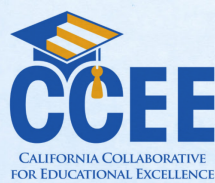


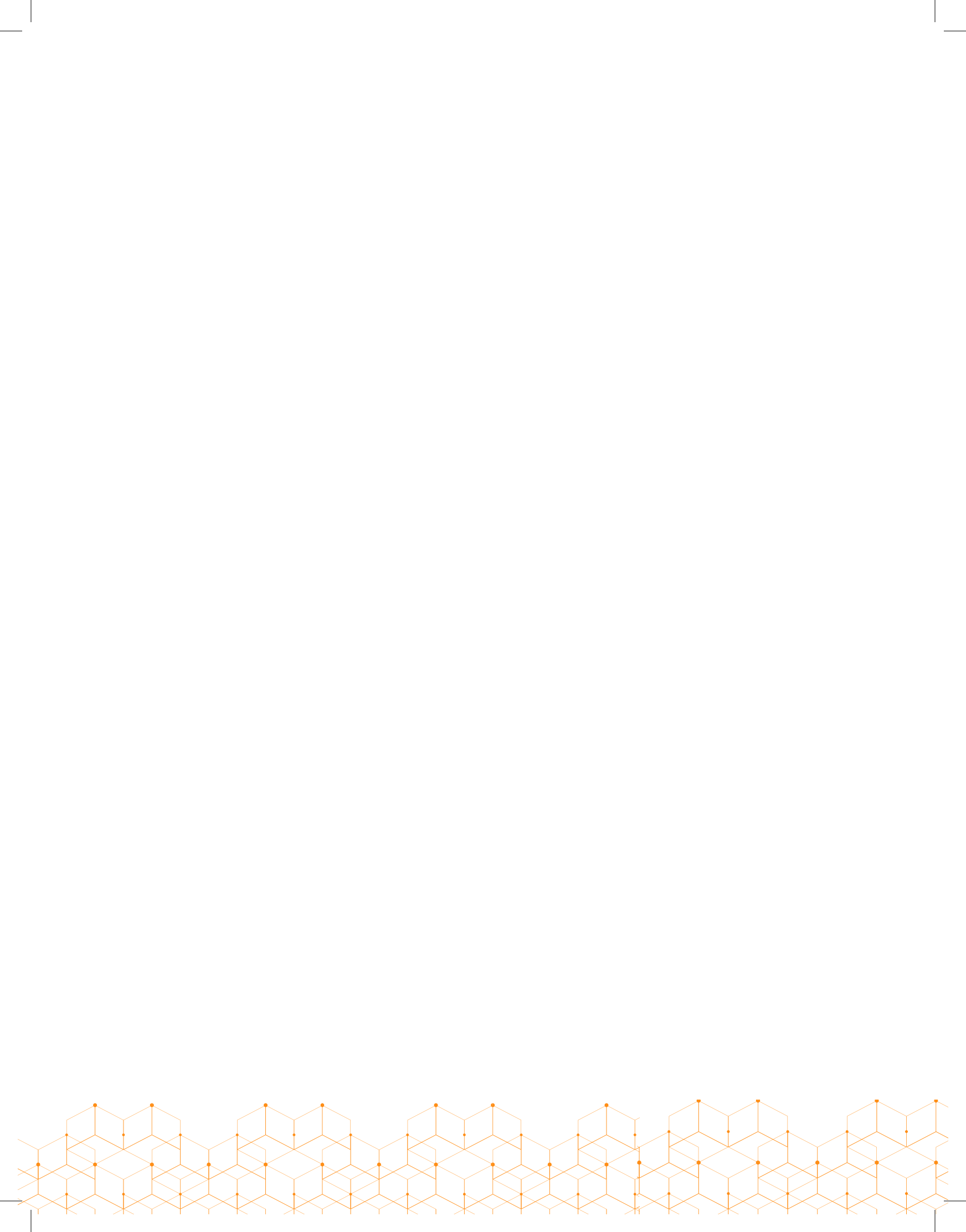


CCEE Pilot Partner Continuous Improvement

RESOURCES FOR LEA'S CONTINUOUS IMPROVEMENT EFFORT

SEPTEMBER 2017 - JUNE 2019





ACKNOWLEDGEMENTS

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Newark Unified School District
Palo Verde Unified School District
Pomona Unified School District
Sausalito Marin City School District
Victor Valley Union High School District
YouthBuild Charter School of CA

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FORWARD

TOM ARMELINO EXECUTIVE DIRECTOR

With a focus in improving quality within a data driven culture we began our journey with our “Pilot Partnership Districts” in 2017. Using a set of quality management tools, rooted in inquiry with clearly defined goals, measurable processes, and a commitment to continual improvement we completed our journey in May 2019. We are excited to share our resources and lessons learned working alongside as partners with the LEAs in our Pilot Partnership Program. The Continuous Improvement (CI) Toolkit includes research, activities, and protocols utilized in five Summits (two days in length) per year. These resources are intended to build capacity, shape a systems approach to CI, and inform collaborative efforts among state and local agencies. Based in a cycle of inquiry and using the Plan-Do-Study-Act (PDSA) model, the cycles introduce new results and challenges, that provide further opportunity for refinement. The knowledge gleaned from this process fosters a transparent and professional discourse infrastructure that includes observation from the work collectively of colleagues as well as independent work and promotes peer learning or what we call Pilot Network Partnerships. An important outcome of this work is the knowledge gained through professional dialogue, peer learning, and reflective self-practice that directly impacts the future orientation of one's work within the organization. We welcome the opportunity to share the Pilot Partner CI Toolkit documenting our CI journey and is ideal for schools, school districts and county offices already organized in structures rooted in analysis and improvement.



CCEE PILOT PARTNERSHIPS

The CCEE Pilot Partnership began with 13 LEAs in 2017 and ended with 12 LEAs in May 2019. To support the development of continuous improvement, CCEE worked with pilot partnership members which included county offices of education, school districts, and charter school leadership teams. The design of the technical assistance consisted of customized, research-driven, continuous improvement practices, and hands-on support through a multi-year pilot partnership that equipped local educators with the knowledge, skills and expertise to drive student learning.

- 1 Academy of Careers & Exploration (ACE)
- 2 Anaheim Union High School District
- 3 Borrego Springs
- 4 Dos Palos Unified School District
- 5 Kern County Office of Education
- 6 Los Angeles Unified (Local District Central)
- 7 Newark Unified School District
- 8 Palo Verde Unified School District
- 9 Pomona Unified School District
- 10 Sausalito Marin City School District
- 11 Victor Valley Union High School District
- 12 YouthBuild Charter School of CA

CCEE PILOT PARTNERSHIP INCEPTION

In order for LEAs to partner with the CCEE in the Pilot Partnership Summit a few steps occur to set the partnership up for success:

- LEA board approval to be part of the CCEE Pilot Partnership
- CCEE Listening and Learning through LEA's Stakeholder Meetings involving the pilot leads, CCEE Executive Director. CCEE members ask the LEA's the following questions:

- What are you proud of in the school and community?
- What one thing we would do next (challenges)?
- Assembling of the LEA Team: Superintendent, Assistant Superintendent / Director and / or Coordinator, Principal, and Teacher Leader
- Identification of CCEE Pilot Lead or Coach for each LEA

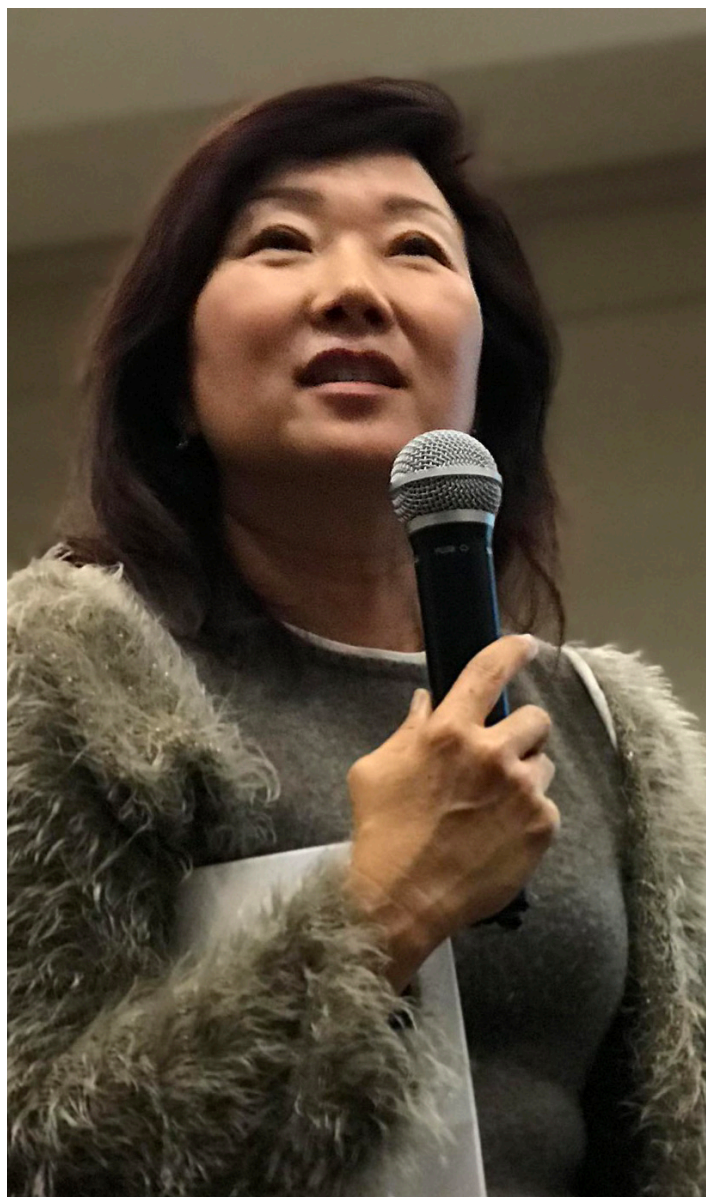
PILOT PARTNERSHIP LEARNING NETWORK SUMMITS AND BEYOND

The CCEE met with LEAs throughout the year to provide coaching (thought partner) support and continuous improvement team development but in order to drive the cultural shifts needed at the local level the support stretched beyond the Summit:

- 5 CCEE Partnership Learning Network (PLN) Summits (two days in length) per year were hosted that gave teams time to work deeply around their problem of practice and receive in-depth support from CCEE leads and Professional experts for capacity building and collaboration.
- LEAs with a common interest in continuous improvement were paired as Critical Friends as an opportunity to provide peer network opportunities.
- Zoom Conference Calls were pivotal in the ongoing support. Meetings varied from Superintendent & Lead; County Office and Leads; and all Leads.
- The CCEE Pilot Partner Leads (Pilot Leads).
- CCEE Staff of professional experts served as Pilot Leads and were paired with LEAs to help them during Summits; to follow up on CI work they started or continued in Summit; and to complete deliverables expected at the following Summit. Pilot Lead work involved monthly in person check-in(s) and monthly phone check-in(s) with LEAs to provide guidance, resources, and contacts to assist LEAs' CI work. Pilot Leads are a confidant, thought partner, guide, coach, and colleague to an LEA. The tables below include Pilot Leads' structured activities: monthly virtual Pilot Lead Team conference calls and monthly check-ins with LEAs' team and Superintendent.

THE CCEE PILOT PARTNER LEADS (PILOT LEADS)

CCEE staff of professional experts served as Pilot Leads and were paired with LEAs to help them during Summits; to follow up on CI work they started or continued in Summit; and to complete deliverables expected at the following Summit. Pilot Lead work involved monthly in person check-in(s) and monthly phone check-in(s) with LEAs to provide guidance, resources, and contacts to assist LEAs' CI work. Pilot Leads are a confidant, thought partner, guide, coach, and colleague to an LEA. The tables below include Pilot Leads' structured activities: monthly virtual Pilot Lead Team conference calls and monthly check-ins with LEAs' team and Superintendent.



