



## Driving Improvement in Low Performing Schools

Lessons from Five Years of Research on State Turnaround Efforts

### *About this Research Brief*

Improving academic outcomes in low-performing K-12 schools remains both a focus for the Tennessee Department of Education (TDOE) as well as a key part of the research agenda for the Tennessee Education Research Alliance (TERA). As policymakers continue to evaluate and consider changes to Tennessee's five-year-old school turnaround strategy, the state department of education requested a summary and update of research on the state's key reform efforts since they began under Race to the Top in 2010.

This brief first provides background on the impetus and early implementation of these reforms. Next, the brief summarizes key findings from TERA studies on student outcomes, teacher and student mobility, and implementation issues among schools taking part in the state's turnaround initiatives. Finally, it discusses upcoming research and future directions for the state's efforts to improve low-performing schools under new federal accountability law.

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## Summary

In the five years since Tennessee began to take dramatic new action under Race to the Top to turnaround its lowest-performing schools, these school improvement efforts have been a major focus of both the Tennessee Department of Education (TDOE) as well as the Tennessee Education Research Alliance (TERA). The state's efforts have centered around two major reform strategies: the Achievement School District (ASD), in which school governance is transferred from local school districts to a statewide district and schools are managed either directly by the ASD or by a charter organization; and district-run "Innovation Zones" (iZones) in which governance stays with the district while the state financially supports instructional and operational changes.

Researchers partnered with TERA have investigated what has worked, what has not, and why. In summary, analysis of data through 2014-15 suggests that, overall, priority schools have improved in both absolute terms and relative to the rest of the state. This analysis also finds that the ASD model has not yet improved student outcomes in ASD schools relative to other low-performing schools, a finding supported by qualitative work identifying political, operational, and human resource challenges that may have hampered the ASD's success. Conversely, researchers find that iZone schools have, on average, improved student outcomes. Success has not been equal across all iZones, however (with Shelby County's the most dramatically successful), and evidence suggests these gains owe in part to tapping into finite pools of within-district talent.

TERA is poised to conduct and support research that considers whether lessons learned from the ASD can improve the results for other governance-focused reforms, and whether some of the early successes within the iZones can be sustained, replicated, and taken to greater scale. Additional monitoring and evaluation will improve our collective understanding of progress and challenges.



## Introduction

### *Background*

Prior to Race to the Top (RTTT), Tennessee's education accountability system monitored school performance in compliance with No Child Left Behind (NCLB), designating schools and districts as "High Priority" based on student achievement, attendance, and graduation rates (Tennessee Offices of Research and Education Accountability, 2006). The year NCLB became law, Tennessee had one of the lowest graduation rates in the US at 59.6%. Under terminology coined in a landmark 2004 study on high schools with graduation rates under sixty percent, the state as a whole qualified as a "dropout factory" (Balfanz & Legters, 2004).

One of the key points Balfanz and Legters made in their report is that a disproportionate number of under-performing students are in a small percentage of schools. By 2006, a report by the state comptroller's office found that all high-priority schools in Tennessee were concentrated in just five districts, including the four representing the state's urban centers of Memphis, Nashville, Chattanooga, and Knoxville (Tennessee Offices of Research and Education Accountability, 2006).

Over the next six years, from 2002 to 2008, Tennessee's growth in high school graduation led the country at over fifteen percentage points, and the number of high schools falling below the 60% benchmark fell from 58 to 34 (Balfanz et al., 2010). Those remaining schools (and the middle and elementary schools that feed them) underscore how aggregate success can mask concentrated failure and justify intervention in the small and shrinking number of sites where extreme challenges persist. For those schools, RTTT called for transformation, not tinkering.

### *A New Era of Reform*

Since 2012, Tennessee has committed unprecedented attention and resources into efforts to improve student performance in the state's lowest achieving schools. State reforms designed in the state's RTTT application and enshrined into law in the First to the Top Act of 2010 began in earnest in 2012.

Though results of these reforms have been mixed, the variation highlights a number of lessons to guide future turnaround efforts, and early findings have revealed and

## Transformation, Not Tinkering

Prior research confirms the pattern of under-served students often being concentrated in a relatively small number of schools and has specified both indicators for identifying these schools as well as emblematic and contributing conditions.

