Continuous Improvement in Schools in the COVID-19 Context: A Summary Brief

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This brief summarizes key points from the report Enabling Conditions and Capacities for Continuous Improvement: A Framework for Measuring and Supporting Progress Towards the Goals of the Statewide System of Support and contextualizes the findings within the current challenge of supporting teaching and learning during a pandemic. The concept of VUCA (volatility, uncertainty, complexity, ambiguity) provides a framework for the ways in which schools are operating amid the COVID-19 crisis. In an unprecedented VUCA context, rapid cycles of improvement are essential for identifying approaches to address student needs. Even in such conditions, the enabling organizational conditions for continuous improvement—shared purpose, mutual trust, structures and resources that foster collaborative work, and the preparation and mobilization of improvement capacities—are needed to facilitate improvement and organizational learning.

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Introduction

Managing a school system in a typical year—especially coordinating and aligning multiple programs, personnel, resources, and structures to support the best interests of students—is always challenging. Nevertheless, there is a predictability and regularity to a standard school year. COVID-19 has introduced a degree of tumult and complication that will put enormous strain on school system capacity in California. Adding to the tumult are destructive wildfires across the state as well as heightened consciousness of systematic racism nationwide. Clearly, much is still unknown about how the 2020–21 year will look for California schools; however, we do know that schools will need the capacity to be responsive to shifting demands and new information, and to be resilient to challenges and additional shocks to the system.

This brief summarizes key points from the report Enabling Conditions and Capacities for Continuous Improvement: A Framework for Measuring and Supporting Progress Towards the Goals of the Statewide System of Support\(^1\) and—based on prior research in disaster recovery and instructional best practice—contextualizes the report’s findings within the current challenge of supporting teaching and learning during a pandemic. Amid all the uncertainty of the current context, schools will need to be responsive and resilient in the face of heightened safety risks for staff and students, increased student and family needs, and evolving public health guidelines. \textbf{When implemented thoughtfully, continuous improvement strategies can equip school leaders with the tools they need to be responsive in these uncertain times.}

Enabling Conditions of Continuous Improvement

Continuous improvement is a disciplined and ongoing approach to improving processes and systems that produce positive outcomes for students. It provides a structure for educators to identify problems; design interventions specific to those problems; test interventions in context; and evaluate effectiveness before scaling up the intervention. Continuous improvement engages the knowledge and know-how of multiple stakeholders to discover, implement, and spread evidence-based changes that work locally to improve outcomes for students. Data on changes are regularly collected and reviewed to ensure that changes are indeed improvements and, if not, to make adjustments to practice.\(^2\)

In recent years, continuous improvement has made headway in schools and districts across California. The state has broken from the prior compliance and accountability-based approaches to education policy to a system focused on continuous improvement through data analysis and capacity building.\(^3\) Continuous improvement was documented as a priority in the state’s plan to implement the federal Every Student Succeeds Act (ESSA).\(^4\) At the local level, many teachers and principals have been engaging in collaborative, inquiry-based data review practices that are hallmarks of continuous improvement.\(^5\)
Volatility, Uncertainty, Complexity, Ambiguity

To better understand the nature of the tumultuous context of the 2020–21 school year and the leadership required to navigate it successfully, we turn to a concept originating in the U.S. military: VUCA, which captures the dimensions of an increasingly turbulent environment. As leaders respond to the compounding crises facing California school communities, they will confront VUCA:

- **Volatility** refers to the speed of change in conditions in the environment. Due to COVID-19 and the highly infectious nature of the disease, it is expected that schools will need to be immediately responsive to local patterns of virus spread and evolving public health guidance.

- **Uncertainty** captures the extent to which the environment is understood and the confidence with which the future can be predicted. While we know some facts about the transmission of the virus and guidelines for physical safety are beginning to emerge, little can be confidently predicted about how the school year will unfold or what the consequences of particular decisions will be.

