Center for Practice Engaged Education Research (C-PEER)

SCHOOL OF EDUCATION & HUMAN DEVELOPMENT

UNIVERSITY OF COLORADO **DENVER**

TLCC User Guide: Student Academic Performance

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TLCC User Guide: Student Academic Performance

How can leaders use TLCC survey evidence to identify, understand, and address factors that impact student academic performance in their school/district?

Introduction

The **Teaching and Learning Conditions Colorado (TLCC) Survey** is a statewide survey, required by Colorado statute and administered by the Colorado Department of Education (CDE) every two years. The survey gathers feedback from educators and school leaders about the conditions that shape teaching and learning in Colorado schools. Because results are reported at the school level, TLCC data provides valuable insights into how educators experience their work environment and how those experiences relate to student outcomes.

The TLCC survey measures several key aspects of the teaching and learning conditions experienced by school staff, referred to as "constructs." Because concepts such as *professional climate, staff leadership*, or *student behavior support* cannot be measured directly; each construct is measured through a group of related survey questions. The TLCC constructs have been evaluated using established statistical methods and have consistently demonstrated that they measure meaningful aspects of school conditions that are associated with important outcomes, including student academic performance and educator retention. **Appendix A** lists the TLCC constructs and survey items included in the 2026 administration.

Research Base

The Center for Practice Engaged Education Research (C-PEER) at CU Denver partners with CDE to study how TLCC results relate to important school outcomes, including student academic performance. The goal of this work is to translate research into practical guidance that school and district leaders can use to strengthen their schools. C-PEER's approach is grounded in three key ideas:

- Student academic outcomes, educator retention, and student behavior are interconnected and influence one another.
- Teaching and learning conditions at the school level matter for both educators and students.
- Schools operate within broader district and community contexts that shape outcomes and the effectiveness of improvement efforts.

Together, these ideas highlight the importance of understanding both the conditions within a school and the context in which the school operates when planning for improvement.

The research upon which this guide was based used student academic performance data collected by the Colorado Department of Education (CDE) annually through testing in English language arts (ELA) and mathematics. The Colorado Measures of Academic Success (CMAS) is administered in grades 3-8 and the PSAT9, PSAT and SAT are administered in grades 9-11.

Using TLCC Results for Improvement

The TLCC User Guides are designed to help leaders use TLCC survey results as part of their continuous improvement efforts. This guide is focused on using TLCC results to inform efforts aimed at i**mproving student academic outcomes**. It supports school leaders and staff in taking the following steps:

1. Focus on the TLCC constructs most strongly connected to student academic performance.
2. Use your school's TLCC results to investigate potential areas for improvement.
    a. Identify constructs that may contribute to current academic challenges.
    b. Examine question-level results to better understand the specific conditions driving construct-level findings.
    c. Validate findings with additional school data as part of root-cause analysis.
3. Select improvement strategies:
    a. Identify related quick wins, moderate changes, and long-term strategies.
    b. Prioritize actions supported by research and aligned to identified needs.
    c. Plan to monitor progress over time using TLCC and other relevant data sources.

What Predicts Student Academic Performance?

Schools and, to a lesser extent districts, have a real effect on student learning even after accounting for individual student characteristics. C-PEER's analysis shows that ***school-level conditions that educators and leaders can influence are consistently associated with stronger student academic performance;*** other aspects of the school context also shape how and which of those conditions matter most.

Key Teaching and Learning Conditions

Three TLCC constructs that describe different aspects of instructional practice within the school explain close to 1/3rd of the variation in student academic performance across schools[1]. This includes:

- **Meeting Diverse Student Needs --** Educators describe instructional supports as inclusive and responsive to students' academic needs, languages, social emotional wellbeing, and cultural backgrounds.
- **Supportive Conditions (for instruction) --** Educators report having the practical conditions necessary to teach effectively including professional autonomy, access to resources, manageable class sizes, sufficient space and time to adjust instruction day-to-day.
- **Shared Responsibility for Learning** -- The school community collectively owns student learning through staff collaboration, clear learning expectations, active student participation in their learning, and two-way partnerships with families to support learning beyond the classroom.

Together, these TLCC constructs describe related drivers of student academic performance (1) ensuring learning *works for <u>all</u> students*, (2) having the *conditions* to teach well, and (3) sharing *ownership and accountability* for learning. Importantly, these reflect aspects of the school's teaching and learning conditions that school leaders and other stakeholders can influence. See Appendix A for a complete list of survey items included in each construct.

[1] See Research Brief:

Additional School Factors

Instructional conditions, staffing patterns, organizational supports, student demographics, and community contexts occur together and interact in ways that create unique school environments. To address this complexity, we applied an analytical approach that made it possible to examine how different aspects of schools combine to create organizational capacity. In addition to the teaching and learning conditions identified above, C-PEER identified two other aspects of schools that are significant predictors of student academic performance, their capacity to support academic success (***Academic Capacity***) and to support wellbeing (***Wellbeing Capacity***).