At the federal level, then-Secretary of Education Arne Duncan recognized chronically low-performing schools as a point of policy focus by highlighting the disproportionate concentration of the country's below-grade-level and non-graduating students in a relatively small number of schools. In a speech in the summer of 2009, he estimated the number of failing schools nationally to be about 5,000 schools, or roughly five percent of all public schools. This bottom five-percent benchmark became the US Department of Education's (ED) mandate for state-level action for both RTTT as well as School Improvement Grants (SIG) within each state.

Years earlier, in 2004, researchers at Johns Hopkins first used the term "dropout factory" to refer to high schools in which fewer than 60% of students graduated, and estimated that the roughly 12% of high schools falling into this category accounted for almost half of dropouts nationwide (Balfanz & Legters, 2004). In North Carolina, Judge Manning famously declared this "academic genocide." These two phrases resonated across the country's education policy landscape and created the moral framing for school turnaround initiatives in the following years.

As Secretary Duncan said, to turnaround performance in these schools would require "transformation, not tinkering."

defined the unanswered questions to guide future research. Before describing the multiple facets of the state's approach to school turnaround and the findings of prior and emerging research on the success of those efforts, this brief will summarize the status of school performance in Tennessee at the time of implementation and the history of reform initiatives leading up to that critical juncture.

When Tennessee applied for Race to the Top funds in 2009, the state outlined significant changes to its school

improvement strategies both in its application and in state law. Owing in large part to strong political will among stakeholders at the state level, including the governor and legislature, and unanimous buy-in across districts, the US Department of Education recognized Tennessee’s progress and promise, and to support continued reforms, awarded the state over \$500 million as one of two initial Race to the Top grant recipients in 2010.

The centerpiece of Tennessee’s strategy for its lowest-achieving schools, or “Priority” schools, as they were termed under the grant, was a radical proposal to form a state-level entity known as the Achievement School District (ASD), which would take over and directly run a subset of priority schools and partner with proven non-profit charter management organizations (CMOs) to take over others. These charter- and direct-run schools would then come out from under the purview of their local districts and into the oversight of the ASD, modeled after the Recovery School District in Louisiana. Alternatively, the rest of the Priority Schools falling in the bottom five percent would remain under existing governance structures but begin to follow prescribed reform models through either district Innovation Zones (iZones), federal School Improvement Grants (SIG), or other district supports.

The state designated an initial list of eighty-three Priority Schools in 2012, which established eligibility for ASD, iZone, and SIG. Of those eighty-three, sixty-nine were in Memphis, and both the ASD and one of the first two iZones were born there in 2012, with Shelby County Schools establishing an initial cohort of seven schools in its iZone and transferring six schools to the ASD. Another three schools in Nashville formed Metropolitan Nashville Public Schools’ iZone beginning the same year. Through the 2017-18 school year, the ASD has grown to 32 schools (29 in Memphis, 3 in Nashville), and iZones are operating in Memphis (21 schools<sup>1</sup>), Nashville (12 schools), Knoxville (8 schools<sup>2</sup>), and Chattanooga (5 schools<sup>3</sup>).

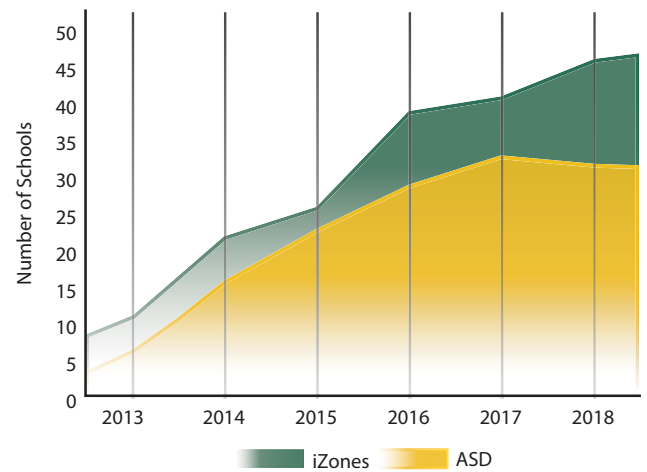
<sup>1</sup>Shelby County Schools website (August 2017): <http://www.scsk12.org/schools/indexOLD?category=izone>

<sup>2</sup>Knox County Schools website (August 2017): <https://www.knoxschools.org/Domain/1061>

Only four of these eight schools were designated as Priority Schools by the state.