PILOT PARTNER LEAD TEAM ACTIVITIES

- Meet monthly one-on-one (Zoom)
- Meet monthly as a team (Zoom)
- Keep records of visits
- Agreed upon next steps
- Progress
- Participate in data gathering for final evaluation

PILOT PARTNER LEAD & LEA COACHING

Frequent Check-Ins

- One face-to-face a month
- Meet with Superintendent
- Meet with team
- One phone check-in

Agenda (Superintendent Meeting)

- Check-In
- Review of last meeting and agreed upon next steps related to change implementation and monitoring
- Discuss next steps and support needed
- Team meeting

Agenda (Team)

- Check-in
- Review of last meeting and agreed upon next steps from that meeting
- Next steps and support needed
- Upcoming summit and necessary preparation

Agenda Phone Check-In

- Report to Superintendent any follow up on requested supports
- Check on agreed upon next steps needed

THE CCEE PILOT PARTNER STORY



HOW TO USE THE TOOLKIT

This graphic below taken from *The Improvement Guide* (Langley, et al., 2009) is a broad overview of CCEE CI Toolkit that the CCEE Pilot Partners experienced as they embarked upon their journey toward continuous improvement. This toolkit follows the circled sections on “What’s Next” in CI journey:

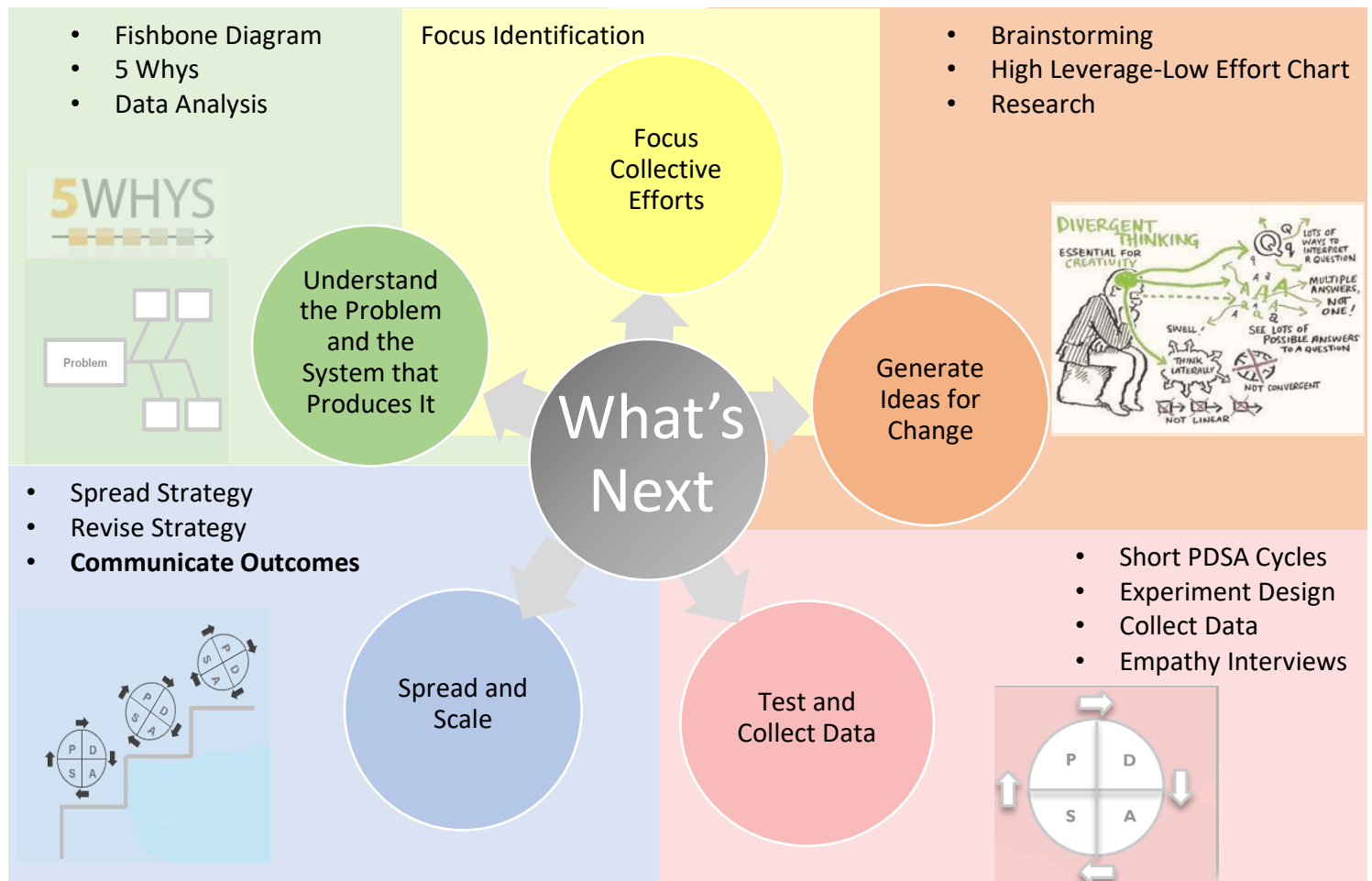
- **Understand the Problem and the System that Produces It**
- **Focus Collective Efforts**
- **Generate Ideas for Change**
- **Test and Collect Data**
- **Spread and Scale**
- **Communicate Outcomes**

Each section includes the pilot partner background story, the process, lessons learned and resources used with pilot partners in the summits.

The CI models and activities chosen are intended to immerse partner teams in the work and can be modified for use at the local level in a network like setting and will establish a moral purpose to the various articles around CI.



Resources used with the pilot partners are identified throughout with this symbol.



The Improvement Guide: A Practical Approach to Enhancing Organizational Performance (Langley, et al., 2009)



BACKGROUND

The CCEE Theory of Action is the foundation upon which all our work has been built. The Continuous Improvement (CI) work is no exception. The capacity building around continuous improvement was meant to impact the way decisions are made in local education agencies (LEA) who are seeking to increase outcomes for students.

So, the pilot partnership experience focused on the building capacity of the team (superintendent, cabinet member/district administrator, principal, and teacher leader) to implement continuous improvement while implementing a high leverage change action. We began with a profound respect for the LEA by not selecting just one continuous improvement model but providing the leaders with many different models to choose from with the understanding that not one model was perfect to meet the diverse needs of all LEAs. Ultimately the LEAs participating in the pilot partnership adopted the Model of Improvement-PDSA Cycle (Taylor, 2014) (p. 14) which has been use throughout the health care system.

The CCEE team sought to get teams more acclimated with CI through various actions, including reading articles like, *Getting Better Together* by Kristen MacConnell and Stacey Caillier (p. 21), and books like, *How to Succeed with Continuous Improvement* by Joakin Ahlstrom. The team felt providing more and more examples and information about CI would deepen the understanding of CI. So, the team used various discussion frames including the Three Levels of Text protocol (p. 28).

THE PROCESS

The teams were given a variety of continuous improvement models and organizational change frameworks to choose from. Models and frameworks were chosen by CCEE based on the current research and practice related to organizational improvement: The DMAIC Model (p. 12), ADDIE Model (p. 13), Model of Improvement-PDSA Cycle (p. 14), FADE Model (p. 15), and LEAN Transformation Framework (p. 16).

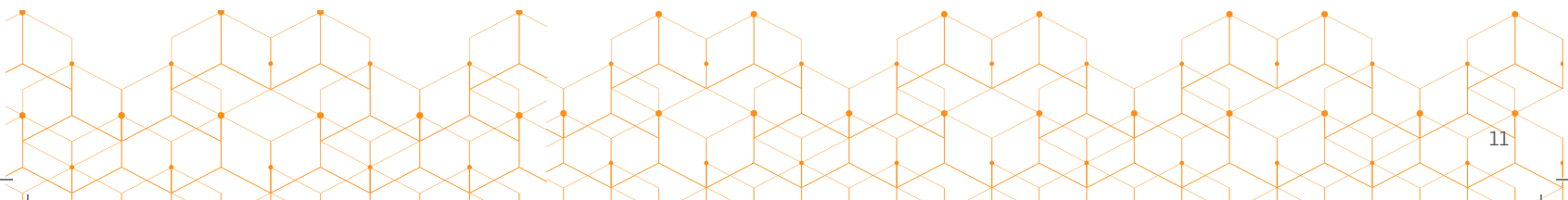
To assist the pilot partners in deciding on the improvement model for use for their journey, we conducted an activity about each model that included ample time for thought and reflection (p. 19). Teams were split into groups by CI model placed around the room. Each group had a poster upon which they were to reflect on the CI Model, noting what was missing based on the pilot partner needs, what was already perfect, and what they might change were they to use to improve.

With individuals on each team, now immersed in each model, teams were given the opportunity to choose the CI model that would work best for them and their LEA using the CI Model Analysis Template (p. 19). They were then asked to choose one of the models and independently reflect on the model and think about how it may be adjusted to better meet the needs of their LEA. It was clear that the pilot partners wanted to adjust the language in the cycle to connect with other professional learning experiences already occurring in the LEA.

LESSONS LEARNED

This activity was a broad introduction to CI and allowed pilot partners to engage in a deeper understanding of improvement process models. Individuals selected their CI model that resonated with them. Allowing choice for CI model assisted in ownership and provided a framework for CI work. Although individually we differed in our CI model selection, pilot partner teams came together to select the Plan-Do-Study-Act Cycle (p. 20) with their own variations.

CAPACITY BUILDING



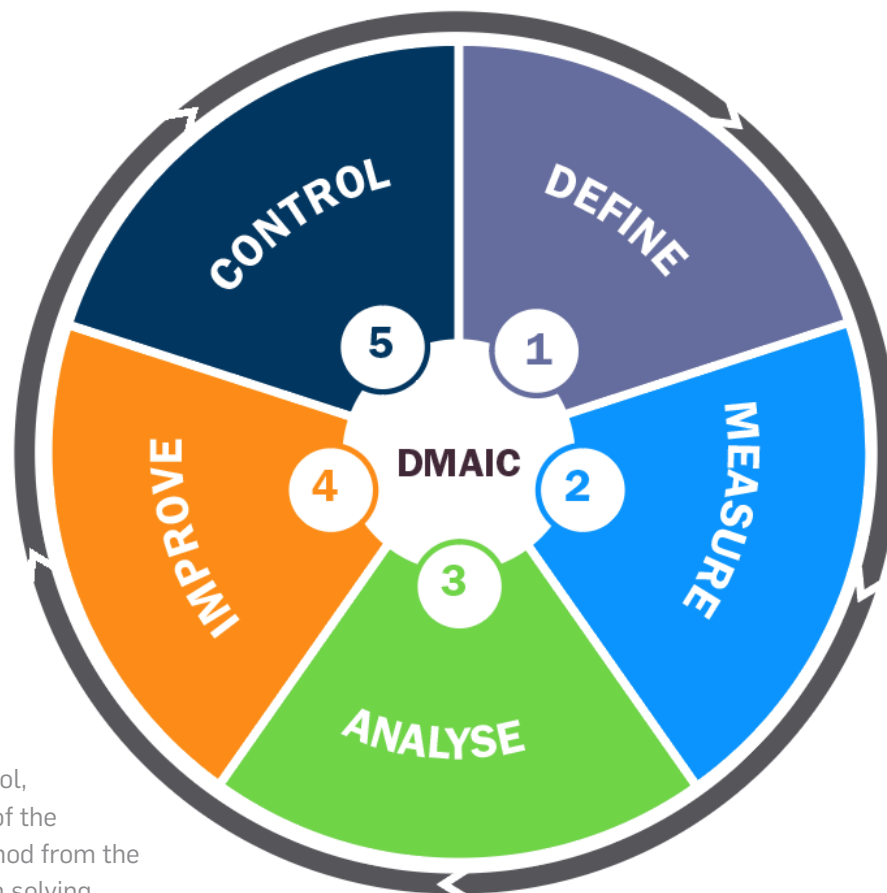


CONTINUOUS IMPROVEMENT MODELS CHOSEN FOR CI UNDERSTANDING

As noted, several models of CI were chosen to allow pilot partner teams to become familiar with the continuous improvement process and allow them to develop ownership by thinking of new ways to frame each model. Each of these models are used in different industry sectors to improve the work being done. The goal here is for pilot partners to realize- they own the improvement process; they must own the model for improvement. None of these models are perfect, none of them are complete for any given LEA. The following is a description of each model reviewed:

THE DMAIC MODEL (SIX SIGMA MODEL)

- Define the problem, improvement activity, opportunity for improvement, the project goals, and customer (internal and external) requirements.
- Measure process performance; the problem and the process where the problem was produced.
- Analyze the data and process to determine root causes of variation, poor performance (defects).
- Improve process performance by creating solution addressing and eliminating the root causes.
- Control to implement; sustain the improvements to keep the process going on the new course.