Academic Capacity includes the following:

- Average teachers' years of experience
- Student-to-teacher ratio
- Schoolwide average teacher evaluation ratings for Teacher Quality Standard 1: Pedagogical content knowledge
- Schoolwide average teacher evaluation ratings for Teacher Quality Standard 3: Teachers plan and deliver effective instruction and create an environment that facilitates learning for their students
- Frequency of student behavior disruptions
- Overall perspective (school mean scale score) of **Instructional Practice: Supportive Conditions** (*TLCC Construct*)

Wellbeing Capacity includes the following:

- Student access to school counselors
- Student access to school psychologists
- Schoolwide average teacher evaluation ratings for Teacher Quality Standard 2: Establishing a safe, inclusive and respectful learning environment for a diverse population of students.
- Overall perspective (school mean scale score) of **Instructional Practice: Meeting Diverse Student Needs** (*TLCC Construct*)
- Overall perspective (school mean scale score) of **Instructional Practice: Shared Responsibility for Learning** (TLCC Construct)

See Appendix B for how each of the metrics included in these factors were measured. Access additional information about the Teacher Quality Standards here: https://ed.cde.state.co.us/educatoreffectiveness/teacher-rubrics.

Community Context

C-PEER research identified two aspects of the schools' community context that are also strong predictors of student academic outcomes:

- School neighborhood socioeconomic status (measured by the income-to-poverty ratio), and
- The percentage of homes in the county where English is not the primary language.

These contextual factors interact with school level conditions and must be explicitly considered when interpreting survey results and planning school improvement efforts. Appendix B includes information about where to find data about these aspects of the school community context.

Related Research

These findings are consistent with recent research on the drivers of academic performance. Several substantial research reviews established that K–12 student academic performance is shaped by multiple, interacting factors at the school, classroom, family, and student levels, with school-based conditions representing a meaningful and actionable area for improvement (Berkowitz et al., 2017; Roorda et al., 2017; Tan, Gao, & Shi, 2020, Tan, Dimmock, & Walker, 2024).

Family and student-level factors — including socioeconomic context, parental involvement, student motivation, and peer relationships — remain critical determinants of academic outcomes across schools and communities (Li, 2023; Black et al., 2025). However, it is important to note that these factors interact with school conditions. Schools with strong learning climates, supportive relationships, and coherent instructional systems are better positioned to promote more equitable academic outcomes and mitigate effects of disadvantage (Berkowitz et al., 2017; Tan, Dimmock, & Walker, 2024). Schools do this not uniformly or through single interventions, but through how they organize teaching, learning, and support for students (Berkowitz et al., 2017; Roorda et al., 2017; Tan, Gao, & Shi, 2020, Tan, Dimmock, & Walker, 2024).

School conditions matter most when they support effective instruction, enable inclusive responses to diverse student needs, and foster collective responsibility for learning (Berkowitz et al., 2017; Roorda et al., 2017; Tan et al., 2024). These findings provide a strong empirical foundation for examining how specific school conditions, particularly those closest to daily teaching and learning, relate to student academic performance.

Making Meaning of Your TLCC Results

TLCC results provide data that describes the teaching and learning conditions within schools as staff members see them. C-PEER research establishes a starting point for interpreting the r**esults related to student academic performance**. This includes the three TLCC constructs related to instructional practices at the school: ***meeting diverse student needs, supportive conditions (for instruction),*** and ***shared responsibility for learning*****.**

We recommend using a collaborative process that engages teachers within the school to make meaning of TLCC results and identify improvement strategies that relate to student academic outcomes. This includes the steps described below.

1. **Numbers of Respondents**. Describe how many and which types of school staff members responded to the TLCC survey at your school.

2. **Construct Level TLCC Results**. Review TLCC Instructional Practice Construct descriptions and associated items related to student academic performance including ***Meeting Diverse Student Needs, Supportive Conditions***, and ***Shared Responsibility for Learning*** (See Appendix A). Predict school-level results (Percent Favorable) for each construct.

3. Use the TLCC ***School Summary*** dashboard to identify strengths and growth opportunities for each of these constructs, consider the following:
    - What percent of instructional staff members responded favorably?
    - Have the percent favorable responses increased or decreased since the 2024 TLCC administration? By how much?
    - Select at least one external comparison point to benchmark school results against (i.e., state, district, region, district setting, school level). How do responses for your school compare to other schools?
    - What teaching and learning conditions did instructional staff respond to the least favorably?
    - With regards to conditions related to student academic performance, what are potential school strengths? What are the potential school growth areas?
    - Identify priorities for further analysis.

4. ***Question-Level Details***. Results for individual survey questions help explain the construct-level results. They may point out aspects of the school to prioritize for improvement. Investigate instructional staff responses to the ***items*** associated with each of the three instructional constructs. Prioritize reviewing item-level results when construct results are surprising, indicate an opportunity for growth, or for which teacher responses vary significantly from other respondent groups. See Appendix A for specific items to prioritize by construct. Consider the following:
    - Which item(s) did instructional staff respond to most favorably?
    - Which did they rate least favorably?
    - Do item-level results point to strengths?
    - Do they suggest conditions that could be improved at the school?
    - Identify conditions that could be improved to investigate further.

5. **Verify with Additional Evidence**.
    The additional evidence that will be relevant depends on the school-level TLCC results and what is available locally. In general, the following are likely sources of additional evidence: documentation of school/district instructional processes and resources; observations of classrooms; and additional student, family or staff perception data. It may also be helpful to engage directly with educators in the school (through informal discussions, focus groups, or interviews) to determine the degree to which the TLCC results reflect their current experiences at the school.