<sup>3</sup>Hamilton County Department of Education website (August 2017): <http://www.hcde.org/?DivisionID=14285&DepartmentID=14802>

## Priority Schools by Strategy, 2013-2018



## The Tennessee Research

Research by TERA partners has focused on the state’s two major, targeted turnaround efforts: the Achievement School District (ASD) and Innovation Zone schools (iZones). These studies have generally asked, What has happened?, Why?, and What can we learn? Specifically, researchers have considered the effects of these interventions on student achievement, teacher and student mobility, and the organizational dynamics of these educational agencies and the communities they serve. Each aspect informs the assessment of the state’s prior efforts and can help guide future strategies.

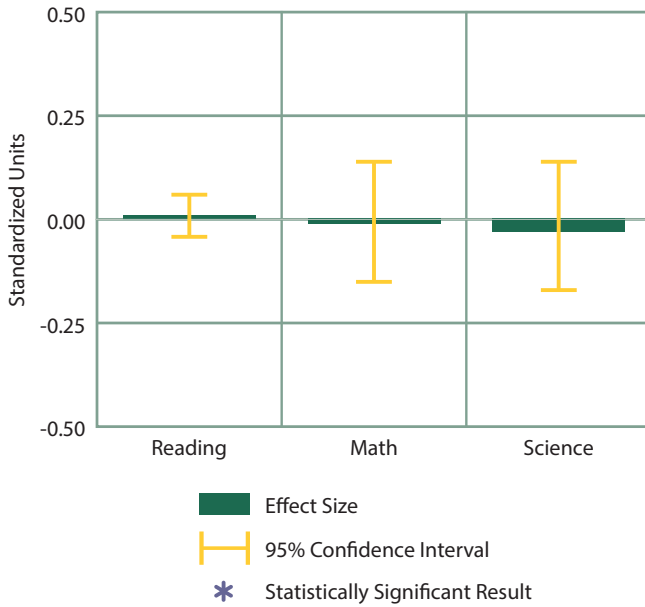
### Student Learning

*Evidence of success emerges earlier in iZones than ASD*

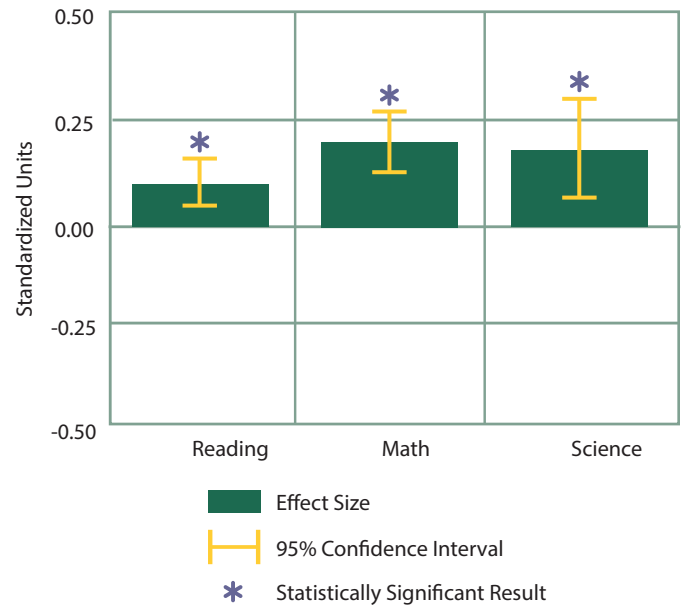
A widely-cited December 2015 evaluation of impacts on student achievement headed by University of Kentucky professor Ron Zimmer and Vanderbilt’s Gary Henry found that through 2014-15, student performance among schools designated as “Priority Schools” in 2012 improved relative to the rest of the state, albeit slightly.

They found consistently large positive effects in math, science, and reading in iZone schools, but no measured benefit to students in schools taken over by the ASD relative to other Priority Schools that were not part of a targeted state intervention (Zimmer, Henry, & Kho, 2017). In the Shelby County iZone, where results were most dramatic, the effect on math and science achievement is roughly equivalent to moving a student from the center of the “Basic” performance level half-way

### Estimated Effects in ASD Schools



### Estimated Effects in iZone Schools



Source: Zimmer, R., Kho, A., & Hentry, G. T. (2017). The effects of school turnaround in Tennessee’s Achievement School District and Innovation Zones. *Educational Evaluation and Policy Analysis*, 39(4).

to the “Proficient” threshold (Zimmer, Kho, Henry, & Viano, 2015).