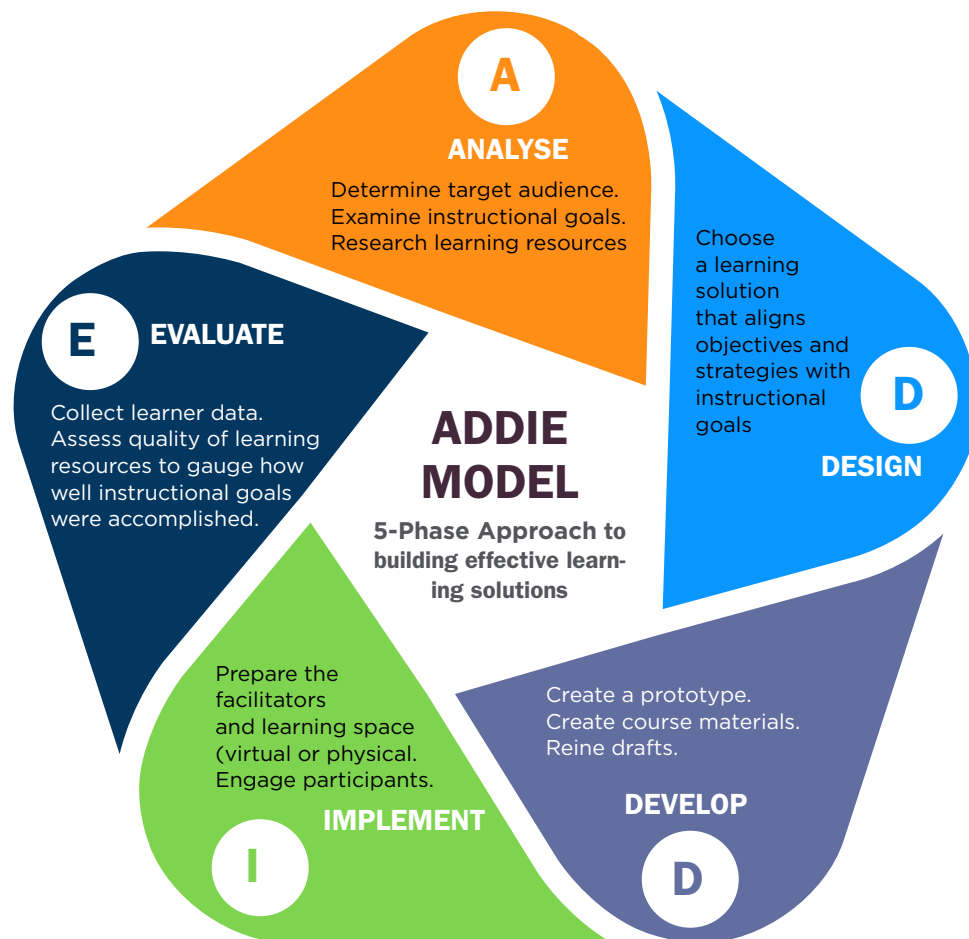


De Mast, J., & Lokkerbol, J. (2012). An analysis of the Six Sigma DMAIC method from the perspective of problem solving. *International Journal of Production Economics*, 139(2), 604-614.



ADDIE MODEL

- For many years now, educators and instructional designers alike have used the ADDIE Instructional Design (ID) method as a framework in designing and developing educational and training programs.
- “ADDIE” stands for Analyze, Design, Develop, Implement, and Evaluate.
- This sequence, however, does not impose a strict linear progression through the steps.
- Educators, instructional designers and training developers find this approach very useful because having stages clearly defined facilitates implementation of effective training tools.
- As an ID model, Addie Model has found wide acceptance and use.



Kruse, K. (2002). Introduction to instructional design and the ADDIE model. Retrieved January 26, 2005.



MODEL OF IMPROVEMENT – PDSA CYCLE

SETTING AIMS

The aim should be time-specific, measurable, and also defines what or whom will be affected.

ESTABLISHING MEASURES

To determine if a specific change actually leads to an improvement.

SELECTING CHANGES

Ideas come from internal and external.

TESTING CHANGES

The Plan-Do-Study-Act - planning it, trying it, observing the results, and acting on what is learned.

IMPLEMENTING CHANGES

After several PDSA cycles, the team may implement the change on a broader scale.

SPREADING CHANGES

After successful implementation of a change, the team can spread the changes to other parts of the organization.

Taylor, M. J., McNicholas, C., Nicolay, C., Darzi, A., Bell, D., & Reed, J. E. (2014). Systematic review of the application of the plan-do-study-act method to improve quality in healthcare. *BMJ Qual Saf*, 23(4), 290-298.

WHAT ARE WE TRYING TO ACCOMPLISH?

HOW WILL WE KNOW THAT A CHANGE IS AN IMPROVEMENT?

WHAT CHANGES WILL WE MAKE FOR IMPROVED RESULTS?





FADE MODEL

There are 4 broad steps to the FADE QI model:

FOCUS

Define and verify the process to be improved.

ANALYZE

Collect and analyze data to establish baselines, identify root causes and point toward possible solutions.

DEVELOP

Based on the data, develop action plans for improvement, including implementation, communication, and measuring/monitoring.

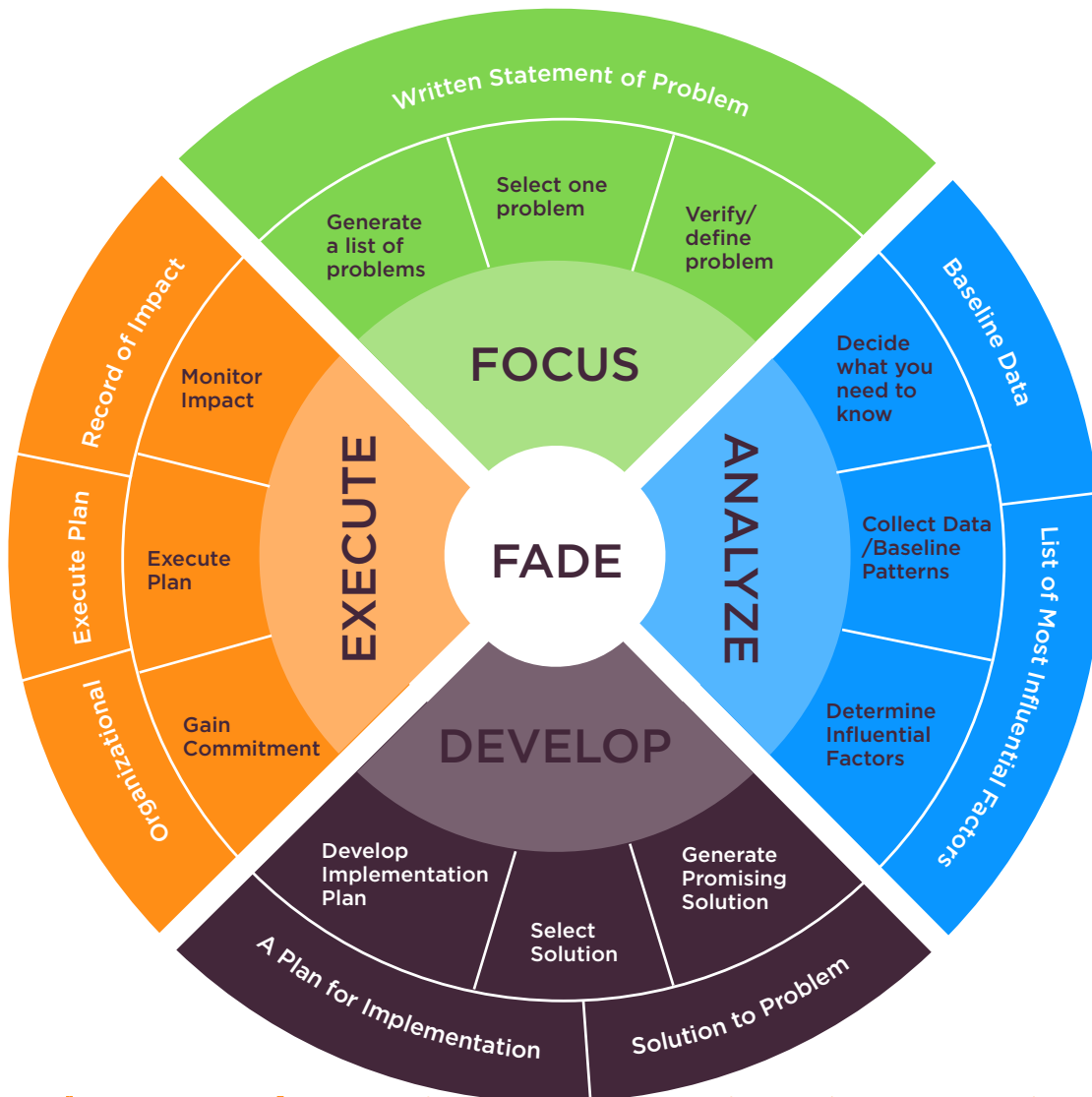
EXECUTE

Implement the action plans, on a pilot basis as indicated.

EVALUATE

Install an ongoing measuring/monitoring (process control) system to ensure success.

Wiseman, B. & Kaprielian, V. (2005). Patient Safety-Quality Improvement: What is Quality Improvement? Department of Community and Family Medicine, Duke University Medical Center. Retrieved from http://patientsafetyed.duhs.duke.edu/module_a/methods/methods.html



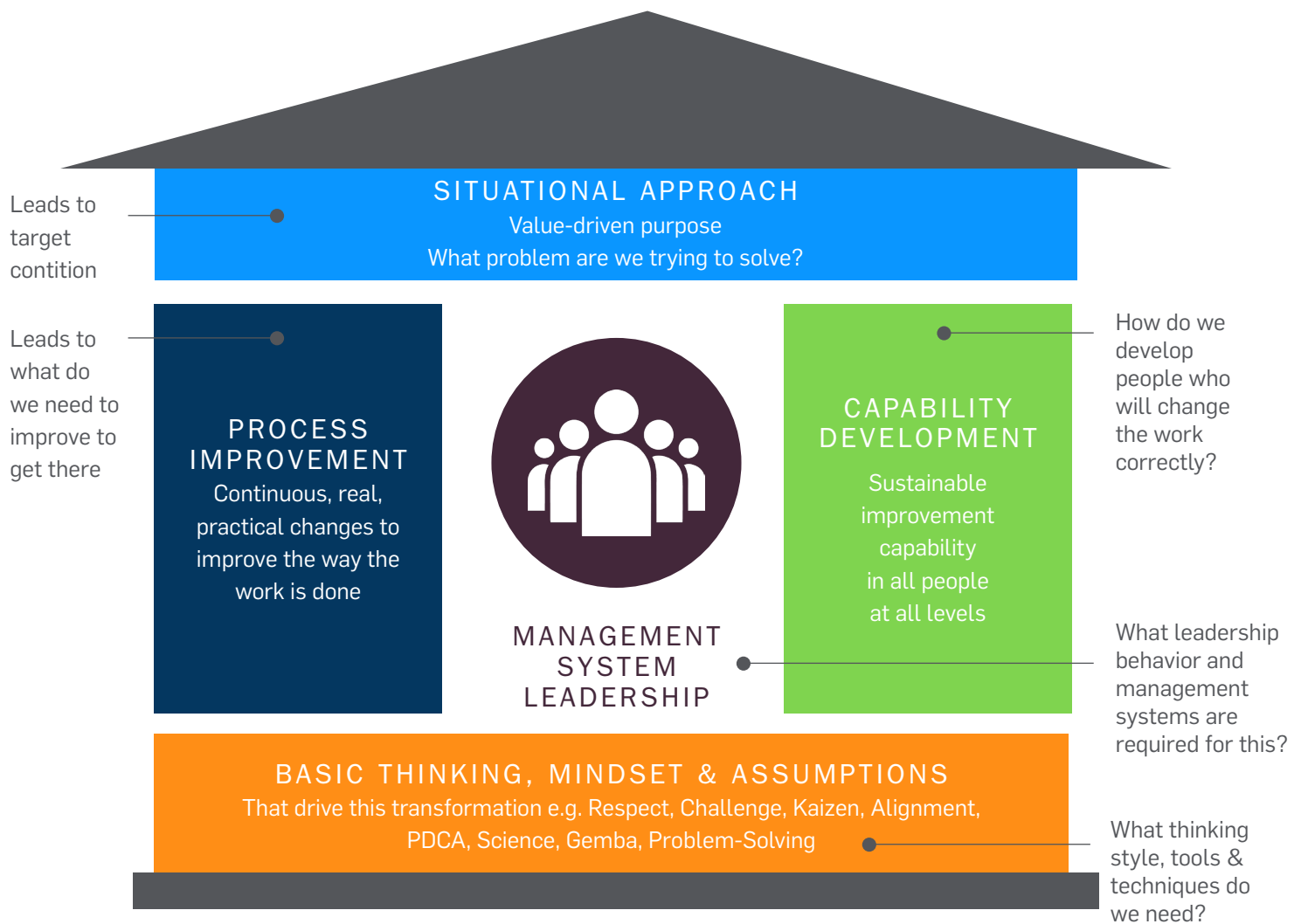


LEAN TRANSFORMATION FRAMEWORK

Embracing the challenge of improvement through:

- Focusing on, and continuously, improving the work (the flow of value throughout the organization to the customer)
- Showing respect by developing people to continuously improve the work through problem solving
- Minimizing / eliminating waste – time, human effort, injuries, inventory, capital, space, defects, rework, etc.
- Asking what management behaviors and management system are needed

Chay, T., Xu, Y., Tiwari, A., & Chay, F. (2015). Towards lean transformation: the analysis of lean implementation frameworks. *Journal of Manufacturing Technology Management*, 26(7), 1031-1052.