Describing School Context and other School Factors

TLCC results provide important insights into potential root causes of student academic performance challenges and the improvement strategies most likely to address them. Before identifying action steps, school teams should also:

1. Review additional data related to the school's well-being and academic capacities.
2. Describe the school's community context.
3. Describe how school staffing aligns with the needs and characteristics of the students served.

Together, these factors provide important context for both root cause analysis and the selection of improvement strategies.

Additional data related to a school's *well-being* and *academic capacities* can be accessed using the resources described in Appendix B. Many of these data sources include state averages or other comparison points that can help school teams determine whether results indicate areas of strength or opportunities for growth. Examining related measures across multiple data sources can strengthen conclusions about root causes that need to be addressed. For example, Teacher Quality Standards (TQS) 2 ratings, which focus on establishing safe and inclusive learning environments, and the TLCC instructional construct, **Meeting Diverse Student Needs,** provide different but complementary sources of evidence about a school's ability to support all learners.

Appendix B also provides guidance for accessing data that describe important aspects of the school's community context, including neighborhood socioeconomic status (measured through the income-to-poverty ratio) and the percentage of households in the county where English is not the primary language spoken. These community factors can influence how instructional challenges are experienced and how effective various improvement strategies may be. As a result, school teams should use community context as an important lens when selecting and adapting action steps to meet local needs.

Students do not experience school in a single demographic category. Rather, their experiences are shaped by multiple identities that interact by influence, expectations, access to rigorous learning opportunities, expectations, and available supports (Zhang & Gao, 2024). When considering student needs and available school supports, teams should examine the overlap among key student characteristics, including economic disadvantage (FRL eligibility), multilingual learner status, and special education identification.

School teams should also consider whether staffing patterns align with the needs of students represented within these overlapping groups. For example, teams may examine the availability of special educators, multilingual learner specialists, interventionists, counselors, and other staff whose expertise supports students with specific learning and well-being needs. Understanding the relationship between student characteristics and available staffing can help teams identify capacity gaps and prioritize improvement strategies that are both responsive and feasible.

Research-Based Improvement Strategies Associated with TLCC Constructs

Below we identify recommended action steps and improvement strategies to improve student academic outcomes organized by TLCC Instructional constructs: **Meeting Diverse Student Needs, Supportive Contexts** (for instruction), and **Shared Responsibility for Learning**. These recommendations are intended to be used as a starting point, not a checklist, and must be adapted to fit the school's context. They are most relevant if you have identified one or more of the TLCC Instructional Constructs as school conditions that could be improved and may be root causes of student academic performance challenges.

For each TLCC construct, the strategies and action steps are grouped by a timeframe to support realistic planning and implementation. This draws on the Concerns-Based Adoption Model (CBAM), which recognizes that change in schools develops over time as educators build understanding, confidence, and new practices. Even when action steps can be taken quickly, meaningful improvement depends on sustained shifts in practice, relationships, and systems. The timeframes include the following:

- **Quick Wins** are action steps that can be implemented immediately using existing structures, authority, and resources. They improve day-to-day conditions but may not be sustained without follow-up.
- **Moderate Changes** can begin within the current school year but require consistency over time to be effective.
- **Long-Term Strategies** require planning, structural redesign, or sustained resources.

Instructional Practice: Meeting Diverse Student Needs

Consider the actions and improvement strategies described in this section if your school's TLCC results indicate that *Meeting Diverse Student Needs* is a growth area for your school. For example, if the % positive instructional staff responses to the construct are lower than your external comparison point, or than your own target, or declined from prior results.

This table includes recommended actions and improvement strategies to ensure instructional support within the school is inclusive and responsive to students' academic needs, languages, social emotional wellbeing, and cultural backgrounds.

Quick Wins		
Immediate action steps to ensure instruction responds to student's needs.		
Focus	Strategy	Why it Helps
Meeting Diverse Academic Needs	Use formative checks on student learning to identify student readiness and adjust instruction, supports, or extensions.	Frequent instructional adjustments help ensure students receive the appropriate level of support or challenge. Continuous assessment helps educators provide timely scaffolds, extensions, and instructional supports. (Bondie et al., 2019; Ernest et al., 2011)
Diverse Cultural Viewpoints	Integrate students' cultural backgrounds, experiences, and perspectives into daily instruction and classroom learning activities.	Students are more engaged when instruction reflects their identities, experiences, and strengths (Gay, 2000; Ladson-Billings, 2009; Santamaría, 2009)
Supporting Multilingual Learners	Incorporate language objectives, visual supports, and structured opportunities for discussion into daily instruction.	This supports multilingual learners accessing grade-level content while developing academic language (Echevarría, Short, & Vogt, 2017; Gibbons, 2015; Ghimire & Nutta, 2026).
Supporting Students with Disabilities	Use formative checks on student learning to adjust instruction, scaffolds, and supports based on students' individual learning needs.	Frequent instructional adjustments help students with disabilities access grade-level learning while receiving appropriate supports. Ongoing assessment allows teachers to respond to individual learning needs rather than relying on one instructional approach (Ernest et al., 2011; Tomlinson, 2000).
Supporting Gifted Students	Use pre-assessment to identify students who have already mastered grade-level content and provide enrichment or extension activities.	Prevents advanced learners from spending instructional time on content they have already mastered while increasing engagement and challenge. Providing appropriately challenging learning experiences increases engagement while allowing students to continue progressing academically (Reis et al., 2011; Tomlinson, 2014).
Social-Emotional Learning	Incorporate brief daily routines that help students identify emotions, practice self-regulation, and reflect on their learning through activities such as mindfulness, emotional check-ins, goal setting, or reflection journals.	Short, consistent routines help students build self-awareness and self-management while creating a classroom environment that supports learning and well-being (CASEL, 2020 Durlak et al., 2022; Llorent et al., 2024).