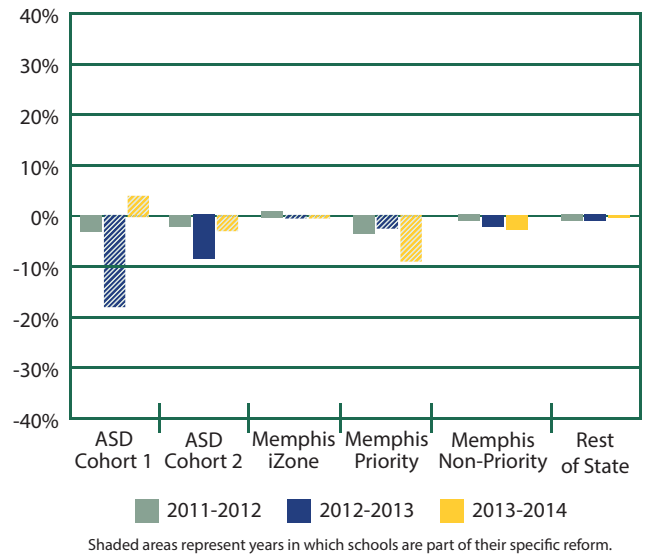
Zimmer, Henry, and team posit that the positive findings in the iZone largely dispel the notion that removing chronically low-performing schools from their local governance structures is necessary to make meaningful gains in student outcomes (Zimmer, Henry, & Kho, 2017). Researchers intend to complete a follow-up study that will update findings with data through the 2016-17 school year, allowing all priority schools, including the ASD, an additional two years to demonstrate an increased capacity to improve students’ academic outcomes.

### Teacher and Student Mobility

*The ASD and iZones both recruit quality teachers, but the ASD struggles to keep them.*

Quantitative analyses of inputs in Priority Schools illuminate factors that may contribute to the outcomes observed to date. A report on Teacher and Student Migration In and Out of Tennessee’s Achievement School District, published in January 2014 by a team of researchers at Vanderbilt, found that the ASD’s emphasis on personnel overhaul led its first cohort of schools to retain just 14% of their teachers, down from a 70% retention rate prior to takeover (Henry, Zimmer, Attridge, Kho, & Viano, 2014). The outflow of teachers

### Net Teacher Mobility Within and Across School Years by Priority Strategy



Source: Henry, Zimmer, Attridge, Kho, & Viano (2014). Teacher and Student Migration In and Out of Tennessee’s Achievement School District. Policy Brief: Tennessee Consortium on Research, Evaluation, & Development.

slowed after the first year of implementation but remained several times greater than state average, speaking to the challenge of developing and sustaining capacity in high-churn environments.

Encouragingly, and also true to the ASD’s design, the researchers found that incoming teachers recruited from other schools were higher-performing than the departing

Average Teacher TVAAS Scores for Stayers, Movers & Leavers, and Incoming Teachers in ASD, iZone, and Other Priority Schools in Tennessee, 2012-13 to 2014-15

	Average TVAAS Scores			Ratio of Teachers with High Growth Scores (5+4) to Low Growth Scores (1+2)		
	Stayers	Movers & Leavers	Incoming	Stayers	Movers & Leavers	Incoming
ASD	2.81 (36)	2.97 (125)	3.35 (78)	0.59 (27)	0.96 (94)	1.54 (61)
iZone	3.44 (403)	2.79 (280)	3.38 (213)	1.90 (302)	0.75 (212)	1.52 (169)
Other Priority	2.97 (968)	2.73 (373)	2.84 (172)	0.97 (759)	0.68 (283)	0.81 (132)
Other TN Schools	3.43 (67,673)	3.18 (9,075)	3.18 (6,158)	1.88 (50,999)	1.29 (6,777)	1.29 (4,632)

Note: Numbers in parentheses indicate the total number of TVAAS scores

Henry, G. T., Zimmer, R., Kho, A., & Pham, L. (2017). Recruitment and retention of teachers in Tennessee's Achievement School District and iZone Schools: Policy Brief. Tennessee Education Research Alliance.