TRANSFORMATIONAL CHANGE MODEL

Anderson & Anderson's model of change provides a comprehensive coverage of the entire process of change and equally explains the whole process of change as a cyclical process (Anderson and Anderson, 2001, p. 13). This model briefly views change from three perspectives:

CONTENT

It analyzes the technical as well as the organizational factors which require change.

PEOPLE

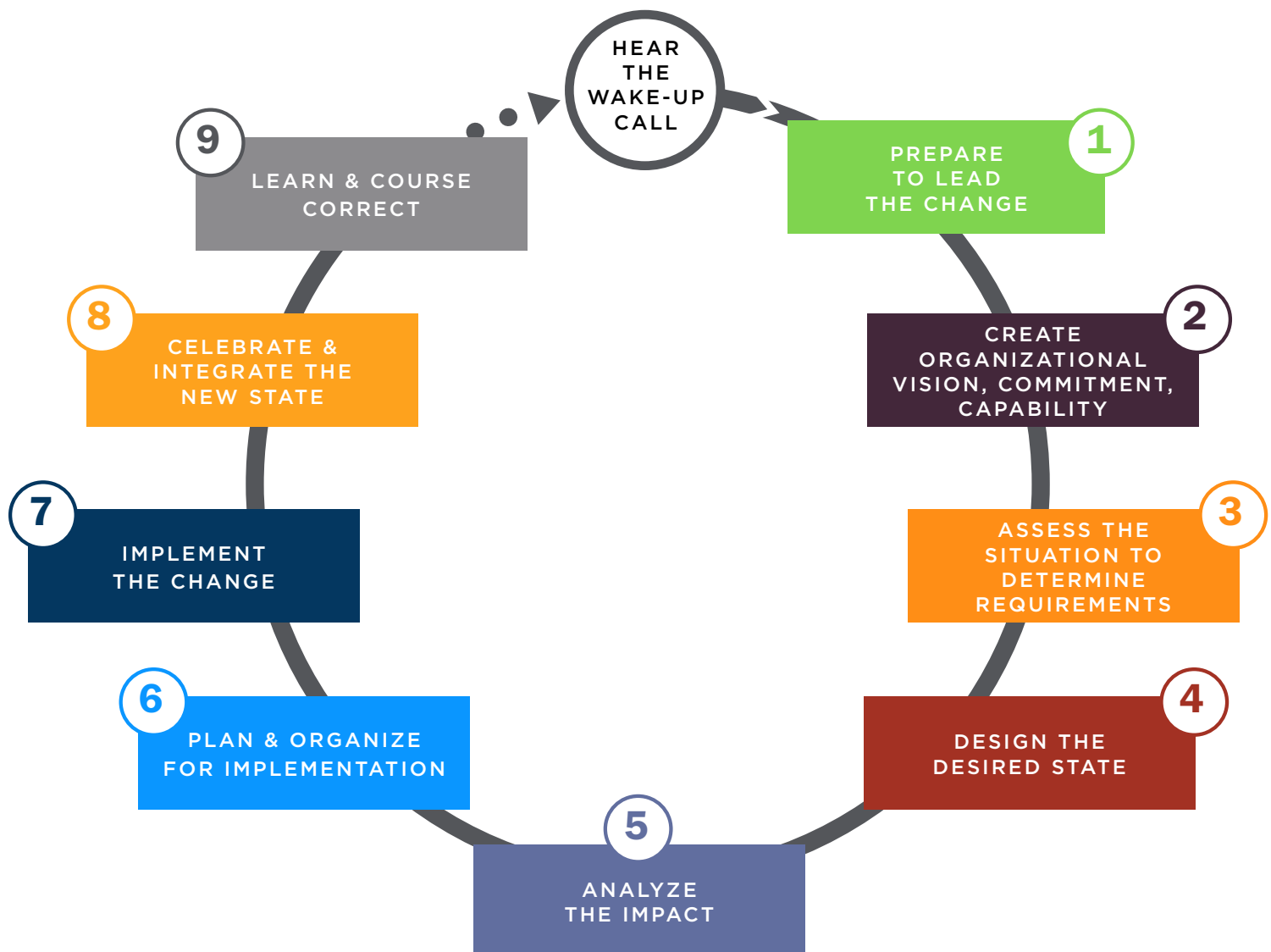
This analyzes the subjective factors such as the mindset, changes in the behavioral patterns of people as well as the cultural changes.

PROCESS

This stage is related with the possible action plans or strategies that can be crafted and implemented for driving the change initiative successfully across the organization.

All the three processes are integrated and interdependent on each other. The model is illustrated through nine phases.

Anderson, D., & Anderson, L. A. (2010). Beyond change management: How to achieve breakthrough results through conscious change leadership (Vol. 36). John Wiley & Sons. Center. Retrieved from http://patientsafetyed.duhs.duke.edu/module_a/methods/methods.html





FULLAN AND QUINN'S COHERENCE MODEL

FOCUSING DIRECTION

Systemness – integration of our work (seamless).

COLLABORATIVE CULTURE

Trumps individualism by producing strong groups.

DEEPENING LEARNING

Founded on new pedagogical partnerships; driver for using technology as the accelerator.

SECURING ACCOUNTABILITY

Developing the capacity of the group; in turn the group interfaces with the external accountability system.

Fullan, M., & Quinn, J. (2015). Coherence: The right drivers in action for schools, districts, and systems. Corwin Press.





CI MODEL ANALYSIS TEMPLATE

This tool is intended to help you reflect on CI models so that your LEA may utilize the one that fits your need.

NAME OF CI MODEL OR FRAMEWORK

How does this model match your own thinking about continuous improvement?

How can internal stakeholders be engaged in this model?

How can external stakeholders be engaged in this model?

How could this model apply to all levels and departments across the organization?

How can this model be improved?

How does this model compare to your organizations model of improvement?



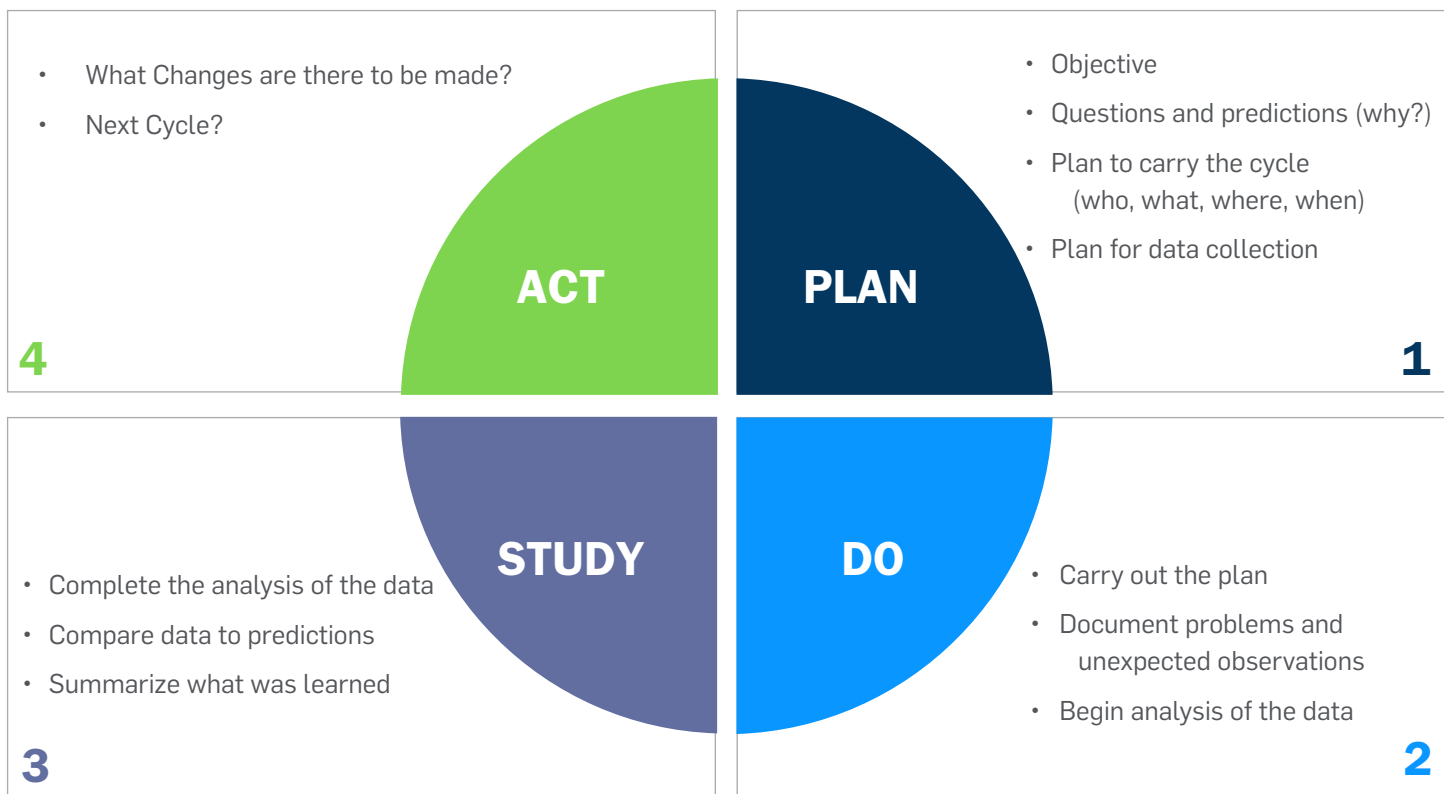
MODEL FOR IMPROVEMENT: PDSA CYCLE

After reviewing several models, the following Continuous Improvement PDSA model was selected by Pilot Partners to be utilized throughout their CI journey.

WHAT ARE WE TRYING TO ACCOMPLISH?
HOW WILL WE KNOW THAT A CHANGE IS AN IMPROVEMENT?
WHAT CHANGES WILL WE MAKE FOR IMPROVED RESULTS?



We then used the following template based on the model:



(Taylor, M. J., McNicholas, C., Nicolay, C., Darzi, A., Bell, D., & Reed, J. E. (2014). Systematic review of the application of the plan-do-study-act method to improve quality in healthcare. *BMJ Qual Saf*, 23(4), 290-298.)



Getting better together

An elementary school uses improvement science to help students express and share their thinking.

By Kristen MacConnell and Stacey Caillier

Mr. Matt's 1st graders sit on the carpet for their number talk. He writes the problem on the board — $17 = 20 - ?$ — and then asks students to give a thumbs up when they have an answer. Students share their ideas: 3, 10, 7, 8, and 6. Next, he asks volunteers to defend their answer. One by one, students come to the board. After each student defends his or her answer, Mr. Matt asks, "Are there any questions or comments?" The room is silent.

Fast-forward one month. Mr. Matt has introduced the sentence frames, "I agree because . . ." and "I disagree because . . ." He writes $2 = ? - 5$ on the board and, as before, calls on volunteers to defend their answers. Yeretzi confidently walks to the board and writes the number 3. She holds up her hand and says, "I have 5 fingers and if I take away 2, there are 3 left." Mr. Matt asks, "Does anyone have any questions or comments?" There's a buzz of excitement in the room. Three hands shoot into the air. Taylor says, "I agree with Yeretzi because if I hold my fingers up and take away 2, I have 3 left, too."

Kaleo raises his hand and says, "I agree with Yeretzi because she used her fingers." Leilani raises her hand and quickly lowers it.

"Leilani, I saw you raise your hand. Do you agree?" asks Mr. Matt. "No, I disagree," says Leilani.

"Oh! Tell us why," says Mr. Matt.

"Because if it's saying you minus something $[-5]$, you might want to add a bigger number [as the minuend]."

