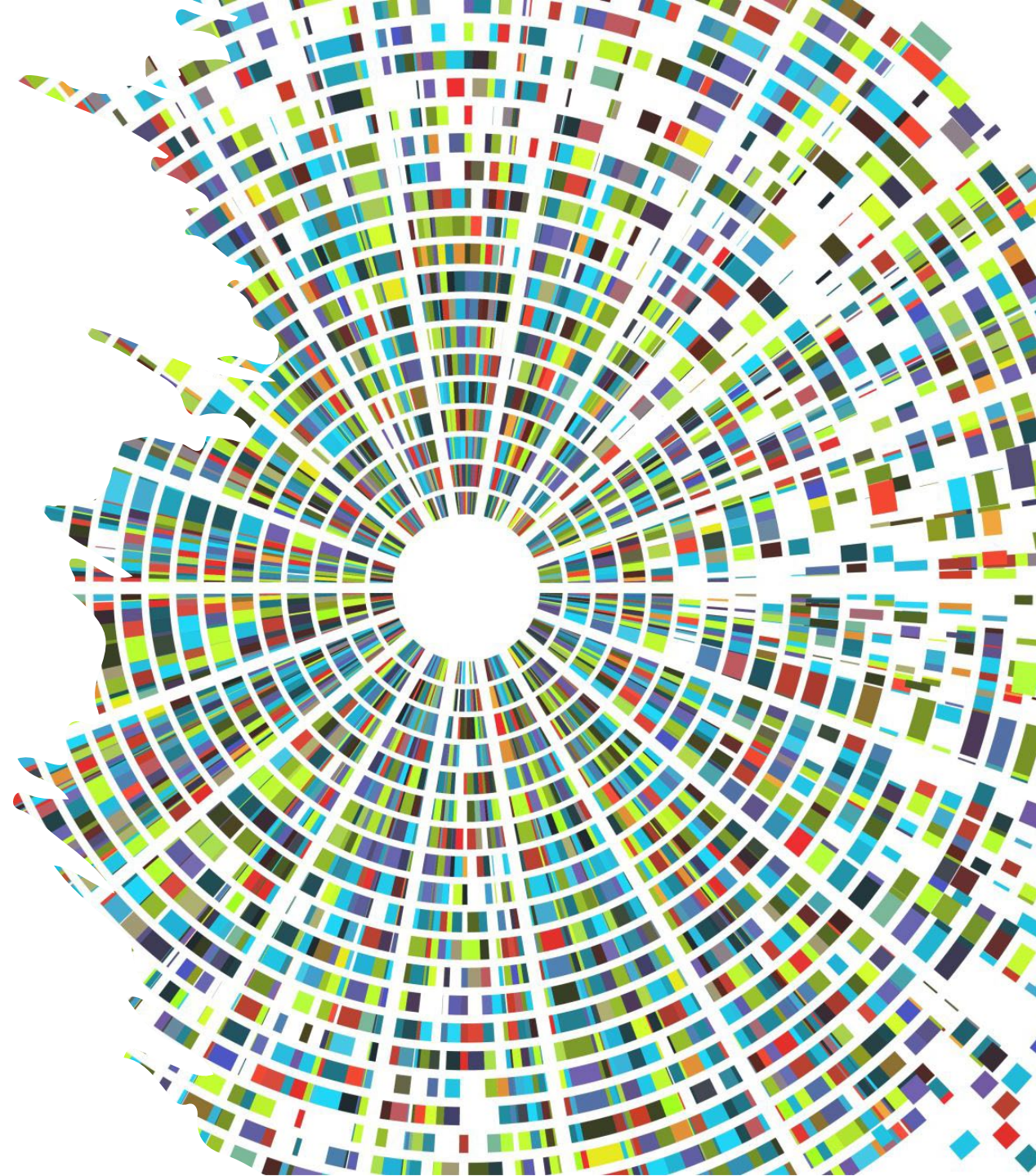


From Data to Design

Utilizing Winter Benchmarks to
Drive Continuous Improvement

Dover School District
March 9, 2026



Submitted Questions

Primarily causal questions. Many questions ask *why* differences or changes occurred across student groups (e.g., gender, race/ethnicity, income status, disability status) and across academic, behavior, and grade-level data.