Moderate Changes		
Strategies. . .		
Focus	**Strategy**	**Why it Helps**
Meeting Diverse Academic Needs	Design lessons with multiple ways for students to access content, engage in learning, and demonstrate understanding.	Flexible lesson design provides equitable access and increases meaningful participation while maintaining high expectations for all learners (Bondie et al., 2019; Ernest et al., 2011; Santamaría, 2009).
Diverse Cultural Viewpoints	Establish classroom routines that regularly invite students to share their perspectives through activities such as think-pair-share, reflective journaling, discussion protocols, and culturally relevant discussion prompts.	Students learn more deeply when they have regular opportunities to contribute their perspectives, connect learning to their lived experiences, and engage in meaningful dialogue with others. Classroom routines that intentionally elevate student voice strengthen engagement, relationships, and culturally responsive learning environments (Bondie et al., 2019; Martínez et al., 2023; Santamaría, 2009).
Supporting Multilingual Learners	Establish collaborative planning between classroom teachers and multilingual learner specialists to embed language supports into instruction.	Cross-disciplinary collaboration helps educators adapt instructional practices, build shared expertise, and provide more coordinated support for multilingual learners (Echevarría, Short, & Vogt, 2017; Gibbons, 2015; Lucas & Villegas, 2013; Adams & Hord, 2023).
Supporting Students with Disabilities	Design lessons using multiple ways for students to access content, participate in learning, and demonstrate understanding through flexible instructional strategies and supports.	Flexible instructional approaches allow students with disabilities to meaningfully participate alongside their peers while working toward rigorous learning goals (Love & Horn, 2021; McKenna et al., 2021; Ernest et al., 2011).
Supporting Gifted Students	Establish schoolwide expectations for differentiated instructional practices, including flexible grouping, curriculum compacting, and higher-order learning opportunities.	This creates more consistent instructional experiences for advanced learners across classrooms and provides opportunities for flexible grouping, advanced learning experiences, and ongoing adjustments based on student readiness (VanTassel-Baska et al., 2020; Tomlinson, 2014).
Social-Emotional Learning	Design classroom learning experiences that require students to practice collaboration, communication, and problem-solving through structured group tasks and academic discussions.	Students strengthen social-emotional skills by applying them during authentic learning experiences rather than practicing them in isolation. Integrating these experiences into instruction strengthens both student learning and well-being (Durlak et al., 2022); CASEL, 2020; Llorent et al., 2024).

Long-Term Strategies		
Cross-year		
Focus	**Strategy**	**Why it Helps**
Meeting Diverse Academic Needs	Develop a schoolwide approach to responsive instruction through collaborative planning, ongoing professional learning, and shared instructional expectations.	Shared instructional practices create greater consistency in meeting diverse learning needs across classrooms (Latz et al., 2009; Ghimire & Nutta, 2026; Love & Horn, 2021).
Diverse Cultural Viewpoints	Develop schoolwide instructional practices that promote student voice, agency, and create learning environments where students' identities and perspectives shape classroom learning.	Creates consistent learning environments where students experience belonging, high expectations, and meaningful participation. Shared expectations and ongoing professional learning help embed these practices across classrooms (Ladson-Billings, 2009; Santamaría, 2009; D'Andrea Martínez et al.,2023).
Multilingual Learner Instruction	Develop ongoing professional learning focused on multilingual learner instruction, culturally responsive teaching, and language acquisition.	Builds educator capacity to consistently meet the instructional needs of multilingual learners across the school. Ongoing professional learning helps embed effective instructional practices across classrooms (Lucas & Villega, 2013; Echevarría, Short, & Vogt, 2017; Ghimire & Nutta, 2026).
Supporting Students with Disabilities	Develop a schoolwide approach to inclusive instruction that builds educator capacity through collaborative planning, professional learning, and shared responsibility for supporting students with disabilities.	Consistent instructional practices improve access to learning while creating inclusive environments where students experience both academic and social belonging. Inclusive education is strengthened when schools focus on instructional quality, collaborative supports, and meaningful participation rather than placement alone (Love & Horn, 2021; DeVries et al., 2018); McKenna et al., 2021).
Supporting Gifted Students	Build ongoing instructional coaching and professional learning focused on differentiating instruction for gifted and advanced learners.	Sustains teacher growth and supports consistent implementation of effective instructional practices over time (Latz et al., 2009; VanTassel-Baska et al., 2020).
Social-Emotional Learning	Develop a schoolwide approach that integrates social-emotional learning into instruction, professional learning, and continuous school improvement efforts.	Embedding SEL into school systems creates sustainable practices that support both student learning and well-being. This strengthens student outcomes and creates supportive learning environments across classrooms (Durlak et al., 2022; Mahoney et al., 2021; CASEL, 2020).