Mr. Matt asks Leilani to come to the board to share her thinking. After she solves the problem, four

KRISTEN MACCONNELL (kmacconnell@hightechhigh.org) is a school leadership resident at High Tech Elementary Chula Vista, Chula Vista, Calif., and **Stacey CAILLIER** is director of the Center for Research on Equity and Innovation at the High Tech High Graduate School of Education, San Diego, Calif.

students raise their hands, using a hand signal that indicates they've revised their original answers. The discussion continues for several more minutes with students revising their earlier answers on the basis of Leilani's explanation.

Let's look at how this transformation happened so quickly. Matt is from High Tech Elementary Chula Vista, a project-based charter school in California that serves a diverse student population of about 330 students in grades K-5 (Hispanic, 60%, Asian 20%, Caucasian, 8%, African-American 7%, Native American, 3%, and Pacific Islander 2%). The student population is 55% free and reduced-price lunch, 20% English language learners, and 13% students receive special education services. He's part of a group of teachers who have been using improvement science, a method for solving a problem of practice with disciplined inquiry, to help students make their thinking visible. These teachers wanted to increase students' use of "how" and "why" language to articulate their thinking. For the past six months, the group has been using short cycles of inquiry, action,

and reflection to test different "change ideas," like the introduction of sentence frames.

Improvement science as professional learning

At the core of improvement science are three simple questions (Langley et al., 2009): What are we trying to accomplish? How will we know if a change is an improvement? What changes might we introduce and why?

As educators, we generate new ideas, reflect on our practice, and make changes that we hope will improve student learning. Yet we often struggle to set clear, measurable goals, let alone develop systematic ways for tracking our progress. With its emphasis on developing a clear theory of action, "practical measures," quick iterative cycles to guide teacher learning, and a network structure that facilitates sharing and accelerated learning, improvement science is a promising framework for scaffolding teacher learning and scaling good ideas (Bryk, Gomez, & Grunow, 2011; Yeager et al., 2013).

To build teachers' investment in the improvement

Rosemarie Biocarles-Rydeen (bottom left), Grace Maddox, Matt Sheelen, Paul North, Trevor Mattea, and Amber George comprise the Making Thinking Visible team at High Tech Elementary Chula Vista. (Photo courtesy the author.)



Join the conversation facebook.com/pdkintl
[@pdkintl](https://twitter.com/pdkintl)

science process, the authors asked teachers to reflect on the following questions:

- What are my dreams for our school and for my students?
- How do I want to grow as an educator over the next year?
- If equity is at our core, what areas — in my practice and our school — are ripe for improvement?

Teachers identified four topics that were most likely to advance equity at the school and that most inspired them to improve:

- Making thinking visible;
- Designing equitable group work;
- Developing student agency; and
- Improving writing instruction.

We'll focus on the work of the Making Thinking Visible team, which was inspired by the work of Harvard's Project Zero (Ritchhart, Church, & Morrison, 2011).

Improvement science encourages educators to avoid “solutionitis” and first get grounded in a deep understanding of the problem.

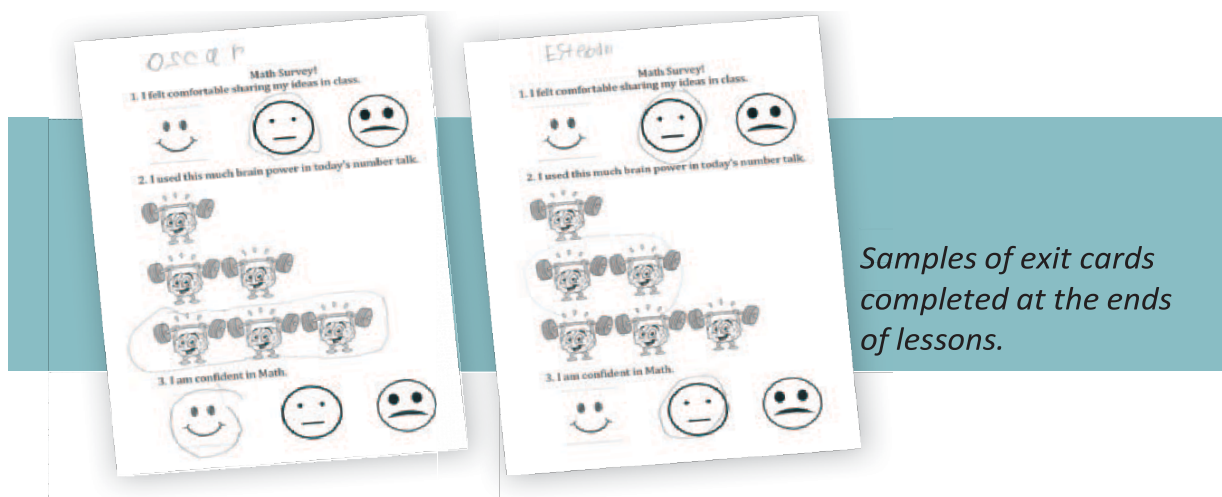
The hub — a person or organization that helps guide the work and maintain the team's focus — is crucial to improvement science. One of us — Kristen — served as the hub for the Making Thinking Visible team, helping team members dig into existing research and craft knowledge to develop a theory of action to guide their next steps. The team shared resources, read articles, and examined various thinking routines. They reflected on aspects of their classes where thinking could be richer (such as class discussions or end-of-activity reflections) and practices they felt would promote visible thinking (such as creating a class blog). As the hub, Kristen planned and facilitated biweekly meetings and supported teachers in collecting, analyzing, and reflecting on evidence.

Developing a theory of action

In improvement science, learning comes from doing. Improvement science encourages educators to avoid “solutionitis” and first get grounded in a deep understanding of the problem. To begin, the team conducted empathy interviews with students. Each team member asked a student to talk about a time the student felt successful sharing his/her thinking in class and a time when it was hard to share thinking and what advice they would give other students who were having trouble sharing their thinking. For example, students said they felt most comfortable sharing ideas when they could talk with a partner first, then the class. Students said sharing their thinking was difficult when they felt rushed and/or if they felt others might judge their ideas negatively.

Team members then used a fishbone diagram to identify the multiple factors that might contribute to students' difficulty sharing their thinking with the class. Drawing on their own experiences and what they had learned from empathy interviews, the team identified a variety of root causes such as a lack of strong models and insufficient opportunities to practice sharing thinking. They discussed factors related to language; teacher language might be too complex and wordy, and students might lack the academic vocabulary to express their ideas clearly. Another root cause was related to student agency and students' perceptions that it felt risky to share ideas with the class. As a result, many teachers decided to focus on developing structures and routines to minimize this sense of risk and create safety for sharing.

Having deepened their understanding of the problem, the group developed a theory of action. Drawing on research and craft knowledge, they constructed a driver diagram that articulated the aim — students will increase their use of how/why language to explain their thinking — as well as the “drivers” or areas of focus the group would need to attend to in order to achieve the aim. Drivers included classroom routines, structures, and modeling; teacher language; and student vocabulary/academic language. The group also identified concrete change ideas related to these drivers — specific, measurable interventions they wanted to try in their classrooms, such as using sentence frames like, “I agree because . . .,” “I used to think/now I think . . .,” and prompting students with the phrase, “What makes you say that?” At the end of a lesson, they would use exit cards to capture students' thinking. The driver diagram served as a guide for their work and evolved as they learned how best to achieve their aim.



Samples of exit cards completed at the ends of lessons.

Plan, do, study, act

Improvement science uses a structure called a PDSA (plan-do-study-act) cycle (Langley et al., 1996) to capture learning and guide short cycles of inquiry, action, and reflection. In the planning stage of each PDSA, teachers documented what they wanted to learn from the cycle and what data they would collect to answer their questions. Once they tried an idea and collected data, they analyzed the results and synthesized their learning. The questions in the PDSA form pushed them to reflect using data: What happened when you implemented the change idea — observations, surprises, questions, challenges? What are your key findings and take-aways from this cycle? The cycle concludes by articulating future actions: What are possible next steps? What refinements might we make? If we recommend abandoning the change idea, why? Only two pages long, the PDSA form served as a powerful tool to document action plans and record learning.

Take-aways

Improvement science fosters reflective practice grounded in evidence.

Although many models of professional learning embed reflection, inquiry, and the use of data, improvement science uses just enough data to accelerate teacher learning, facilitate deep reflection, and guide further action. This approach differs from other forms of data-driven professional learning in which teachers have little choice about the types of data collected (such as test scores or schoolwide assessments) or must deal with an abundance of data that is challenging to analyze in useful ways. Such data can feel divorced from day-to-day teaching practice. As a result, many data-driven discussions fail to support teachers in generating concrete steps for improving student learning.

In contrast, Making Thinking Visible team members collected user-friendly data they could easily analyze to determine whether an idea worked. For example, the team tallied who participated in class discussions and how frequently students used sentence frames, assessed the quality of student comments on a class blog, and administered short exit cards to gauge students' comfort level with sharing their thinking with the class. Examining these data enabled teachers to gain a deeper understanding of how their actions affected student learning and to develop new questions to pursue in the next PDSA cycle.

Remember Matt and his 1st graders? Matt noted a dramatic increase in student engagement when he used sentence frames in that second number talk. He described this moment as a critical point, not only because he learned about his students' thinking but also because he came to new understandings about his teaching. Matt began asking himself questions to push his teaching practice such as, "How can I get more feedback from students?" and "How can we hear new voices in our class conversations?"

Other team members also benefited from this type of reflective practice grounded in evidence. Rosemarie, a kindergarten teacher, gathered video data to capture her students' thinking. "I learned that video is a powerful documentation tool because we were able to revisit student thinking and, in turn, respond," she said. For example, Rosemarie noticed that several of her language learners began to say, "I need more time" when the class was sharing their thinking after an activity. After recognizing this pattern on video, she developed her next change idea: pre-conferencing with her language learners before the whole class reflection.

Capturing just enough data specific to a focused



Capturing just enough data specific to a focused inquiry helped teachers get better at making student thinking visible.

inquiry helped teachers get better at making student thinking visible. The teachers examined their data, reflected on their learning, and adapted their idea to improve practice.

Improvement science helps teachers take action.

Reflecting on the difference between more traditional professional learning and improvement science, one teacher noted, “In my experience, meetings often lack an action-based approach and end up with people simply talking about change ideas, not actually trying them.” The opportunity to go beyond talk and take action is a powerful component of improvement science, one that facilitates teacher ownership. At High Tech Elementary Chula Vista, teachers chose an area of focus that was meaningful to them and then engaged in PDSAs where they decided what to do, how to do it, and what data they would collect to know if they were making progress toward their goal.

For example, Matt noted on one PDSA form that he wanted to “try to find ways to have more one-on-one conversations with students and also see if I can gain more access to student thinking [for those students] who aren’t sharing regularly in math.” Grace, a 5th-grade teacher, wanted students to be “more creative in how they work on problems and assignments.” She came up with the following actions to push student thinking: Ask students to respond to one another’s reading and writing rather than simply sharing their own. Ask more open-ended questions and spend more time on them.

There were times when teachers didn’t complete their PDSA, either because they hadn’t clearly articulated what they wanted to learn, or they were unsure what data to collect and how to collect that information. Working through these challenges collaboratively helped teachers regain control and take action.

Improvement science facilitates collaboration and sharing.

Improvement science brings teachers together in networked improvement communities to share data, talk about the effectiveness of change ideas, and accelerate learning. As LeMahieu and colleagues explained, “Networks are rich sources of innovation; they provide diverse contexts in which to learn from testing, they allow the detection of patterns that would otherwise appear singular, and they provide the social connections that accelerate knowledge production and dissemination” (LeMahieu, Edwards, & Gomez, 2015, p. 447).

Four characteristics of networked improvement communities are unique to improvement science.

These communities are:

- Focused on a specific aim;
- Guided by a deep understanding of the problem and the system that produces it;
- Disciplined by the rigor of improvement science; and
- Networked to accelerate the learning into varied education contexts (Martin & Gobstein, 2015).