Equitable
Academic
Outcomes Across
Student Groups

Instructional
Quality, Access,
and Intervention
Systems

Student
Development,
Engagement, &
Behavioral
Systems

Understanding Our Data

- **Moving from “why?” to “How do we improve?”**
 - **The Goal:** To move beyond simply observing data to taking strategic action that closes achievement gaps.
 - **The Challenge:** District data often reveals "what" is happening (e.g., shifts in academic proficiency or behavior), but rarely points to a single, simple cause.
 - **Our Focus:** Shifting energy away from variables we cannot change (external) and toward the factors within our direct control (alterable).

The Limits of Causality

- **Why we can't always find a single factor**
 - **Complexity:** Student outcomes are influenced by a web of factors. It is difficult to isolate if a change is due to a new curriculum, a specific program, or outside-of-school influences.
 - **Correlation vs. Causation:** Just because two data points move together—like 504 plan proficiency and reading levels—it doesn't mean one caused the other.
 - **The "Big Picture":** Instead of hunting for one cause, we look for **trends and patterns** over time to ensure our response is systemic, not reactionary.

Alterable Variables vs External Variables

Key Takeaway: While we cannot control external variables, we must optimize the **in-school experience** to eliminate disproportionate outcomes.

We Control (Alterable Variables)

Instruction: The quality and method of teaching

Curriculum: The materials and standards we use to teach

Environment: School culture, safety, behavior expectations

Resource Allocation: scheduling, staffing, multi-level preventions

We Support (External Variables)

Student health and/or developmental exceptionalities

Housing security and/or prior school enrollments

Student-family language & cultural background

Life experiences outside the school's control

The Anatomy of an Evidence-Based Continuous Improvement Cycle

An evidence-based approach focuses on **alterable variables**—factors within district control like instruction, curriculum, and environment—to systematically improve student outcomes.

1. **Identify Trends:** Monitoring significant shifts and patterns in student achievement, attendance, and behavior.
2. **Root Cause Analysis:** The process of asking "Why" repeatedly to move past surface-level symptoms and uncover underlying instructional, curricular, or environmental barriers.
3. **PDSA Cycles (Plan-Do-Study-Act)**
 - **Plan:** Develop an actionable change
 - **Do:** Implement the change on a small scale
 - **Study:** Analyze the results – did the change make an improvement?
 - **Act:** Scale up what works; pivot away from what doesn't

Future Focus: Implementation Goals

To fully install the Root Cause Analysis and PDSA cycles, the following next steps are prioritized:

- **Leadership Training:** Equipping administrators with specialized skills in evidence-based problem-solving and root cause methodology.
- **Time Allocation:** Dedicating protected windows in leadership calendars for deep-dive analysis and collaborative cycle work.
- **Standardized Routines:** Establishing a predictable, year-round schedule for completing and studying PDSA cycles across the district.

Key takeaway: Sustainable improvement is an ongoing process of refining the instructional core to address disproportionate student outcomes



Many schools begin continuous improvement cycles in the summer, but it is possible to begin at any time of the year.