- **Complexity** describes the number of factors that must be taken into account, their variety, and the relationships among them. The greater the number of factors, the more various they are; the more intricate their interconnections, the more complex the environment. Operating a school was already complex under typical circumstances, and now schools opening under pandemic conditions face a constellation of new factors related to prioritizing public health; meeting a variety of needs to protect student and staff safety; and balancing the demand for schools to function as childcare to allow parents to fully reenter the workforce.

- **Ambiguity** characterizes a situation lacking clarity, when information is incomplete or contradictory, or the accuracy of available information is questionable. Scientists are publishing research on COVID-19 and policymakers are issuing guidance based on their most current understanding of the disease, however this rapidly expanding knowledge base is difficult to validate and even more difficult to interpret and apply to the school context.\(^6\)

In response to the COVID-19 pandemic, on March 19, 2020, Governor Newsom issued a shelter-in-place order that effectively shut down schools across the state. With abrupt school closures and the continuing uncertain nature of the disease, there is a risk that schools will abandon their continuous improvement commitments and advancements. **Research has shown that in times of crisis, organizational patterns are challenged and decision-making has the tendency to centralize, even when centralization impedes possible solutions, perspectives, and expertise.**\(^7\)
Across the state, educators and administrators will be developing new approaches to educating children under unfamiliar conditions. It is now more important than ever that all levels of the system engage in rapid cycles of improvement as they respond to the VUCA that will characterize schooling in the context of COVID-19. Educators can no longer rely on past experiences in similar situations or look to established best practices to meet current demands. They must work collaboratively to understand problems, identify potential solutions, use data to quickly assess what does and does not work, and integrate successful solutions. District and school leaders must also put in place and strengthen the structures, practices, and cultures to support meaningful implementation of continuous improvement.

Research on the underlying organizational conditions that foster continuous improvement inform how schools can develop their capacity to adapt to the challenges they will face in the 2020–21 year. There are four organizational building blocks that can support school and district system capacity for continuous improvement, even amid the VUCA of crises such as COVID-19: (a) shared purpose, (b) culture of trust, (c) structures and resources that foster collaborative work, and (d) preparing and mobilizing improvement capacities.

**Shared Purpose**

In turbulent times, an organization needs a stable guiding “north star.” A common purpose is the organization’s fundamental reason for existence. Captured by the notion of “start with why,” shared purpose within an organization provides focus and direction for improvement efforts. W. Edwards Deming, considered a founding father of the field of continuous improvement, believed that developing and maintaining a constancy of purpose was the first step towards achieving quality and organizational improvement. Indeed, noteworthy scientific breakthroughs, sweeping social movements, and rapidly growing organizations are often the result of a clear, shared unifying purpose. Purpose that propels motivation and transformation does not describe what is possible today but rather depicts a different future towards which it is worth aspiring. Key questions to guide an organization’s development of a shared purpose include: (a) Why does our organization exist, (b) how will we be successful, and (c) how will we know that we have succeeded?

COVID-19 has introduced drastic changes and challenges to schools and districts. School leaders are rightly occupied with the operational details of supporting students and staff in the midst of this crisis. However, it is productive to step back and assess the unique purpose that guides the organization’s priorities and actions. A shared purpose among school staff should reflect the unique characteristics and circumstances of the school community. In addition, this purpose should:

- **Be student-centered and ambitious.** The shared purpose reflects a whole-child understanding of teaching and learning.
• **Prioritize equity.** Teachers, staff, and administrators must be committed to positively affecting all students’ outcomes—with explicit attention to historical opportunity gaps associated with race, ethnicity, socioeconomic status, and disability classification.

• **Be codeveloped with differentiated roles.** Individuals within the system should clearly understand their specific contribution to the purpose and goals of the organization as well as how its parts work together. Engaging school and community stakeholders in defining the organization’s purpose is foundational to maintaining their involvement as part of ongoing continuous improvement processes.