Supportive Conditions (for Instruction)

Consider the actions and improvement strategies described in this section if your school's TLCC results indicate that *Supportive Conditions (for instruction)* is a growth area related to the teaching and learning conditions in your school. This may be the case if, for example, the % positive instructional staff responses to the construct were lower than your external comparison point, or than your own target, or declined from prior results. This may be particularly important if the school has novice teachers.

The following table includes recommended actions, and improvement strategies intended to help school and district leaders ensure school conditions are supportive of instruction. The strategies address factors within the school environment that influence educators' ability to implement effective instructional practices, including the following: professional autonomy, support for innovation, effective use of formative assessment, access to resources and adequate learning spaces, manageable workloads, and operational supports that contribute to instructional continuity. By addressing these conditions through a combination of short-term and long-term actions, leaders can strengthen the organizational capacity needed to support continuous instructional improvement.

Quick Wins		
Immediate action steps that improve support for instruction within the school.		
Focus	**Strategy**	**Why it Helps**
Professional Autonomy	Clarify non-negotiables vs flexible instructional decisions (e.g., pacing adjustments, instructional strategies that are within standards)	This clarify immediately increases perceived trust and allows teachers to adapt instruction to student needs. Autonomy improves motivation, engagement, and effectiveness (Patzak & Zhang, 2025; Yang et al., 2022)
Innovation	Support educators in pilot testing instructional changes using a short-cycle approach -- plan, do, study, adjust.	Reduces risk and encourages experimentation in instruction. Improvement science supports PDSA cycles (City et al., 2009; Bryk et al., 2010)
Formative Assessment	Provide educators with a small set of high-impact formative assessment techniques (e.g., exit tickets, checks for understanding, hinge questions) and establish an expectation that teachers adjust instruction in the moment based on information gathered.	This gives teachers immediately usable, instruction-embedded techniques to elicit evidence of learning, and ensures formative assessment goes beyond information gathering to impact learning. Formative assessment improves learning when embedded in daily instruction (Black & Wiliam, 2009; Leahy et al., 2005; Wiliam, 2017)
Class Size & Workload	Reduce non-instructional duties (e.g., streamline duties, paperwork, meetings) to the degree feasible.	Reducing other duties can improve workload manageability without changing class size. Workload impacts retention and effectiveness (Laitsch et al., 2021)

Resources	Conduct a rapid resource audit and redistribute existing materials.	Ensures immediate access to needed materials. Access to materials improves instruction (Doan et al., 2022)
Physical Space	Reconfigure existing classroom layouts or shared spaces for better usability	Improves usability of existing space. Learning environments influence outcomes (OECD, 2013; Barrett et al., 2015)
Substitute Access	Establish and share preferred substitute pools and coverage. protocols.	Improves reliability of substitute coverage immediately. Shortages disrupt learning (BLS, 2023)

Moderate Changes		
Strategies to create conditions that support instruction during the current school year.		
Focus	**Strategy**	**Why it Helps**
Professional Autonomy	Train school leaders in autonomy-supportive leadership practices (e.g., reducing micromanagement, increasing instructional trust).	Leadership behavior shapes school-wide norms and teacher perception of autonomy. Autonomy support improves motivation and engagement (Patzak & Zhang, 2025; Yang et al., 2022)
Innovation Support	Provide job-embedded coaching.	Coaching ensures new strategies are implemented effectively in classrooms and leads to real-time instructional changes. It improves transfer to practice (Joyce & Showers, 2002; Aust et al., 2025)
Formative Assessment	Build teacher capacity to use effective questioning and feedback (e.g., timely, specific, actionable) techniques. Then support educators in shifting grading and feedback practices to emphasize actionable feedback over scores/grades during learning.	Feedback links formative assessment to student learning gains. Effective questioning Improves educator's ability to elicit and interpret student thinking during instruction (Black & Wiliam, 2009; Leahy et al., 2005; Wiliam, 2017).
Class Size & Workload	Implement flexible grouping and/or co-teaching if feasible.	Using co-teacher and flexible grouping can improves effective student-teacher ratios using existing staff. Instructional organization mediates class size effects (Blatchford et al.).
Resources	Develop centralized resource systems (e.g., shared curriculum banks, digital tools).	Centralizing and consistent use of resources provides sustained, system-wide improvement in curriculum quality (Doan et al., 2022).
Physical Space	Adjust building level allocation to create space for collaboration (e.g., flexible layouts, shared planning areas).	Collaborative space supports professional learning and instructional coordination (OECD, 2013).

Moderate Changes		
Strategies to create conditions that support instruction during the current school year.		
Focus	**Strategy**	**Why it Helps**
Substitute Access	Provide incentives for substitute teachers.	Improves fill rates over time. Incentives affect labor supply (Kraft et al., 2022; BLS, 2023).