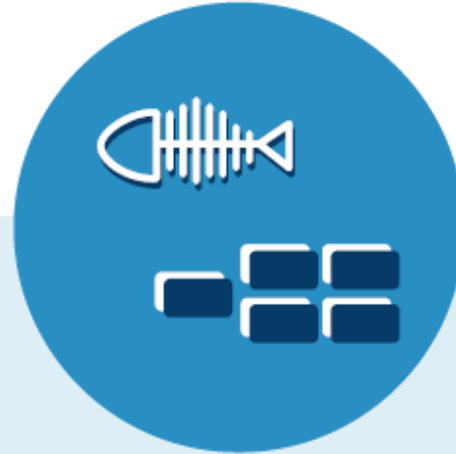
Example of a Continuous Improvement Calendar



Prepare for the continuous improvement effort

- Assess school or district readiness
- Recruit potential Improvement Team members
- Define a general issue or topic to address
- Inventory available data

SUMMER



Convene the improvement team

- Meeting 1: Introduction to continuous improvement
- Meeting 2: Defining the problem and determining root causes using a fishbone diagram
- Meeting 3: Establishing an aim and developing a driver diagram
- Meeting 4: Preparing for Plan-Do-Study-Act cycles

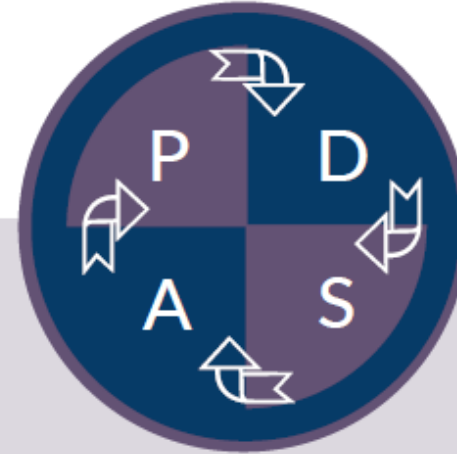
Meeting 1 date: _____

Meeting 2 date: _____

Meeting 3 date: _____

Meeting 4 date: _____

FALL



Begin PDSA cycles

Meetings 5-8: *Examining results and related data

*Depending on the number of PDSA cycles, the number of meetings to reflect on the PDSA cycles (Meetings 5-8 in the toolkit) will vary.

Meeting 5 date: _____

Meeting 6 date: _____

Meeting 7 date: _____

WINTER



Continue PDSA cycles

- Meetings 5-8: *Examining results and related data
- Meeting 9: Reflecting across multiple Plan-Do-Study-Act cycles
- Meeting 10: Preparing to implement a change practice more broadly

