have struggled to develop strong literacy foundations. Our evolving approach to literacy assessment mirrors this shift, moving beyond evaluation toward assessments that directly support student confidence, engagement, and foundational literacy growth.

## Advancing Student-Centered Design with Adaptive Learning Technologies

As ANet continues to refine its approach to assessment, one fundamental principle remains constant: assessments must not only be rigorous but also accessible. This means ensuring that all students—regardless of their starting point—can fully engage with grade-level content in ways that foster both mastery and growth.

A key part of this vision is deepening student-centered design, recognizing that students learn best when they feel confident in their abilities and see assessments as a tool for growth rather than a judgment of their abilities. Research has shown that student efficacy increases when they have a sense of agency in their learning. As a result, ANet is exploring ways to:

- Expand student choice in assessment formats, ensuring that students can demonstrate understanding in ways that reflect their strengths.
- Integrate culturally relevant content, making assessments more engaging and reflective of students' lived experiences.
- Balance mastery and growth, maintaining high academic standards while providing differentiated access to content based on student readiness.

With these priorities in mind, the future of assessment must embrace adaptive learning technologies. By integrating AI-driven insights and adaptive assessment models, ANet is working toward a system in which assessments dynamically adjust to student responses, ensuring that every student is met at the right level. These adaptive assessments combine diagnostic and mastery-based items, reducing test-taking time while simultaneously improving the precision of insights for teachers.

Advancements in machine learning and real-time data analytics also open new possibilities. Technology allows for a sharper focus on diagnostic purposes, helping educators pinpoint not just where students struggle, but why. As these innovations take hold, ANet continues to ground its work in the lessons learned over the past twenty years. Understanding what makes assessments truly effective and where traditional approaches fall short has shaped the evolution of our design. These insights guide our commitment to ensuring that assessments actively support student growth rather than serving as rigid measures of ability.

## Results & Impact: Lessons That Shape Assessment Design

For twenty years, ANet has worked alongside schools and districts to transform how assessment fuels instruction. Our approach—pairing high-quality, instructionally focused formative assessments with targeted professional learning—has helped educators make better, data-driven decisions for student success. However, our journey has also revealed critical insights about what makes assessments truly effective and where traditional approaches must evolve.

A key question in a 2010 federal innovation grant (i3), analyzed by Harvard University, was whether timely student performance data—paired with targeted support—could improve instructional practices and boost student achievement. The answer? It depends. While the study showed that ANet's program improved teacher data usage and instructional decision-making, student achievement gains were only significant when schools had the right readiness conditions in place (West, Morton, & Herlihy, 2016). In short, data alone wasn't enough. Impact depended on whether teachers and schools had the capacity to act on it.

This was a critical insight: Great assessments alone aren't enough. Their impact depends on whether teachers and schools are ready to act on the data. In response, ANet recalibrated its approach, expanding its focus beyond school-level data literacy to ensure that assessment-driven success is supported at every level of the system. Our adaptive strategies now strengthen vertical coherence from the district office to the classroom, enhancing the implementation of high-quality curricula and developing assessments that provide timely, actionable insights to improve teaching and learning.

## *Demonstrating Efficacy Through Continued Evaluation*

While ANet is committed to designing student-centered and adaptive assessments, the ultimate measure of success is whether these assessments lead to improved outcomes. To ensure that our innovations are effective, ANet employs a rigorous, data-driven evaluation process to assess the impact of our work.

Internal evaluations consistently demonstrate that ANet-supported schools show stronger performance on summative assessments than comparable non-ANet schools. However, a simple comparison does not fully capture the depth of our impact. To isolate ANet's direct effect on student learning, we use a three-step evaluation process:

- 1. Matching:** Each ANet partner school is paired with a non-ANet school of similar demographics and prior achievement levels.
- 2. Change Calculation:** We track how performance changes over time in ANet-supported schools versus their matched counterparts.
- 3. Difference-in-Difference Analysis:** The differential in performance growth between ANet and non-ANet schools allows us to quantify ANet's direct impact.

This method ensures that our results are not just anecdotal but backed by empirical evidence. We consistently observe that when readiness conditions are in place, ANet's coaching, assessments, and instructional strategies lead to measurable improvements in student learning. The takeaway is clear: assessments only drive improvement when they exist within a system that supports teachers in acting on them. Readiness conditions, targeted coaching, and aligned instructional practices determine whether assessment leads to meaningful change. Schools like Honey Dew Elementary put these insights into action, leveraging data, refining instruction, and demonstrating what is possible when assessment is used as a tool for learning rather than measurement.

## *Case Study: Transforming Educational Outcomes at Honey Dew Elementary*

The story of Honey Dew Elementary School in Renton, WA, exemplifies how a strategic approach to assessment, professional learning, and responsive instruction can transform student outcomes. Over the course of their ANet partnership, Honey Dew saw a 12.2% positive change in math proficiency compared to their matched comparison group of non-ANet partners. Their journey offers a powerful case study in how schools can move beyond a strong culture to drive measurable academic success.