• **Reflect a sense of urgency.** Administrators and staff see the need for change and understand that the status quo is no longer acceptable. According to research on organizational change, over 50 percent of change efforts fail due to the lack of a sufficient sense of urgency for change.\(^\text{12}\)

• **Maintain constancy.** School administrators and leaders are focused on the organization’s shared purpose over an extended time period and strategically limit the number of initiatives undertaken. The prioritization and monitoring of no more than six initiatives in a school at a time is related to improvements in student learning.\(^\text{13}\)

In a VUCA environment, a clear, shared purpose is essential to maintain focus on what remains constant even in the midst of instability and uncertainty—that is, the well-being and success of all students and teachers.

**Culture of Trust**

Attempts at improvement usually disrupt routines, require vulnerability, and open one up to the risk of failure. In order for continuous improvement to take hold, in the words of a California district superintendent, “the system has to be created so that the organization feels safe enough to actually try something different.”\(^\text{14}\) In trying something different, individuals are accepting that what they were doing before was not getting the desired results.

A culture of trust, therefore, is foundational to continuous improvement; it is the connective tissue that binds individuals together in improving schools. Trust can foster “a set of organizational conditions, some structural and others social-psychological, that make it more conducive for individuals to initiate and sustain the kinds of activities necessary to affect productivity improvements.”\(^\text{15}\) Educators need to trust that their ideas, improvement efforts, and potential failures will not result in punishment or shame. Leaders need to extend the autonomy of staff, empowering them to draw on their expertise and apply disciplined inquiry to improving outcomes for students. Staff must trust one another enough to share their challenges and collaboratively review data that reveal individual problems of practice.
The COVID-19 pandemic has introduced an unparalleled degree of uncertainty and change to the structure, expectations, and risks of public schooling—every decision that schools and districts are making is an untested hypothesis. As such, trust is more important now than in prior years—the risks are greater and the stakes for ensuring educational equity are higher, with significant public health considerations and necessary safety accommodations now layered on top of the work of equity-centered teaching and learning. And in order to engage meaningfully in restorative conversations about racial injustice in schools and communities, leaders must explicitly confront the racist culture, practices, and histories that contribute to mistrust and division. Therefore, while districts are paying increased attention to measures that ensure physical safety for the school community, it is imperative to foster a culture of trust and psychological safety that is necessary for improvement and resilience.

Psychological safety describes the extent to which individuals trust their peers and believe that inquiry and vulnerable conversations are foundational to their professional environment. Organizations that prioritize and develop high psychological safety are able to support collaboration and “teaming,” where colleagues are able to work together without interpersonal anxiety or fear. Amy C. Edmondson writes that when colleagues feel psychologically safe, they feel willing and able to take inherent interpersonal risks of candor. They fear holding back their full participation more than they fear sharing a potentially sensitive, threatening, or wrong idea. The fearless organization is one in which interpersonal fear is minimized so that team and organizational performance can be maximized in a knowledge intensive world.16

In a school clouded by fear of negative consequences for trying something new or for failing, improvement will not happen. W. Edwards Deming posits that “driving out fear” is an imperative for continuous improvement, which is especially relevant in times of crisis.17 Whether trust increases or declines in times of crisis often depends on how individuals make sense of the situation. If members attribute the cause of the crisis to external factors, trust does not necessarily suffer, but if members attribute failure to internal reasons (e.g., lack of competence or concern), trust will erode.18

Organizational leaders are able to earn and maintain the trust of their colleagues by explicitly and consistently modeling learning and inquiry in their own work, in addition to concretely supporting the collaborative efforts of staff and partners. In a trusting, safe, and supportive school and district environment that engages in continuous improvement:

- **School staff, leaders, families, and students have relationships characterized by relational trust.** The interpersonal dynamics and exchanges among members of the community demonstrate relational trust. Critical attributes that foster relational trust include respect, personal regard for others, competence, and integrity.19
• **School staff, leaders, students, and families feel psychologically safe.** They are able to engage in learning behaviors—such as admitting lack of knowledge, making mistakes, expressing dissenting perspectives, asking for help, or taking risks—without fear of punishment or interpersonal or social threat.²⁰

• **School staff and leaders engage in continuous improvement in their own work.** They demonstrate vulnerability, seek feedback, and apply disciplined inquiry methods to engage in the testing of ideas and learning from failures. This is especially important for counties and state organizations that need to “walk the talk” of the approach they coach and expect from districts and schools.