Meeting 8 date: _____

Meeting 9 date: _____

Meeting 10 date: _____

SPRING

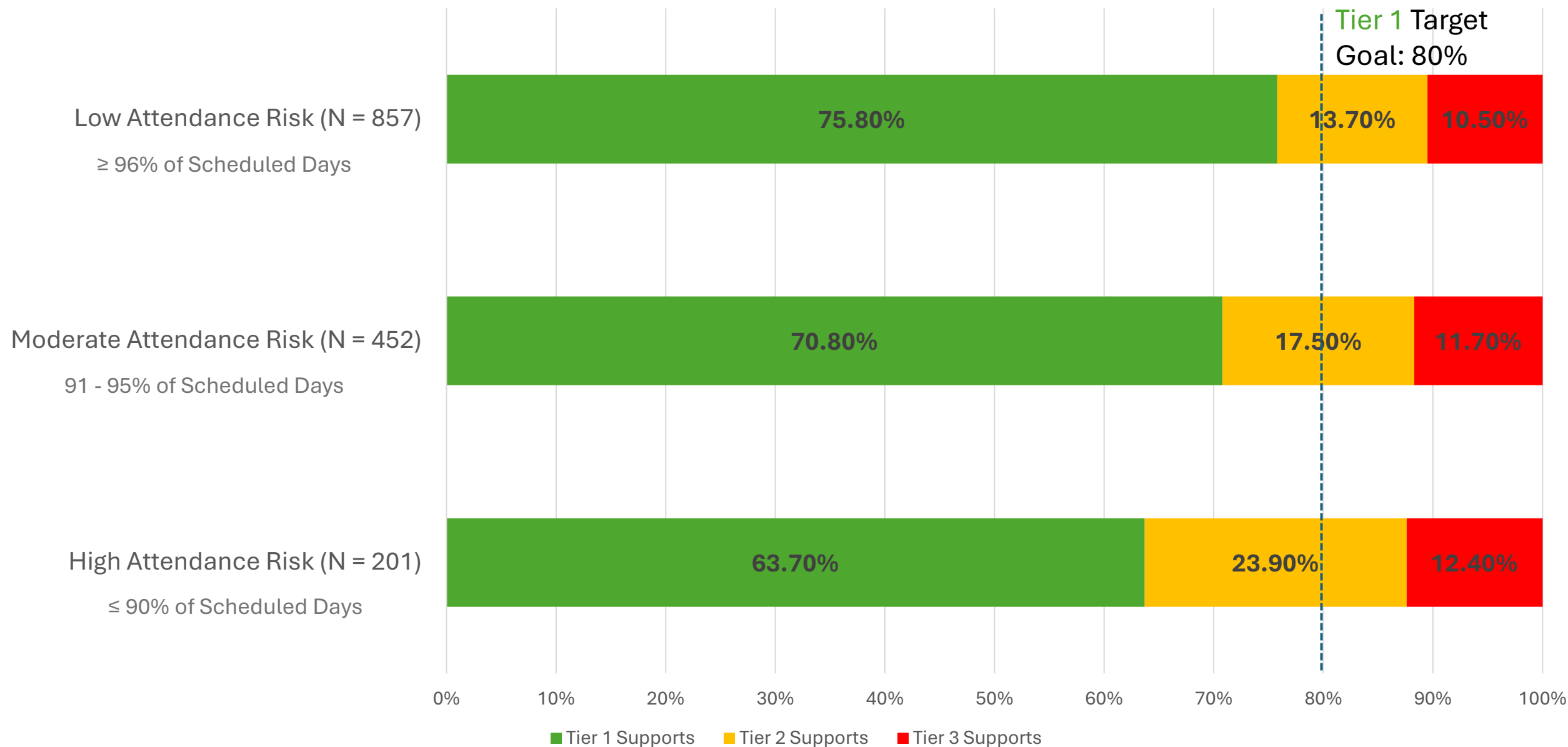
PDSA Cycle in Action: K-8 ELA Curriculum Adoptions (2024-2027)

PHASE	Action Taken by The District
Plan	• In 2024, an exploration team of educators, specialists, and administrators identified reading achievement gaps across several student subgroups. • Root cause analysis uncovered the previous curriculum tools and resources integrated disproven instructional methods. • The team selected a new, evidence-based curriculum designed to improve reading proficiency levels – Amplify CKLA (K-4) and HMH Into Reading/Into Literature (Gr 5-8)
Do	• The district began a three-year phased rollout. • This included initial training, coaching, developing expertise with new instructional methods, tools, and resources.
Study	• Evaluating spring-to-spring data trends to determine if new programs and pedagogical methods are "moving the needle" on student achievement. • Analyzing the collective impact of evidence-based instructional practices and pedagogy rather than attributing results to a single isolated variable. • Assessing program effectiveness based on the specific research-aligned components for which they were adopted.
Act	• Based on spring-to-spring data trends, the district will refine implementation, provide targeted support where barriers remain, and scale the most successful instructional practices district-wide.