As we examined teacher reflections about their participation in this process, we identified two consistent themes that aligned with these characteristics. First, the structures of networked improvement science — planning and documenting through PDSAs, support from the hub, and regular meetings — provided both support and accountability for teachers to remain engaged in the work. “I really appreciated the chance to debrief ideas with my group and our leader because it provided account-

Improvement science is a promising framework for scaffolding teacher learning and scaling good ideas.

ability and inspiration,” Grace said. Matt reflected, “I don’t think [this experience] would be the same without having a mentor to guide me along the way.” Second, participating in a networked improvement community accelerated learning. As teachers shared ideas, other teachers were inspired to implement a colleague’s work. Grace noted how much she had learned from Rosemarie about the importance of taking time each day to reflect with her students on how their thinking had changed, and how powerful it was to see that progression of thinking over time

Join the conversation

facebook.com/pdkintl
[@pdkintl](https://twitter.com/pdkintl)

Getting started with improvement science

Here are some tips for schools interested in implementing the process:

- Make time for the work. Build consistent time for reflection and collaboration into professional learning structures.
- Learn from your students. Start with empathy interviews to understand the problem under study and seek student feedback as you get moving. You can even engage students as collaborators in the improvement work, encouraging them to generate change ideas and collect and analyze data to identify next steps.
- Focus your aim. The aim needs to be targeted and specific enough that the team understands it and that it leads to concrete action.
- Dig into the literature. Getting grounded in current research is empowering, and it gives teams a place to start.
- Focus on what you can control. When you focus on something beyond your sphere of influence, you may find yourself stuck.
- What can you do this week? When you’re passionate about improving something, it can be tempting to focus on big change ideas that require lots of effort but whose effect is uncertain. Instead, focus on what you can do tomorrow. By starting small and learning from both failures and successes, we’re in a better position to share promising ideas and scale the work.

For more information

To learn more about the Making Thinking Visible work done by teachers at High Tech Elementary Chula, visit www.kristenmacconnell.com.

Improvement science has provided a powerful framework for engaging teachers as collaborative problem solvers.

through the video data that Rosemarie had gathered. Paul wrote, “The social aspect of this experience has been empowering. If it hadn’t been for Kristen’s work with Matt around number talks, I probably wouldn’t have embraced them in my own classroom. Now I’m doing them two to three times a week, and students are really enthusiastic about sharing their math thinking!” Teachers are continually innovating in their classrooms. The structure created opportunities for teachers to share their learning in authentic and meaningful ways.

How did we do?

Did teachers reach their aim of increasing students’ use of “how” and “why” language to articulate their thinking? We can’t say with 100% certainty that all students are using that language to explain their thinking daily, but we can say with confidence that they’re getting closer. Five of six teachers said they have increased the number of opportunities that students have throughout the day to share their thinking. In addition, five of six teachers reported an increase in

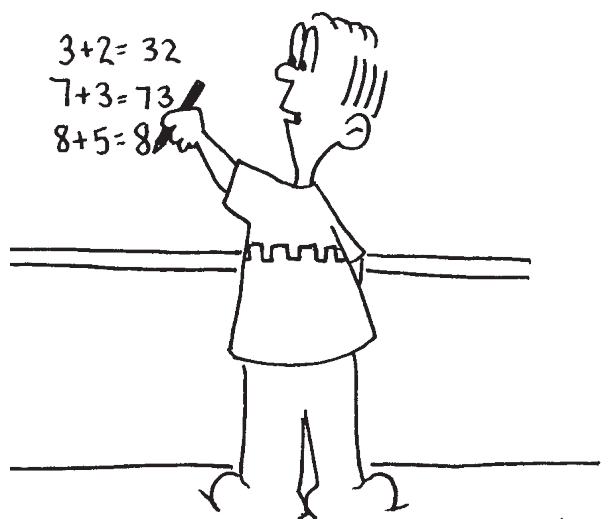
students’ use of how and why language to share their thinking. These data are supported by observations and video data from each teacher’s classroom.

Paul expressed pride when students in his class began to develop deeper wonderings through classroom blogging, one of Paul’s change ideas. He said one student wrote a profound blog comment expressing her dissatisfaction with racism. Through improvement science, he was able to offer students a way to share their thinking that hadn’t existed in his class before. Grace’s change idea, encouraging students to use sticky notes to make their thinking visible, gave her a new way to capture student learning. She wrote that one of her students was able to write two “wows” and two “wonders” from a book he was reading, which offered her insight into his thinking. Matt now has students who are confident in their ability to explain erroneous thinking, and students who never used to participate in discussions are now joining in. Now when Matt asks, “Are there any comments or questions?” his students can hardly wait to share!

Improvement science has provided a powerful framework for engaging teachers as collaborative problem solvers. It grounds inquiry and actions in a shared goal and provides an invaluable tool to assess the effect of those actions on student learning. **K**

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“Wow! This is easy!”



THREE LEVELS OF TEXT PROTOCOL

PURPOSE

This protocol is designed to deepen the understanding of a text and explore implications for participants' work. It asks participants to respond to 3 levels of the text: Literal (Level 1), Interpretation (Level 2), and Implications (Level 3). This can be used as a prelude to a text-based discussion or by itself.

Time

30-45 Minutes

Materials

- Copies of text for each participant
- Highlighters
- Sticky Notes
- Pens

Roles

Timekeeper / facilitator, who both participates and keeps the process moving.

Stick to the time limits. Each round takes up to 5 minutes per person in a group. Emphasize the need to watch airtime during the brief group response segment.

Do 1-3 rounds. A round consists of one person using up to 5 minutes to:

Level 1

Read aloud the passage she/he has selected. If another participant has previously read one of your passages, select another to read.

Level 2

Say what she/he thinks about the passage (interpretation, connection to past experiences, etc.)

Level 3

Say what she/he sees as the implications for her/his work. The same pattern is followed until all four members of the group have had a chance to be the presenter and to have "the last word."

DEBRIEF

How was this a useful way to explore the ideas in the text and to explore your own thinking?

Adapted from The Final Word Protocol, National School Reform Faculty, nsrfharmony.org

- ▶ Create a group of 4-5 participants.
- ▶ If participants have not done so ahead of time, have them read the text and identify passages that they feel may have important implications for their work.
- ▶ When the group is ready, a volunteer member identifies the part of the article that she/he found to be most significant and reads it out loud to the group. This person (the presenter) says nothing about why s/he chose that particular passage.

UNDERSTANDING THE PROBLEM

THE CCEE PILOT PROGRAM STORY

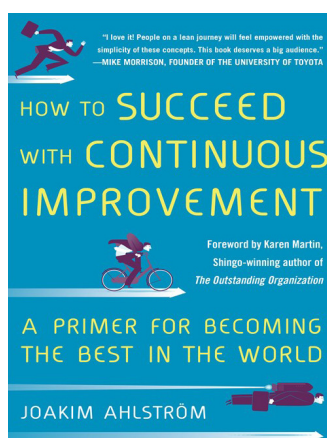
BACKGROUND

Einstein said if we have an hour to solve a problem, fifty minutes should be spent trying to understand the problem, and the last ten minutes for looking for solutions. The CCEE team recognizes how easy it is to look at data and then try to quickly look for programs or interventions to solve them. With this in mind we set out to put together experiences allowing the pilot partner teams to really understand the problem they most wanted to address.

THE PROCESS

Data Analysis

The teams first looked at data from a “mock” district (actual district outside of Pilot LEAs). They were asked to examine the data and then try to determine what they might find in the LCAP of the district. There was discussion around the data points as each team was given a set of data points depicting student performance on the data dashboard.



The teams were then given “mock” district LCAP goals and discuss any surprises or confirmations. Then each team was given their own LEA data to review. Each team member was asked to use the see, think, wonder reflection sheet to examine the data individually. The reflection sheet was completed in sections, first discussing what they saw in the data, then discussing what they thought about what they saw, lastly discussing what they wonder about the data.

A deeper continuous improvement learning was strengthened through a book read: *How to Succeed with Continuous Improvement* by Joakim Ahlström. Participants read and took part in the activities mentioned in the book to measure their efficacy, problem or practice and their organization's' continuous improvement culture. From this work participant adapted and pivoted in their plans as needed.

Three questions became grounding questions for our pilot partners as they embarked on their CI work: What are we trying to do? What changes can we make that will result in improvement? How will we know a change is an improvement? (p. 31).

Lastly, teams were asked to choose a data set that if they addressed would make the biggest impact on student outcomes.

Five Whys (p. 36)

Pilot partners were given the 5 Why's Analysis Template (p. 36) and asked to complete one of the three columns on the template individually. They were asked to keep asking why until they feel they have reached the ultimate reason for the performance outcome. It could be they only ask three why's, or they might have to ask eight - with the ultimate goal of getting to the core of the problem. Then they were asked to turn to an elbow partner and share their whys and try to agree on what they believe to be the root of the problem, then they were asked to discuss as a team, ultimately choosing one root cause.

Fishbone Diagram (p. 34)

Pilot partners participated in utilizing the Fishbone Diagram (p. 34) to explore the problem of practice and root causes. With the use of poster and stickers, teams were able to gather consensus around the root cause by placing stickers next to three root causes. They were then able to spend time at every other teams' Fishbone Diagram poster to place stickers around the root cause. This allowed for sharing and gathering input from all the pilot partners. This protocol is included in this section.

LESSONS LEARNED

The biggest lesson learned here is you can't spend too much time understanding the problem. The Fishbone Diagram became a very doable and exciting protocol that teams utilized continually. Due to the ease of use and results received from the Fishbone protocol, a couple of pilot partner administrators were inclined to share this protocol to other administrators at their county meeting and were able to engage others in root cause analysis.



RESOURCES & ACTIVITIES

UNDERSTANDING THE PROBLEM

Going Deeper with the Big 3 Questions of Continuous Improvement

These three questions became grounding questions for our pilot partners as they embarked on their CI work. These questions provide a constant focus on the root cause of the problem, focused goal, and what to measure.

These questions reside in, *Learning to Improve: How America's Schools Can Get Better at Getting Better*: By Anthony Bryk, Louis Gomez, Alicia Grunow, and Paul LeMahieu.



BIG 3 QUESTIONS WITH SUB PROBING QUESTIONS:

1 What are we trying to accomplish?

- What is our goal?
- Who is the focus of our goal?
- When will you reach our goal?
- Why is this goal important?

2 What changes can we make that will result in improvement?

- What change action could we choose to take that would have the biggest impact?
- Who will implement the change action?
- Why do we believe this change action will have the biggest impact?
- When and on what timeline will we implement this change action?

3 How will we know that a change is actually an improvement?

- What key components to the change action can we measure?
- What do we already have in place to measure these components?
- What process measures will we use to determine if your change action is occurring?
- What outcome measures will we use to determine if your change action is making an impact?
- How can we measure impact of the change action on the trajectory of our achievement gap?



SEE, THINK, WONDER: DATA ANALYSIS TEMPLATE

This template is intended to help LEAs analyze their school data to understand the root cause as they walk through their data and self-reflect with the categorized questions.

SEE



What patterns do you notice?
What gaps do you see?
What trends do you see?

THINK



What do you think about the patterns you notice?
What do you think about the gaps you see?
What do you think about the trends you see?
What do you think is happening to create these outcomes?

WONDER



Based upon your thoughts about the patterns, gaps, and trends you see, what do you wonder about?
What issues, or ideas have been raised in your wonderings?



FISHBONE GENERATION PROTOCOL

PURPOSE

The purpose of this protocol is to arrive at a deeper understanding of the problem we want to address (before jumping to solutions).

Time

40 minutes

Materials

Chart paper

Markers

Sticky notes

Roles

Timekeeper / facilitator, who both participates and keeps the process moving

6 Cluster on your Poster

Group related causes together and give each category a title. (The stuff on the post-its are the details/bones on the fishbone).

7 Post & Reflect (5 min)

Post your poster to the wall. Does your diagram capture the root causes you think are important? Anything missing? Then each person gets to vote with one heart and one star:

- **High Leverage:** Put a heart by the factor, that if addressed, you think would have a significant impact on the problem.
- **Practical:** Put a star by the factor that is within your control, that your team could address with little effort.

PROTOCOL

1 Generating our Problem Statement (5-7 minutes)

- 2 Individual:** What is the problem we need to solve?
See if you can express the problem in one sentence.

3 Group discuss and agree on a problem statement.

4 Initial Brainstorm of Causes (5 min.)

Based on your work digging into the problem (i.e. empathy interviews, expert convenings, relevant data, research, etc.) and your own ideas/experiences, individually brainstorm as many causes as you can that might contribute to the problem/issue. Write each cause on a different post-it. For meaty "big" topics, it can help to ask a chain of "why?".

5 Share & Categorize (15-20 min)

Share around: Each person shares one cause contributing to the problem. If others have a similar cause, you can start to group those post-its together on your poster.

Continue to share your initial brainstorm, building on each other's ideas and adding new causes that may contribute to the problem.