• **School staff and leaders prioritize support.** Support—not mandates—for teachers, students, and the community are prioritized, and school staff and leaders are explicit about investing in the relationships and resources that are needed to succeed.

• **School staff and leaders believe in their collective ability to affect all students’ outcomes together.** This occurs regardless of student race, ethnicity, socioeconomic status, background, or disability classification.

Establishing a culture of trust in schools, like trust in any relationship, is a process that requires attention and time—and, in many cases, requires disconfirming assumptions of mistrust and cynicism. That is, leaders must actively challenge the negative underlying experiences and expectations of students, families, teachers, and staff by continuously demonstrating inclusive, transparent community building and leadership. This important investment in relationships can serve to strengthen the trust needed for collective, continuous improvement.²¹

**Structures and Resources That Foster Collaborative Work**

Historically, the work of teaching has been isolated work. Sociologist Dan Lortie described schools as organizational “egg crates” in which each teacher conducts their work alone within the confines of the classroom, focused on their own students and with limited interaction with colleagues.²² Indeed, teacher autonomy has traditionally rested on freedom from scrutiny and the largely unexamined right to exercise personal preference, with teachers acknowledging and tolerating the individual preferences or styles of others.²³ However, it is well established in research that teacher collaboration in joint work reaps benefits for student learning, teacher practice, and school improvement.²⁴ Structuring schools to foster collaboration accelerates the likelihood of finding and spreading solutions that work.

School reform is replete with strategies attempting to dismantle this traditional approach to isolated teaching, yet for many schools and districts, the change is easier said than done. Ideas of collaboration in joint work and teaming are often at odds with the dominant cultures of order and individuality. For some schools, these habits transferred into a COVID-19 context with each teacher and each school working separately, and without coordination or conversations.
about how best to serve students. For other schools, COVID-19 rendered an isolated approach to teaching useless, as basic assumptions and practices of in-person schooling disappeared with the literal closing of the classroom door. Teachers came together as school communities to understand and redefine a new “normal” set of expectations for teaching and learning. They shared their knowledge about individual students with other teachers and student support staff in order to respond to students facing housing and food insecurity, violence, grief, or inadequate at-home learning materials. In addition, many teachers and other school staff have had to reevaluate how they engage parents and families as in-person teacher proxies and learning supports, and how they determine whether or not teaching strategies are having positive outcomes.

Continuous improvement work is not an individual task but depends on the ability and agility of the school community to work together to identify challenges, try different solutions, rapidly assess implementation and results, and respond. However, traditional structures of schooling and improvement offer limited opportunities for teachers to partner substantively with others outside of their classrooms, and instead often rely on “one-shot” workshops. In the context of COVID-19, although leaders and staff are maintaining physical distance, teachers are, out of necessity, trying and testing out new ideas and approaches to instruction under current constraints—this is a time in which teachers need more opportunities for collaboration and support, not less.

Schools and districts that invest in continuous improvement methodologies are intentional about creating and maintaining integrated structures and resources that facilitate and encourage collaboration and joint learning. This includes:

- **Protected time and effective process.** There is protected time and space for teacher and staff collaboration built into the master schedule so that teachers are able to work together, assess progress, and make pivots as necessary. Similarly, there are clear and formal norms around how teachers and staff effectively use their collaboration times (e.g., grade-level teams, service teams, cycles of inquiry).

- **Sufficient and sustainable improvement resources.** This includes coaching and student support personnel (including substitutes), training, funding, and materials that guide improvement conversations and processes.