When Principal Misty Mbadugha joined Honey Dew in 2014, she inherited a school with a positive culture but a lack of academic rigor. Recognizing the need for change, she sought to elevate instructional quality and ensure assessments were used as tools for learning rather than just measurement. In 2019, Honey Dew partnered with ANet to integrate a structured teaching and learning cycle—one that would align assessments with instruction and professional development.

### **Strategic Implementation: Turning Data into Action**

From the outset, the school's leadership team, including Title I Math Coach, Becca L'Amour, and ELA Instructional Facilitator, Brooke Argotsinger, worked closely with ANet coaches to refine their approach to data-driven instruction. This partnership focused on helping teachers not only understand assessment results but use them to inform targeted interventions.

The turning point came when a professional learning session did not go as planned, prompting the team to rethink their instructional approach. This led to a shift toward more interactive and reflective professional development, helping teachers use ANet assessments to diagnose and address specific student needs in real time.

## From Assessment to Impact: The Story of David

One of the most vivid examples of this transformation is the story of David, a fifth-grader struggling with fractions. Through ANet's interim assessments, his teacher was able to pinpoint his specific challenges and provide targeted instruction that rebuilt his confidence in math.

David reflects on the role of these assessments in his learning:

*"It's important for your teacher to know what you need to learn. If you rush through your test... then your teacher won't know what you need to work on."*

Rather than viewing assessments as a test to pass or fail, David saw them as an ongoing dialogue about his progress. He even acknowledged the value of making mistakes:

*"When you're wrong, you always learn something from your mistakes."*

This shift in mindset—from seeing assessments as high-stakes evaluations to seeing them as learning tools—is central to ANet's vision. By using assessments to guide real-time instructional adjustments, Honey Dew created a culture where students and teachers alike were empowered by data.

## Broader Impact and Continuous Growth

As teachers became more adept at using data, student engagement and academic performance improved significantly. By the 2020–2021 academic year, students at Honey Dew saw a 10% or greater improvement in 38% of the assessed standards year over year.

These gains were not just one-time improvements. They reflected a lasting shift in instructional leadership. Teachers were no longer just administering assessments. They were leveraging them as tools for responsive teaching.

## The Takeaway: The Power of Readiness, Coaching, and Continuous Improvement

Honey Dew's transformation underscores a central theme of this chapter: Assessment is most powerful when it is embedded within a system that supports instructional leadership and continuous improvement.

The success at Honey Dew was not just about implementing assessments—it was about ensuring teachers had the professional learning, coaching, and leadership structures in place to use assessments effectively. This case study reinforces three key takeaways:

1. Assessment alone does not drive improvement—how educators use assessment data is what matters.
2. When readiness conditions are in place, ANet's coaching and instructional strategies lead to measurable and sustained student growth.
3. Continuous improvement is essential. Schools must be willing to adapt their strategies in response to both successes and challenges.

As ANet continues to refine its student-centered, adaptive, and data-driven assessment models, the lessons from Honey Dew serve as proof of concept for what is possible. Schools that invest in a structured teaching and learning cycle—one that integrates responsive assessment, professional learning, and strong instructional leadership—can achieve breakthrough results for students.

Honey Dew's journey exemplifies what is possible when assessment moves beyond a tool for accountability and becomes a driver of learning. Their success highlights the essential conditions for impact: a clear instructional vision, professional learning that enables teachers to refine their practice, and assessments that serve as formative tools rather than final judgments. This model not only transforms schools, it reshapes the role of assessment itself, proving that when assessment is embedded within a system of instructional coherence, real and lasting student growth follows.

## Conclusion

Assessment has long been viewed as a necessary but imperfect tool, often associated with accountability rather than learning. But as schools rethink how assessments are designed and used, a different reality emerges: assessments can do more than measure learning; they can accelerate it.

Throughout this chapter, we have explored the fundamental shifts required to make assessments more transparent, coherent, and student-centered. We have seen that assessment systems must be embedded within instructional cycles, connected to high-quality curricula, and designed to provide meaningful, real-time insights that empower both teachers and students.

Schools like Madison Metropolitan School District (MMSD), Carlsbad Municipal Schools, and Honey Dew Elementary exemplify what is possible when assessment moves beyond passive evaluation and becomes an active driver of learning. MMSD strengthened transparency and instructional alignment. Carlsbad built coherence across curriculum, assessment, and professional learning, and Honey Dew leveraged assessments to transform instructional decision-making. Each of these schools demonstrates that when readiness conditions are in place, assessments can shift from being a source of compliance to a catalyst for meaningful student growth.

As ANet continues to refine its approach, we remain committed to the vision that assessments must not simply track progress, but actively contribute to it. The future of assessment is one in which data informs—not dictates—teaching and learning. And as schools embrace this future, they move closer to an educational system that truly puts students at the center of every decision.