Long-Term Strategies		
Significant, cross-year efforts that sustain a supportive context for instruction.		
Focus	**Strategy**	**Why it Helps**
Professional Autonomy	Adjust evaluation systems (e.g., leader observation of instruction) to prioritize professional judgment and instructional decision-making	Aligning accountability with professional judgment sustains autonomy. Combining autonomy and structure leads to stronger student and teacher outcomes (Patzak & Zhang, 2025; Yang et al., 2022).
Innovation Support	Fully establish formal continuous improvement systems (e.g., instructional rounds, PDSA cycles).	Creating a sustained infrastructure for continuous improvement sustains instructional innovation (City, et al., 2009; Bryk et al., 2010; Lin, 2022)
Formative Assessment	Develop shared instructional vision of formative assessment, embedding formative assessment into curriculum and lesson design.	This aligns educator understanding of what formative assessment looks like in practice. It provides consistency and reduces complexity of implementation, ensuring formative assessment is planned and sustained (Heritage, 2010; Aust et al., 2025).
Class Size & Workload	Reallocate staffing to reduce class sizes in high-need contexts.	Smaller classes support individualized instruction and improve outcomes; this directly addresses structural workload constraints (Laitsch et al., 2021).
Resources	Invest in high-quality instructional materials, including adoption and training.	Consistent access and use of instructional materials provides sustained improvements in instructional quality. When paired with PD high quality materials improve teaching effectiveness (Doan et al., 2022).
Physical Space	Prioritize capital improvements or redesign for instructional spaces.	Addresses structural barriers to effective teaching. Physical design impacts learning (Barrett et al., 2015)
Substitute Access	Develop a pipeline for substitutes.	It ensures sustainable staffing solutions. Substitute supply is shaped by labor markets (Liu et al., 2022)

Shared Responsibility for Learning

Consider the actions and improvement strategies described in this section if your school's TLCC results indicate that Shared Responsibility for Learning is a growth area related to the teaching and learning conditions in your school. This may be the case if, for example, the % positive instructional staff responses to the construct were lower than your external comparison point, or than your own target, or declined from prior results.

The following table includes recommended actions, and improvement strategies intended to help school and district leaders ensure students, families and all staff share responsibility for student learning. The strategies address factors that relate to educators perceiving the school community as collectively owning student learning through staff collaboration, clear learning expectations, active student participation in their learning, and two-way partnerships with families to support learning beyond the classroom.

Quick Wins		
Immediate action steps to engage students, families and educators in sharing responsibility for learning.		
Focus	**Strategy**	**Why it Helps**
Students see class activity as relevant	Ask students to identify why a learning goal matters and how it connects to their experiences or future aspirations.	Agency develops when learners perceive learning as personally relevant and connected to meaningful goals. Purpose and relevance are foundational conditions for student engagement (Brandt, 2024; Deci & Ryan, 2000).).
Individualized family engagement	Conduct beginning-of-year family asset and learning conversations focused on strengths, goals, and support needs.	Asset-based family engagement strengthens relationships and helps schools tailor supports to student and family needs. Understanding family strengths before designing engagement activities is key (Mapp & Bergman, 2021).
At home strategies for families	Include specific learning goals and home support suggestions in weekly family communications.	Family engagement is most influential when it focuses on student learning rather than school events or logistics (Henderson & Mapp, 2002).
Family Communication	Identify family language and communication preferences at the beginning of the school year.	Reducing communication barriers supports reciprocal partnerships between families and their children's schools (Mapp & Bergman, 2021).
Educator learning from colleagues	Add a standing "instructional sharing" agenda item to faculty or team meetings where teachers briefly share successful practices.	Collaborative professional learning increases teachers' access to instructional expertise and promotes reflective dialogue about practice. (Wilson, 2023; Voelkel & Chrispeels, 2017).

Quick Wins		
Collective responsibility for learning	Include schoolwide growth and achievement updates as a standing agenda item during staff meetings, emphasizing trends across student groups rather than individual classrooms.	Collective responsibility develops when educators view student outcomes as a shared organizational concern. Collaborative examination of student learning evidence is a key contributor (Anderson & Olivier, 2022; Eells, 2011)
Seeking new/improved instructional strategies	Create a monthly "problem of practice" protocol and time for staff to collaboratively identify a common instructional challenge and discuss potential solutions.	Collaborative inquiry helps shift improvement from individual classrooms to collective learning. (Liu et al., 2025; Salas-Rodríguez & Lara, 2022).

Moderate Changes		
Strategies to build collective ownership of learning during the current school year.		
Focus	Strategy	Why it Helps
Students see class activity as relevant	Create opportunities for students to co-design projects, tasks, inquiry questions, or product options within units of study.	Student agency is strengthened when learners have meaningful opportunities to exercise voice, choice, and influence in their learning. This increases student engagement and motivation (Brandt, 2024; Deci & Ryan, 2000; Reeve, 2006).
Individualized family engagement	Partner with families to establish individualized academic goals and support plans for students needing intervention or enrichment.	Family-school partnerships are most effective when connected directly to student learning goals and shared responsibility for success (Henderson & Mapp, 2002; Mapp & Bergman, 2021).
At home strategies for families **Family Communication**	Develop workshops, videos, and/or coaching supports that help families facilitate learning at home.	Research consistently finds stronger outcomes when schools help families support learning rather than simply encouraging participation in school activities (Henderson & Mapp, 2002).
Educator learning from colleagues	Develop peer observation and instructional learning walk routines focused on common school improvement priorities.	Educators learn most effectively through job-embedded opportunities that include observation, feedback, modeling, and reflection. Collaborative learning structures help spread effective teaching practices across classrooms (Darling-Hammond et al., 2017; Wilson, 2023).

Moderate Changes		
Strategies to build collective ownership of learning during the current school year.		
Focus	Strategy	Why it Helps
Collective responsibility for learning **Seeking new/improved instructional strategies**	Establish structured cycles in which educator teams analyze student work, review common assessment data, identify instructional challenges, and develop coordinated responses.	When educators engage in structured collaboration around student learning, they are more likely to develop collective efficacy, improve instructional practice, and share responsibility for student success (Liu et al., 2025; Wilson, 2023; Voelkel & Chrispeels, 2017).