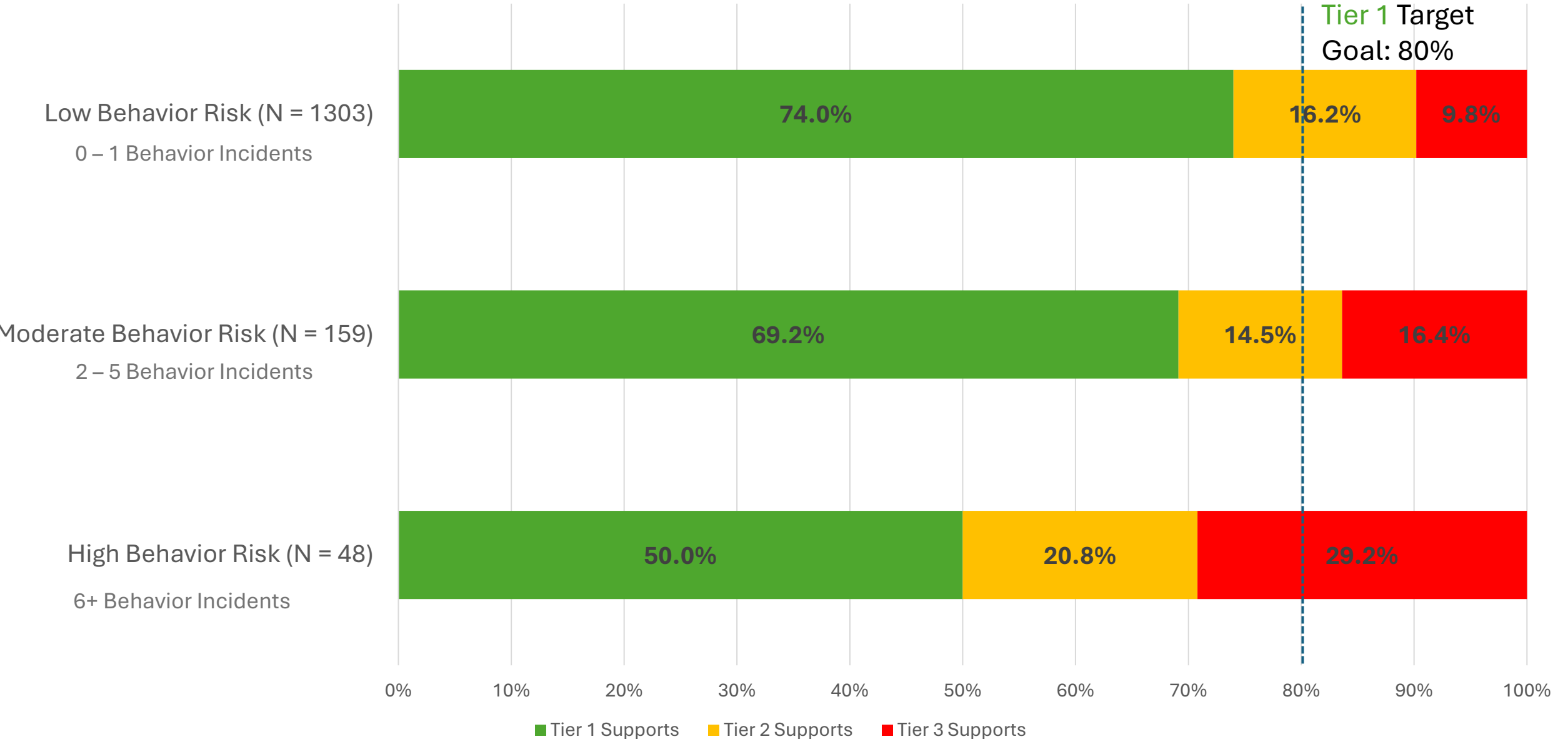
The “Long Game”

- Sustainable change is ongoing effort.
 - **Not a One-Time Event:** District level improvement does not happen in a single semester.
 - **Addressing Disproportionality:** Closing the gap for student subgroups requires consistent, multi-year focus on instruction, curriculum, and environmental variables.
 - **Commitment:** Our goal is to move from “notable observations” to a system of success that can respond to student needs, regardless of their background or experiences.