DEBRIEF (5 MIN)

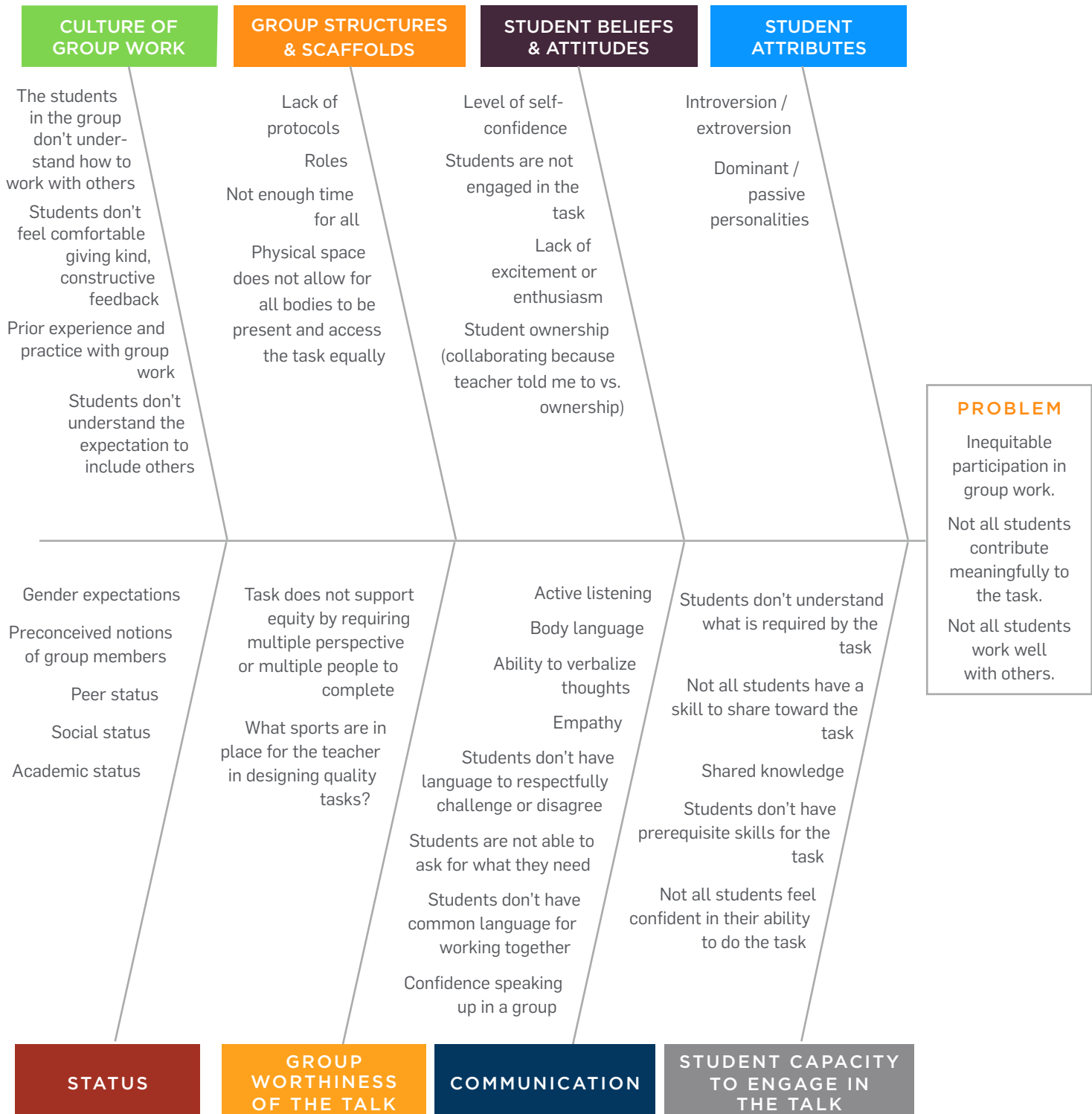
How did we do upholding the norms?

How might we adjust this protocol in the future?

Ishikawa, Kaoru (1968). Guide to Quality Control. Tokyo: JUSE



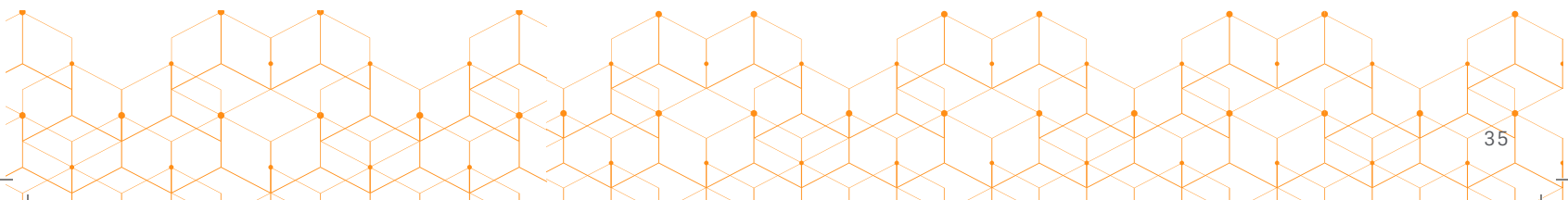
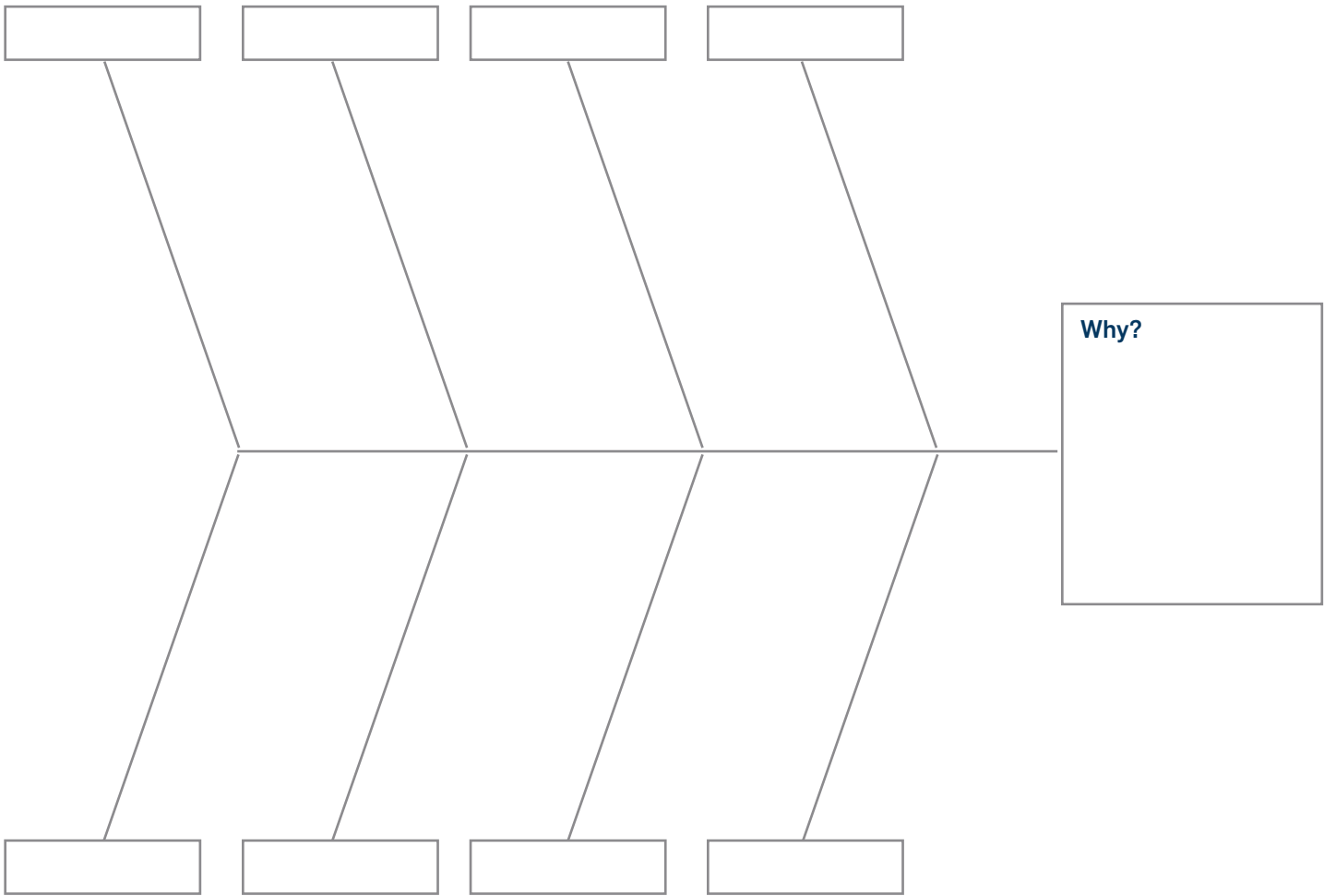
FACTORS INFLUENCING INEQUITABLE PARTICIPATION IN GROUP WORK





FISHBONE DIAGRAM TEMPLATE

PROBLEM: The gap between where you are and where you want to be.





FIVE WHY'S PROTOCOL

PURPOSE

The purpose of this protocol is to arrive at a deeper understanding of the problem we want to address (before jumping to solutions).

Time

30 minutes

Materials

5 Why's Templates: You can select which document to use
Pens
Chart Paper
Markers
Sticky Notes

Roles

Timekeeper/facilitator, who both participates and keeps the process moving

DEBRIEF

How was this a useful way to explore the problem and value every voice?

PROTOCOL

Group Generates the Problem Statement (5-7 minutes)
Place the problem statement in the top box on the template.

Individual Work

- 1** Answer the question Why _____
(Problem Statement) in the first box.
- 2** Answer another Why _____ with the answer to the first question.
- 3** Continue this process until you arrive at what is thought to be the underlying cause within the group's locus of control with the most impact on the problem.
- 4** On a sticky note, the individual writes the underlying cause within the group's locus of control and with the most impact on the problem.

The group discusses each sticky note and prioritizes the causes to choose the most advantageous one to address first.



Technique originally developed by Sakichi Toyoda and was used within the Toyota Motor Corporation.



5 WHY'S

The problem of practice is _____



WHY IS THAT?



WHY IS THAT?



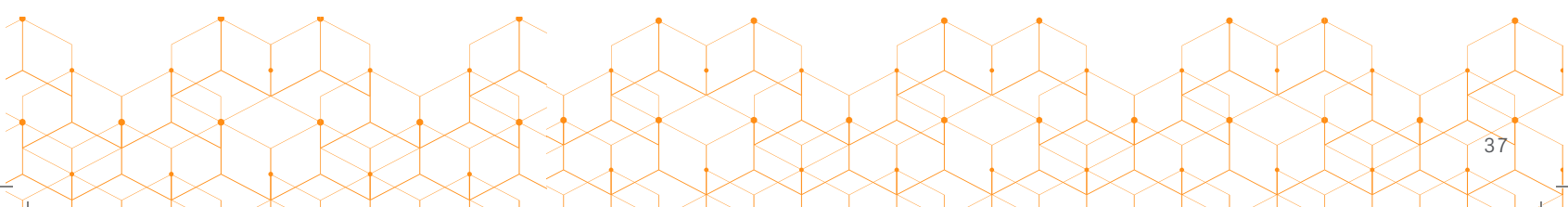
WHY IS THAT?



WHY IS THAT?



WHY IS THAT?





5 WHY'S ANALYSIS TEMPLATE

Problem based on data: _____

	WHAT IS THE CAUSE OF THE PROBLEM?	WHY WASN'T THE PROBLEM DETECTED?	IS THERE A PART OF THE SYSTEM THAT FAILED?
1ST WHY?			
2ND WHY?			
3ND WHY?			
4TH WHY?			
5TH WHY?			

FOCUS COLLECTIVE EFFORTS

THE CCEE PILOT PROGRAM STORY

BACKGROUND

CCEE created the Pilot Partnership in response to state legislation (AB 1623; SB 828) to assist county offices, school districts, and charter schools to improve the quality of education. CCEE's Pilot Partnership maintained adherence to the CCEE theory of action for support that would strengthen local control embedded in Local Control Funding Formula and CCEE legislation. Since stakeholder engagement is a critical aspect in the development and implementation of LCFF, the CCEE team designed the pilot partnership activities with the aim of fostering stakeholder engagement within and across LEAs as a professional learning network. For this reason, many of the activities in the CCEE CI Toolkit involve self-reflection, working together and engaging in action-oriented feedback to refine their continuous improvement cycles (short cycle). In addition, it was critical to have teachers and principals on the pilot partner teams to ensure those closest to students were able to give voice to, and affirm, the problem of practice, develop the theory of action and develop the short cycles.

The work of engagement began with the importance of developing a moral purpose for the CI journey ahead. At the summits, pilot partners identified the importance of communication and the power of doing the continuous improvement work, not in silos, but together with their stakeholders. The Pilot Partnership teams were then asked to develop a communication plan for each type of stakeholder. In the second year of the pilot partnership it became clear that there was opportunity to leverage and build the LEA relationship and experience across participating pilot partnership LEAs with specific job alike activities.