Long-Term Strategies		
Cross-year		
Focus	**Strategy**	**Why it Helps**
Students see class activity as relevant	Involve students as partners in school improvement planning, instructional reviews, and decision-making processes. This includes adding them to relevant teams or committees.	Positioning students as improvement partners whose perspectives contribute to stronger engagement and organizational learning changes how they participate in school (Cook-Sather, 2020; Mitra, 2008).
Individualized family engagement **At home strategies for families**	Implement a comprehensive family partnership framework that emphasizes relational trust, capacity building, shared ownership, and reciprocal communication.	For example, the Dual Capacity-Building Framework emphasizes family-school partnerships built on trust, collaboration, and shared responsibility for learning. These approaches move beyond family participation in activity toward authentic partnership in support of student success (Mapp & Bergman, 2021).
Family Communication	Build systems that ensure communication, leadership opportunities, learning supports, and engagement structures are accessible across linguistic and cultural groups.	Equity-centered engagement reduces barriers to participation and strengthens partnerships with historically marginalized families through culturally responsive and linguistically accessible practices (Mapp & Bergman, 2021).
Educator learning from colleagues **Seeking new/improved instructional strategies**	Implement an instructional coaching model that includes classroom modeling, co-planning, observation, feedback cycles, and implementation support.	Effective professional learning is sustained, job-embedded, collaborative, and connected to classroom practice. Coaching provides ongoing support that helps teachers transfer learning into practice and refine instructional approaches over time (Darling-Hammond et al., 2017).

Long-Term Strategies		
Cross-year		
Focus	**Strategy**	**Why it Helps**
Collective responsibility for learning	Redesign schedules to provide protected collaborative planning, teacher team time, and opportunities for cross-grade or cross-department collaboration.	Supportive conditions such as protected collaboration time are important predictors of collective efficacy and sustained professional learning. Collaboration is difficult to sustain when teachers lack time and organizational support (Gaham, 2021; Salas-Rodríguez & Lara, 2022).

Using TLCC Findings for Improvement Planning

TLCC survey results can serve as an important source of evidence during annual or multi-year school and district improvement planning. The survey provides insight into the teaching and learning conditions that impact student academic outcomes. Improvement teams should use TLCC results to support two key planning activities:

- Conducting Root Cause Analysis
- Selecting Research-Based Improvement Strategies and Action Steps

Conducting Root Cause Analysis

TLCC survey results provide valuable information about potential underlying causes of student academic performance challenges. C-PEER research found that three TLCC instructional practice constructs are consistently associated with stronger student academic outcomes:

- Meeting Diverse Student Needs
- Supportive Conditions (for instruction)
- Shared Responsibility for Learning

Together these constructs represent three key drivers of student academic success: 1) Ensuring instruction meets the needs of all students; 2) Providing educators with the conditions necessary to teach effectively; and 3) Fostering shared ownership and accountability for student learning.

Educator retention is also closely related to student academic outcomes. If a school has experienced significant staff turnover, staffing shortages, or survey results suggest educators are unlikely to remain at the school, improvement teams should also examine the TLCC constructs most strongly related to retention:

- Support for Educator Wellbeing
- Professional Climate
- Staff Leadership
- Student Behavior (supports).

As part of the root cause analysis process, school and district improvement teams should review their most recent TLCC survey results with particular attention to these constructs. Begin by identifying areas of strength and areas for growth at the construct level. Then examine item-level results to better understand the specific experiences contributing to those broader patterns.

For example, a low percent positive rating on **Supportive Conditions for Instruction** may reflect concerns about planning time, access to instructional resources, competing responsibilities, or communication processes. Item-level data can help identify the specific conditions contributing to the overall result. This two-step process—examining both construct-level and item-level results—can help improvement teams identify root causes that may be contributing to their student performance challenges.

Resources: See *Making Meaning of Your TLCC Results (above)* for guidance on interpreting survey results and *Investigating 2026 TLCC Survey Results* (separate tool) for support on using the state-provided TLCC dashboards.

Additional C-PEER research identified other school and district factors associated with differences in student outcomes. These factors generally fall into two categories:

- Support for Student Wellbeing
- Academic Capacity

Reviewing data related to these areas provides additional insight into potential root causes and may help teams prioritize improvement strategies and action steps. See Appendix B for recommended data sources.

Selecting Research-Based Improvement Strategies and Action Steps

Once improvement teams have identified likely root causes, they can use those findings to select improvement strategies and action steps that directly address the conditions identified through the TLCC survey. This guide includes research-based recommendations aligned to the TLCC constructs that have been shown to predict student academic performance. Recommendations are organized into:

- Quick Wins (actions that can often be implemented immediately)
- Moderate Changes (strategies requiring additional planning or coordination)
- Longer-Term Strategies (system-level changes that typically require sustained implementation efforts)

For each strategy, the guide provides:

- The relevant TLCC construct and focus area
- A description of the strategy
- Information about why the strategy may be effective
- Connections to supporting research
- Key references for further learning

Improvement teams should prioritize strategies that address the specific root causes identified through their review of TLCC data rather than selecting strategies based solely on areas of low performance. Focusing on the underlying conditions driving survey results increase the likelihood that improvement

efforts will produce meaningful and sustainable changes for both students and educators. Note, research-based recommendations shown to predict educator retention are provided in the *TLCC User Guide: Educator Retention*.