## References

- Black, P., & Wiliam, D. (1998). *Inside the black box: Raising standards through classroom assessment*. King's College London, School of Education.
- Davidson, K. L., Shepard, L. A., & Penuel, W. R. (2017). *Design principles for new systems of assessment*. Phi Delta Kappan.
- EdReports. (2021). *ELA grades 3–8 review criteria v1.5*. <https://www.edreports.org>
- Elmore, R. F. (2019). *The future of learning and the future of assessment*. *ECNU Review of Education*, 2(3), 328–341.
- Gordon, E. W. (2013). *To assess, to teach, to learn: A vision for the future of assessment*. Learning for Action Research Network. [https://www.ets.org/Media/Research/pdf/gordon\\_commission\\_technical\\_report.pdf](https://www.ets.org/Media/Research/pdf/gordon_commission_technical_report.pdf)
- Hart, R., Casserly, M., Uzzell, R., Palacios, M., Corcoran, A., & Spurgeon, L. (2015). *Student testing in America's Great City Schools: An inventory and preliminary analysis*. Council of the Great City Schools. <https://files.eric.ed.gov/fulltext/ED569198.pdf>
- Heritage, M. (2010). *Formative assessment: Making it happen in the classroom*. Corwin Press.
- Ladson-Billings, G. (1995). Toward a theory of culturally relevant pedagogy. *American Educational Research Journal*, 32(3), 465–491.
- Learned, J., Frankel, K., & Brooks, M. (2022). Disrupting secondary reading intervention: A review of qualitative research and a call to action. *Journal of Adolescent Literacy*, (in press), 1-11.
- Marion, S. F., Pellegrino, J. W., & Berman, A. I. (Eds.). (2024). *Reimagining balanced assessment systems*. National Academy of Education.
- National Research Council. (2011). *Assessing 21st century skills: Summary of a workshop*. The National Academies Press. <https://doi.org/10.17226/13215>
- Paris, D., & Alim, H. S. (2017). *Culturally sustaining pedagogies: Teaching and learning for justice in a changing world*. Teachers College Press.
- Pellegrino, J. W., Chudowsky, N., & Glaser, R. (Eds.). (2001). *Knowing what students know: The science and design of educational assessment*. National Academy Press.
- Simba Information. (2019). *PK–12 Testing Market Report: PreK–12 instructional materials industry competitive analysis*. Simba Information. <https://www.simbainformation.com>
- Stanovich, K. (1986). "Matthew effects in reading: Some consequences of individual differences in the acquisition of literacy." *Reading Research Quarterly*, 21(4), 360-407.
- West, M. R., Morton, B. A., & Herlihy, C. M. (2016). *Achievement Network's Investing in Innovation Expansion: Impacts on Educator Practice and Student Achievement*. Achievement Network. <http://cepr.harvard.edu>

## About the authors

**Michelle Odemwingie** is the chief executive officer at Achievement Network. Michelle joined ANet nearly a decade ago as a coach and has since held roles as chief of school and system services and chief of staff, among others. This includes spearheading ANet's Breakthrough Results Fund in partnership with five school districts across the country. Through her work at ANet and in her local community, Michelle maintains a deep personal commitment to educational equity and ensuring all students are able to learn and thrive. A recognized strategic advisor and policy advocate for the future of assessments, she plays a key role in shaping the national conversation around instructional improvement. Michelle actively engages in education policy and system-level transformation, advising districts, policymakers, and nonprofit leaders on instructional strategy, assessment innovation, and equitable access to high-quality materials. Prior to joining ANet, she spearheaded the ThinkMath team in California and DC, supporting instructional leaders around math enrichment and intervention programs, as well as supporting secondary math teachers through TNTP and Teach for America. Michelle began her career as an educator teaching math in the District of Columbia and is a graduate of Stanford University.

**Kimberly Cockrell** is an experienced educator, administrator, and leader committed to instructional excellence, leadership development, and equity in education. With over two decades of experience in school leadership, professional learning, and strategic partnerships, she has worked to transform assessment and instructional practices to better support educators and students. At Achievement Network (ANet), Kimberly directs communications and stakeholder engagement, shaping public discourse around instructional coherence, data-driven decision-making, and student success. Kimberly's career spans charter, public, and independent schools, where she has designed professional development programs, led data-driven instructional strategies, and championed equitable learning environments. A lifelong learner and consultant, she continues to support educators in strengthening school leadership, assessment literacy, and instructional coherence.

## About the Study Group

The Study Group exists to advance the best of artificial intelligence, assessment, and data practice, technology, and policy; uncover future design needs and opportunities for educational systems; and generate recommendations to better meet the needs of students, families, and educators.

### Date of Publication

May 2026

### Citation

Odemwingie, M., & Cockrell, K. (2025). From evaluation to impact: Transforming assessment into a tool for learning. In E. M. Tucker, E. L. Baker, H. T. Everson, & E. W. Gordon (Eds.), *Handbook for assessment in the service of learning, Volume III: Examples of assessment in the service of learning*. University of Massachusetts Amherst Libraries.

### Licensing

This case study is based on a chapter that has been made available under a Creative Commons Attribution-NonCommercial-NoDerivatives 4.0 International ([CC BY-NC-ND](https://creativecommons.org/licenses/by-nc-nd/4.0/)) license.