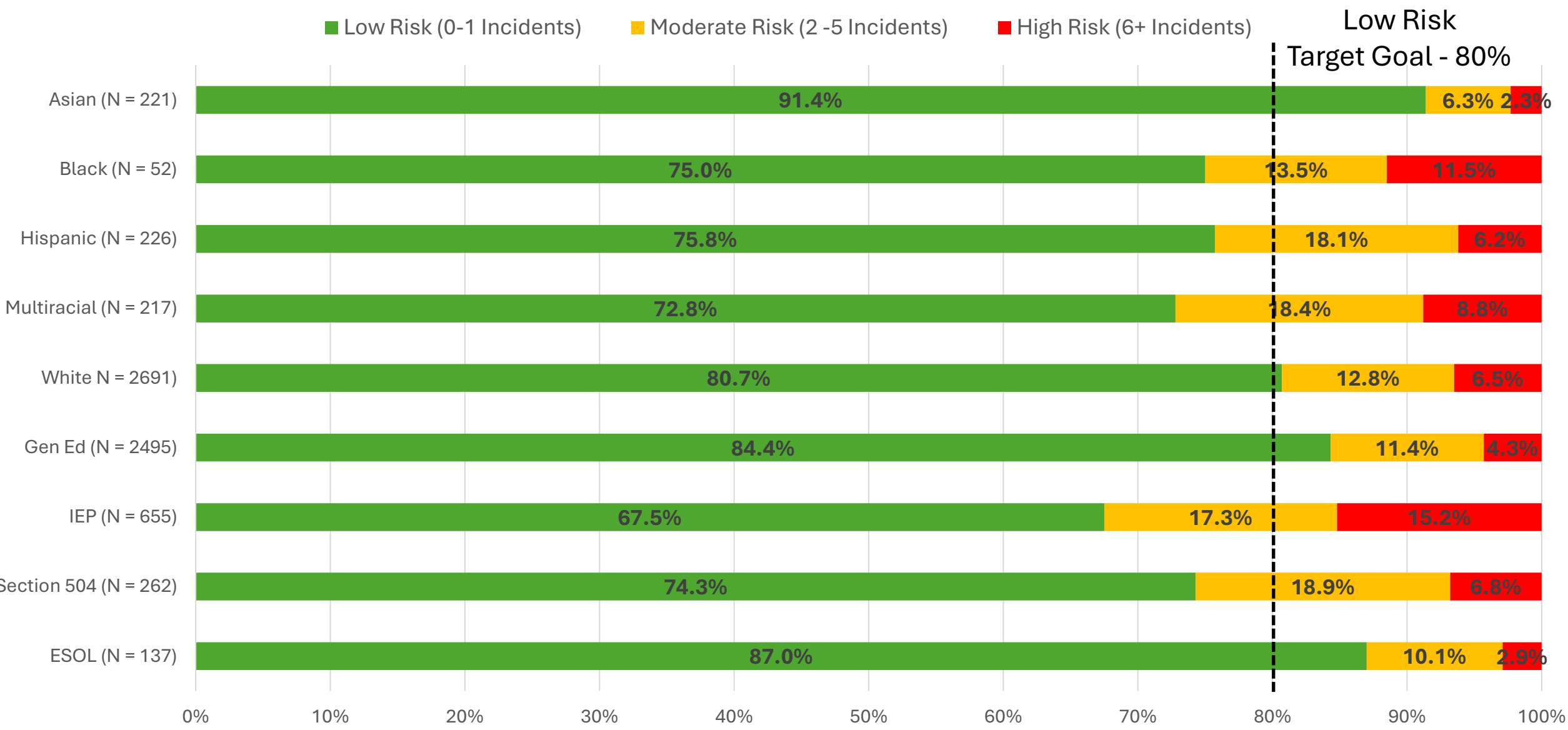
K-8 General Education Students w/ No Mandated Learning Plan: Winter 2026 Reading Achievement Proficiency by Attendance Risk Level



K-8 General Education Students w/ No Mandated Learning Plan: Winter 2026 Reading Achievement Proficiency by Behavior Risk Level



Behavior Incidents: Risk Level by Student Subgroup



Q & A