Appendix A: Key TLCC Constructs and Items

Instructional Practice - Meeting Diverse Student Needs

This construct captures the degree to which instructional staff describe instructional supports within the school as inclusive and responsive to students' academic needs, languages, social emotional wellbeing, and cultural backgrounds. The following items are used to measure this construct:

- Academic programming in this school encourages different cultural viewpoints.
- The diverse academic needs of our students are met by this school.
- Multilingual Learners are adequately supported in this school.
- Students with disabilities are adequately supported in this school.
- Gifted students are adequately supported in this school.
- Students' social emotional learning is adequately supported in this school.

Instructional Practice - Supportive Conditions

This construct captures the degree to which educators report having the practical conditions necessary to teach effectively including professional autonomy, access to resources, manageable class sizes, sufficient space and time to adjust instruction day-to-day. The following items are used to measure this construct:

- I have the autonomy to make important decisions in the classroom (e.g., pacing, materials, and/or pedagogy).
- I feel supported in trying new instructional strategies.
- I use formative assessment data to improve my students' learning.
- My class size(s) is reasonable.
- Instructional resources are adequate to support student learning.
- I have adequate physical space to work productively.
- It is easy for me to secure a substitute for personal leave.

Instructional Practice - Shared Responsibility for Learning

This construct captures the degree to which educators see the school community as collectively owning student learning through staff collaboration, clear learning expectations, active student participation in their learning, and two-way partnerships with families to support learning beyond the classroom. The following items are used to measure this construct:

- Staff in this school consistently seek new and improved ways of providing instruction.
- Staff in this school hold themselves accountable for the academic growth of every child.
- The school provides opportunities for me to learn from other staff members.
- Students understand how class activities relate to learning objectives.
- The school's efforts to engage families are individualized based on student needs.
- The school provides interactive strategies that families can use at home to support their children's learning.
- The school utilizes two-way communication methods (e.g., text app, email, call) in families' home language to share what is happening in the school.

Appendix B: School Context and Factor Measures

Support for Student Wellbeing

Factor	Measure	Access
Student access to school counselors	Number of students per counselor in district	https://ed.cde.state.co.us/cdereval/staffstatistics Staff to Pupil Ratio (click on)
Student access to school psychologists	Number of students per school psychologist in district	https://ed.cde.state.co.us/cdereval/staffstatistics Staff to Pupil Ratio (click on)
Teacher Effectiveness Ratings for TQS 2: Establishing a safe, inclusive and respectful learning environment for a diverse population of students.	Percent of teachers within the school rated Proficient, Accomplished, or Exemplary for TQS 2	https://ed.cde.state.co.us/educatortalent/researchandimpact/educator-effectiveness-metrics "Quality Standards" Dashboard Select: Academic Year, Quality Standard 2, District, School Add: Proficient, Accomplished, and Exemplary (percentages)

Academic Support Capacity

Factor	Measure	Access
Teacher Experience	Average teachers' years of experience	
Student-to-teacher ratio	Pupil/ Teacher ratio	https://ed.cde.state.co.us/cdereval/staffstatistics Staff to Pupil Ratio (click on) Teacher by School tab (in excel worksheet)
Schoolwide teacher evaluation ratings for TQS 1: Content knowledge and pedagogical expertise	Percent of teachers within the school rated Proficient, Accomplished, or Exemplary for TQS1.	https://ed.cde.state.co.us/educatortalent/researchandimpact/educator-effectiveness-metrics "Quality Standards" dashboard Select: Academic Year, Quality Standard 1, District, School Add: Proficient, Accomplished, and Exemplary (percentages)
Schoolwide teacher evaluation ratings for TQS 3: Instructional practice grounded in student development, informed by assessment, and designed to foster critical thinking,	Percent of teachers within the school rated Proficient, Accomplished, or Exemplary for TQS 3.	https://ed.cde.state.co.us/educatortalent/researchandimpact/educator-effectiveness-metrics "Quality Standards" dashboard Select: Academic Year, Quality Standard 3, District, School Add: Proficient, Accomplished, and Exemplary (percentages)

Factor	Measure	Access
collaboration, and communication		
Frequency of student behavior disruptions	Average number behavior incidents (reported to the state) / number of classrooms.	Schools provide this data to the district and the state, but it is not currently available publicly. For a list of the types of behavior incidents reported to the state: https://ed.cde.state.co.us/cdereval/disciplinestatistics.

Community Context

Factor	Measure	Access
School neighborhood socioeconomic status	Income-to-poverty ratio (IPR), percentage of family income that is above or below the federal poverty threshold.	https://data.census.gov/table?q=C17002 Filter by state, county, and the next layer down that captures the school neighborhood (e.g., county subdivision or census track(s))
The percentage of homes in the county where English is not the primary language	U.S. Census data, counties in Colorado. File set S1602, Limited English-Speaking Households.	https://data.census.gov/table?q=C17002 Filter by state, county, and the next layer down that captures the school neighborhood (e.g., county subdivision or census track(s)). "Topics" = Populations and People -> Language Spoken at Home

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