- **Breaking down silos.** This means having explicit rationale about who meets and what the focus is; following well-designed processes and protocols to facilitate important and productive interactions; and including those who are most often left out (e.g., students, families). Working deliberately across departments and disciplines is not the same as being together in the same meeting.

- **Data infrastructure.** This is invaluable to continuous improvement efforts but must be heavily supported, including staffing and resources to collect, manage, and facilitate the use of data and feedback as part of continuous improvement.
• **Engagement practices.** There is a demonstrated commitment to engage, meaningfully and regularly, a wide range of stakeholders in improvement work. Educators, students, families, and community members are recognized as being invaluable to learning and as having shared goals of improving student outcomes.

**Preparing and Mobilizing Improvement Capacities**

The rapid testing of ideas for organizational learning is essential to operating under conditions in which there is no clear path forward. No school or district can design and implement the perfect plan for schooling during a pandemic on the first attempt. However, organizations with a shared purpose, a culture of trust, and structures and resources to foster collaborative work have the foundation to initiate and sustain, successfully, the rapid cycles of prototyping and testing that undergird continuous improvement. In addition to establishing the enabling conditions for continuous improvement, schools and districts need to invest in building the specialized skills, knowledge, and abilities for continuous improvement in staff to be able to improve.

School and district leaders must consider—with specificity—a baseline set of improvement knowledge, skills, and resources, including data, process, and time for work. Primarily, they need to have identified:

- **The set of knowledge and skills for improvement.** This includes, for instance, having basic knowledge of an improvement methodology; having the ability to analyze data and identify areas for improvement; selecting the strategies to identify and address root causes; having content knowledge to support instruction; and having sufficient information about students and families to tailor instruction and support.

- **Which staff need which skills.** While there are some basics of improvement methodology around purposeful action, assessment, and adjustment—and a reliance on data—from which all staff can benefit, improvement work will not uniformly engage all stakeholders. Related to developing a culture of and structures to support collaborative learning, it is important to differentiate roles and skills and create the learning environments and supports for those particular staff. The Core Capacities for Continuous Improvement section in the full report identifies which capacities are needed at different levels of the Statewide System of Support; but these skills can be further differentiated by role at each level.

- **A consistent and intentional professional learning strategy.** Instead of relying on rote professional learning days or piecemeal presentations from “experts,” leaders need to have a thoughtful and sustainably resourced adult learning strategy that engages teachers and staff, prioritizes relationships, demonstrates and models evidence-based decision-making, and embeds learning within professional roles.
Conclusion

In the midst of the COVID-19 pandemic, schools and districts are struggling to know how best to respond. The myriad urgent choices and decision-points are overwhelming: How do we ensure learning? How should we reopen? How do we keep students and staff safe? What about our most vulnerable students? With little certainty about the duration and impact of the virus, school leaders and educators have had to improvise in response to unpredictable and rapidly changing directives. The principles and methods of continuous improvement—such as problem identification, idea generation, quick tests, and data collection and analysis—can reorient improvisation to result in learning and sustainable improvement. **Enabling conditions for continuous improvement will help schools and districts navigate their way through the evolving challenges of teaching and learning in a VUCA environment, and investments in these conditions will ensure that schools emerge from the crisis more resilient and with greater capacity to improve.**

Endnotes

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Derning, 2000.


Bryk & Schneider, 2002.

Edmondson, 2019.

For an example of how one school community leaned into its culture of trust to meet student needs, see: Kimner, H., Gopal, M., & Rocha-Salazar, L. (2020). *Ayer elementary school’s resilient conditions for improvement: Pivoting amid COVID-19* [Practice brief]. Policy Analysis for California Education. edpolicyinca.org/publications/enabling-conditions-and-capacities-continuous-improvement


Kimner et al. 2020.


Examples of improvement methodologies include Design-Based Implementation Research, Deliverology, Implementation Science, Improvement Science, Lean, Positive Deviance, and Six Sigma.

Myung et al. 2020.

**Author Biographies**

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