teachers, such that the ratio of high-performing teachers to low-performing teachers in the first cohort of staff hired by the ASD was greater than 4-to-1 (Henry et al., 2015). However, a subsequent analysis (Henry, Zimmer, Kho, & Pham, 2017) found that the ASD struggled to sustain the quality of its workforce over its first three years of operation, with an average of over sixty-percent of ASD teachers departing each year, potentially offsetting any performance gains from selective recruitment or human capital investments. Further, the analysis showed that the ASD lost more effective teachers than it retained (Henry, Zimmer, Kho, & Pham, 2017). Conversely, in that same analysis, researchers found that Memphis iZone schools underwent a far less drastic initial staff overhaul, showing lower teacher turnover rates and greater retention of their high-quality teachers over time.

Henry, Zimmer, Kho, Viano, and Pham (2016) conducted a survey of current ASD teachers and teachers exiting ASD schools both prior to and after takeover to identify preferences of school attributes that may influence teachers' retention decisions. Among the attributes highest-rated by those surveyed were factors related to (#1) the consistent enforcement of student discipline, (#2) administrative support, and (#3) school safety. Notably, these three factors can be influenced by

within-school efforts, while most factors that would require changes in state or district policy ranked lower, indicating that increasing the retention of high-performing teachers may not require major policy changes at the state or district level.

Future analyses may help determine the extent to which the iZone's apparent improvements are sustainable and scalable. To the extent they owe to intra-district recruitment, further improvements may prove difficult. Further, updated analysis of data through the 2016-17 school year will test whether initial results have scaled to a larger number of schools served and across a change in state assessments.

### Organizational Learning

*ASD operators have faced new and unexpected challenges and tend to work to solve them as individual operators. Collective learning and sharing processes have not yet emerged.*

In addition to staffing challenges noted in "Teacher and Student Migration," qualitative research led by George Washington University professor Joshua Glazer (2015) describes the struggles of the ASD and its school operators to build capacity through either the incorporation of feedback from state assessment results or conversations



with each other focused on continuous improvement of the technical core of education—curriculum and instruction. This lack of cross-organizational coordination may owe in part to how central autonomy and competition are to the school choice environments in which the charter operators typically developed their organizational capacity and culture before taking on schools within the ASD (Massell, Glazer, & Malone, 2016). Reports from the ASD study also emphasize that the sheer number and varied backgrounds of CMOs within the ASD make inter-operator coordination difficult (Massell, Glazer, & Malone, 2016; Groth, Malone, & Glazer, 2017).

In addition to cross-organizational challenges, the unfamiliar context of the ASD also created within-organization learning curves for CMOs. Although the ASD made considerable effort to create an environment similar to what charters typically enjoy, these circumstances nevertheless posed unique and distinctive challenges. For example, most ASD schools operate as zoned neighborhood schools rather than open choice charters. Zoned enrollment has repercussions for the stability of the treatment population, norms of engagement with students and parents, and culture-setting—all in ways that undercut aspects of schooling that charters see as key to their success (Massell, Glazer, & Malone, 2016). CMOs in the ASD had to design and mobilize a new array of strategies to accommodate these new conditions.

Groth, Malone, and Glazer (2017) also discuss the structural challenges for the ASD of acting as both LEA

and authorizer for the CMOs operating within the ASD. While these researchers acknowledged the significant work of ASD operators to expand their vision and practice to meet the demands of the challenges they face, they suggest that developing and demonstrating efficacy in these efforts remains an elusive goal.

### **Community Engagement**

*The ASD faces a crisis of legitimacy amid historically rooted community tensions.*

Glazer and colleagues note throughout their work that the historical and racial contexts surrounding the state taking over schools contribute to the difficulty of building public support and are exacerbated by the ASD's struggle to achieve their original goals of quickly moving schools out of the bottom five percent (Glazer & Egan, 2016).

The contentious environment surrounding the ASD had practical implications for providers who realized that they would have to prove the legitimacy of their presence to the local community (Glazer & Egan, 2016). They invested substantial time, effort, and money in building relationships with local leaders, knocking on thousands of doors, organizing community events, and establishing ties with neighborhood organizations (Glazer & Egan, 2016). Most ASD operators seemed to do this willingly, but at the same time these activities diverted resources from what was already a daunting educational challenge.

Already the most controversial of the state's initiatives, the ASD's lack of demonstrated success has further intensified resistance to its work. Glazer and Egan (2016) document both the initial contention around ASD takeovers in Memphis and how continued, divided views on the ASD are inextricably tied to the city's contemporary and historical racial dynamics. With much of the ASD's legitimacy grounded in a promise to deliver drastic improvements in academic outcomes, the district's underwhelming track record leaves it without much rebuttal to local criticism until demonstrating greater performance. Glazer and Egan (2017) posit that the feelings of some in Memphis about the state's increased role in its local schools indicate a possible third way in which the state partners with local leaders rather than supplanting them, appreciating the local context and history while also challenging a school district's status quo.

## Looking Toward the Future

As RTTT grant funding has come to an end and Tennessee schools and districts implement a new suite of policies under the Every Student Succeeds Act (ESSA), the state is examining the years of experience, feedback, and research it has gathered from its efforts to turn around the performance of its lowest-performing schools and is using this information to consider its path forward.

First, the state has proposed a set of guiding principles for school improvement that fundamentally redefines the problem by establishing a broader set of criteria for defining Priority Schools. In addition to student proficiency, the priority list will consider schools' recent history of performance, measures of student growth, graduation rate, and the performance of other schools within the same feeder pattern. Beyond these Priority Schools, the state will also designate a list of roughly 200 "Focus Schools" based on aggregate and subgroup performance, with an emphasis on closing achievement gaps in schools where student outcomes seem the most inequitable. Both Priority and Focus schools will be monitored and supervised by a newly-established Office of School Improvement within the TDOE (Aldrich, 2017).

In the summer of 2017, the ASD announced a restructure that involved staff cuts and changes to the organization of the leadership team intended to bring long term stability to the district in two ways. First, by reducing the overall budget, the ASD can be less dependent on external funding going forward. Second, the restructuring shifts resources from directly running schools to the district's oversight and management roles, which can be more adaptive to the dynamic nature of the ASD in which schools come in and out of the district over time as their priority status changes. This clarification of the ASD's role may also avoid making difficult decisions even harder as ASD operators' performance contracts come up for review beginning after the 2018-19 school year and operators may be either renewed, replaced, or transferred back to local district governance. With its direct school management role minimized, the ASD may be better positioned to participate in these decisions.

In what may become the intervention model for state involvement and support in Priority Schools going forward, TDOE wrote a shared-governance model into the state's ESSA plan. The state spent the late spring and

summer of 2017 working with a local district on a new shared-governance opportunity for its Priority Schools referred to as the "Partnership Zone." Under the Partnership Zone, a board comprised of local representatives appointed by the commissioner and the local school board would oversee the operations in clusters of low-performing schools within the district. This partnership model has been informed by lessons from the state's direct experiences as well as the research summarized above and seeks to maintain local governance while supplying access to the state's financial and human resources to build capacity for more effective instruction.

Forthcoming evaluation of the iZones' impacts on student learning will inform the state's continued support for those interventions and the extent to which they serve as a model going forward. In particular, analyses of data through 2016-17 may reveal whether the iZones in Nashville and Chattanooga can match the early successes in Shelby County, and whether those results in Shelby have scaled to a larger number of schools and translated across a change in state assessments.

Even as school turnaround in Tennessee transitions to a post-RTTT landscape, research on the impacts of the past five years of policy continues. In addition to Zimmer and Henry continuing their estimation of ASD and iZone impacts on student outcomes and teacher mobility using data through the 2019-20 school year, TERA is researching how state reforms have shifted the landscape of school-level performance across the state and will further analyze differences in school-level growth across the 2012 priority list to identify factors that may help explain why reform efforts are more successful in some locations than others.

Additionally, TERA will continue to seek and support researchers to conduct further analyses using its rich administrative database. Lastly, TERA hopes to learn from the team of qualitative researchers led by Glazer and Massell, which has begun working with Shelby County Schools to study the Memphis iZone in the same level of depth that has yielded important insights into the successes and challenges of the ASD. As the state adapts its approaches to supporting the students, educators, parents, and communities of its lowest-performing schools, TERA will continue its mission to conduct rigorous research and provide timely feedback in a cycle of continuous improvement.



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