In addition to work done at the summit, CCEE Pilot Leads spent time with each pilot partner conducting focus group interviews to gather qualitative data regarding the chosen focus area. This data was gathered and presented to the team to add more local context to the problem being studied.

THE PROCESS

The first item in this section: Setting Moral Purpose (p. 41) has an introduction and a description of the process used. Next, you will see the communications considerations template (p. 42). The form asks the teams to think of what and how they need to communicate to each stakeholder group and develop a timeline for communication. The teams were given an entire afternoon to develop this plan.

The change driver diagram (p. 43) was used with some of the teams with some of the pilot leads. It was utilized before determining a change action to address the problem, and then revisited afterwards to delve deeper into measurement.

The last two items in this section were used to develop inclusion, as well as get a clear picture regarding the LEA's association with continuous improvement: Getting to Know You Questions Protocol (p. 44) and Current State Analysis of Our Improvement Work (p. 45).

LESSONS LEARNED

When it comes to having everyone in an LEA understand the CI process, making sure the communication plan is implemented is crucial. This is a reoccurring theme throughout the lessons learned - the CCEE lead coaching between the summits was critical to the change actually being implemented. We also neglected to collect the results from the status of CI survey and decided in the third and final year to use it as critical piece of data in our research.



SETTING MORAL PURPOSE: THE CCEE PILOT PARTNER STORY

Developing the WHY behind the implementation of a change is imperative. The CCEE team developed the following activity to allow teams to begin to develop trust and understand each of their whys.

The activity began with a quick write where participants were asked to answer the following questions:

- What is your moral purpose?
- What actions do you take to realize this purpose?
- How do you help other find clarity in their moral purpose?
- How close are you in realizing your purpose with students?

The team then watched a video called: *"Be the Change You Want to See in the World."* You can find this video on YouTube, linked below. It depicts a major problem in a city where a big tree has fallen in the middle of the road. While most of the people just looked at the tree, a young boy decides he would try to move the tree. It was then others began to realize they can impact this problem if they all helped.

After the video the teams were asked:

What helped this group to accomplish a seemingly impossible task?

The teams then went through the Sideline Protocol. The protocol was developed with three discussion prompts:

- When it comes to your district or school improvement... What is your tree?
- How do you engage others in moving the tree?
- How does this video relate your moral purpose?

Sideline Protocol

PURPOSE

Participants will have short one-to-one conversations around the "problem(tree)" and cycle through the 3 guiding questions.

Time

Dependent on number of participants

Videos

2:08 minutes

Materials

Videos

[Be the Change That You Want to Be See in This World](#)

Roles

Timekeeper/facilitator, who both participates and keeps the process moving

PROTOCOL

Pair up and form two lines, with partners facing each other.

Round 1: Facing Pairs will discuss the 1st prompt.

After 3 minutes, the first person in Row A will move to the end of Row A.

Each Person will then move one space to the right until everyone has a new partner

DEBRIEF

After the activity has been completed it is important to give members time to reflect and jot down notes from their conversations before engaging in whole group findings.



COMMUNICATIONS CONSIDERATIONS

Use this template to think through what and how your team needs to communicate to each stakeholder group and develop a timeline for communication.

WHAT TO COMMUNICATE	TO WHOM	HOW	WHEN
	Board		
	Teachers Involved		
	Teachers not directly involved		
	Other Staff		
	Parents		
	Students		





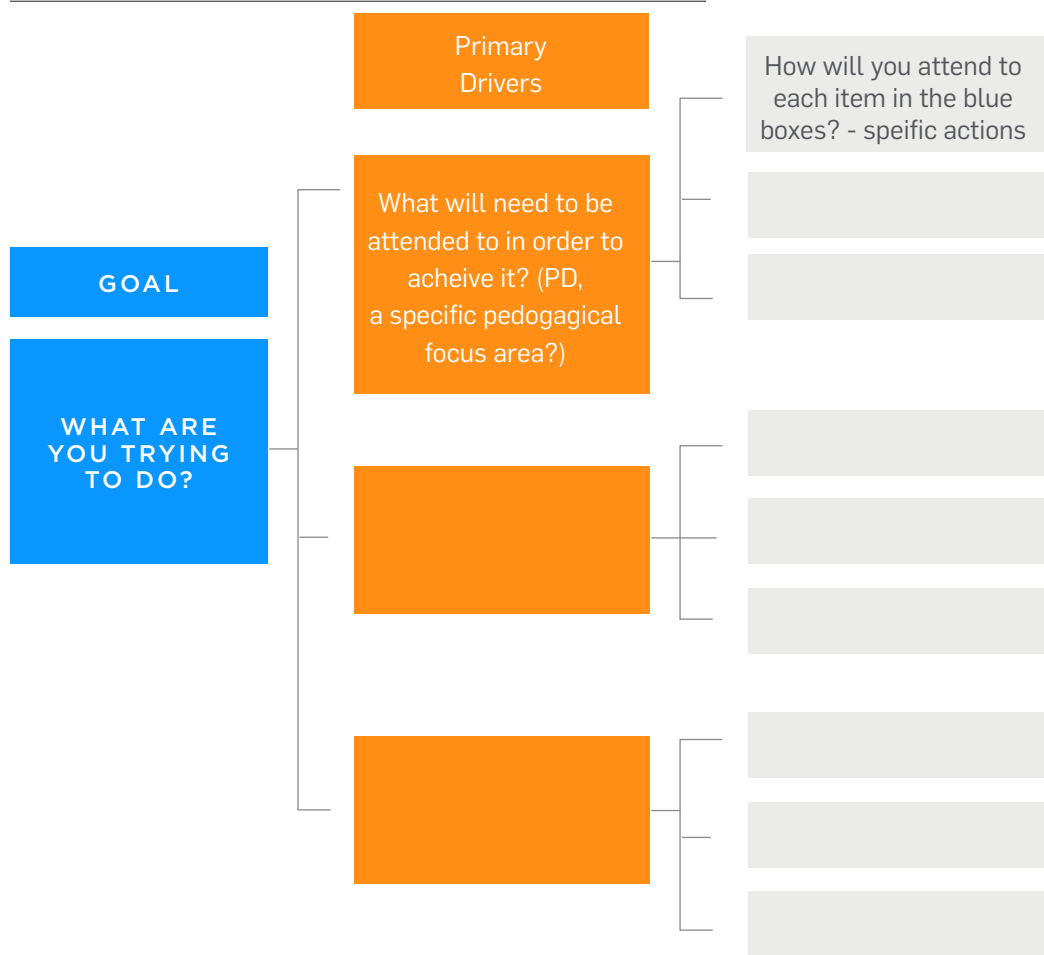
CHANGE DRIVER DIAGRAM

This driver diagram template is to assist with mapping out the specific changes needed to achieve the desired outcome.

WHAT IS DRIVING YOUR CHANGE ACTION?

Problem of Practice

Measures



Measures

Measures

This template is from Learning to Improve By Anthony Bryk, Louis Gomez, Alicia Grunow, and Paul LeMahieu .



GETTING TO KNOW YOU QUESTIONS PROTOCOL

PURPOSE

A great way to help people open up is to ask them fun questions that allow them to express their personality or interesting things about them.

Time

10 minutes

Materials

None

Roles

None



Here is a list of twenty safe, useful icebreaker questions to help break the ice:

- 1 If you could have an endless supply of any food, what would you get?
- 2 If you were an animal, what would you be and why?
- 3 What is one goal you'd like to accomplish during your lifetime?
- 4 When you were little, who was your favorite superhero and why?
- 5 Who is your hero? (a parent, a celebrity, an influential person in one's life)
- 6 What's your favorite thing to do in the summer?
- 7 If they made a movie of your life, what would it be about, and which actor would you want to play you?
- 8 If you were an ice cream flavor, which one would you be and why?
- 9 What's your favorite cartoon character, and why?
- 10 If you could visit any place in the world, where would you choose to go and why?
- 11 What's the ideal dream job for you?
- 12 Are you a morning or night person?
- 13 What are your favorite hobbies?
- 14 What are your pet peeves or interesting things about you that you dislike?
- 15 What's the weirdest thing you've ever eaten?
- 16 Name one of your favorite things about someone in your family.
- 17 Tell us about a unique or quirky habit of yours.
- 18 If you had to describe yourself using three words, it would be...
- 19 If someone made a movie of your life would it be a drama, a comedy, a romantic comedy, action film, or science fiction?
- 20 If I could be anybody besides myself, I would be...

www.icebreakers.ws/get-to-know-you/icebreaker-questions.html



CURRENT STATE ANALYSIS OF OUR IMPROVEMENT WORK

You can administer this survey at the start of your CI journey and periodically to assess the changes in the team culture, efficacy and to view the current state of your CI work. This survey was Modified from: How to Succeed with Continuous Improvement by Joakim Ahlström.

- 1** Where we work everyone is fully aware of why we need to work with improvements.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 2** Where we work everyone can continually see how their own efforts contribute to the overall results for the LEA.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 3** Our improvements are based on problems identified by data with input from a cross section of instructional and administrative teams.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 4** The way we work with improvements stimulates and anchors our collaboration.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 5** We gather facts from multiple settings, data sets, and stakeholders to identify problems and the extent of these problems.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 6** Decisions made in our LEA are based on a true picture of our actual current state.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 7** Where we work, everyone knows why we implement the improvements we do.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 8** Our to-do list includes the person responsible and a completion date to ensure that we progress in our work.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 9** We celebrate our successes frequently enough on our journey toward our targets.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 10** We set targets and follow-up on our improvement work in a way that helps us evaluate and improve our improvement work.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 11** We talk often about positive examples of improvements.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 12** We always identify the root cause of our problems.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 13** Where we work everyone knows what is expected from her or him in the improvement work.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 14** My manager is sufficiently committed to improvement work.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

- 15** We are good enough at coaching each other on our journey towards the targets.

No, not at all Yes, really
1 2 3 4 5 6 7 8 9 10

GENERATE IDEAS FOR CHANGE



THE CCEE PILOT PARTNER STORY

BACKGROUND

After determining a root cause, the problem being studied, it was important to spend some time learning about how to choose change ideas to have the biggest impact on the root of the problem. This is where it became evident the root cause may or may not have been identified.

The team knew the work around implementing a change action really involves being able to focus on it and not get distracted from the multiple and daily responsibilities back at the district and sites.

THE PROCESS

The first part of working with the pilot partners to determine a high leverage change idea involved using the high leverage change idea protocol (p. 48) in this section. Here the teams worked individually to come up with as many change ideas as they could to address the problem. Then, they were asked to place each idea in one of the four quadrants shown on the protocol to help them identify the low effort and high impact ideas. From the change ideas on the chart, participant teams were asked to choose a change action that was both easy to implement and would have a big impact on the problem. The aim to ground the pilot partners in a “quick win” was to help them practice being focused and to work as a team as they implement continuous improvement.

The Basic Action Plan (p. 49) was used to allow teams to think through initial actions needed to implement the chosen change action. Pilot partners were given an afternoon to complete this plan.

To provide teams a full picture of the CI process, the team created the CI funnel (p. 50) showing all of the work to be done in the process, from developing a focus to studying the data from the implementation of a short cycle. This became an artifact the team collected to examine each team's understanding and progress.

Coaches used the Partner Cognitive Coaching Protocol (p. 52) to allow reflective and deeper discussion with the pilot partners team.

LESSON LEARNED

The pilot leads needed time to build CI knowledge, and identify activities and protocols, to then implement change actions with pilot partners. As a result, the selection of focus and kick-off into the short cycles took time. A quicker approach can be taken if the leads/support providers have their CI knowledge and toolkit ready to implement.





RESOURCES & ACTIVITIES

GENERATE IDEAS FOR CHANGE

High Leverage Change Idea Protocol

PURPOSE

The purpose of this protocol is to arrive at an agreed upon change idea to address an agreed upon cause to a problem.

Time

20 minutes

Materials

Previously developed fishbone diagram

Chart paper with four quadrants drawn
(See the end of protocol)

Markers

Sticky Notes

Roles

Timekeeper/facilitator, who both participates and keeps the process moving

PROTOCOL

- 1 Review** the problem and chosen cause from the Fish Diagram.
- 2 Individual:** What actions/changes if implemented would address the identified cause.
- 3 Use the Problem statement:** It can be challenging to effectively coordinate inclusion supports.

You may choose to modify the problem statement.

4 Initial Brainstorm of Causes (5 min.)

Based on your work digging into the problem and under lying cause (i.e. empathy interviews, expert convenings, relevant data, research, etc.) and your own ideas/experiences, individually brainstorm as many actions or change you think will address the cause.

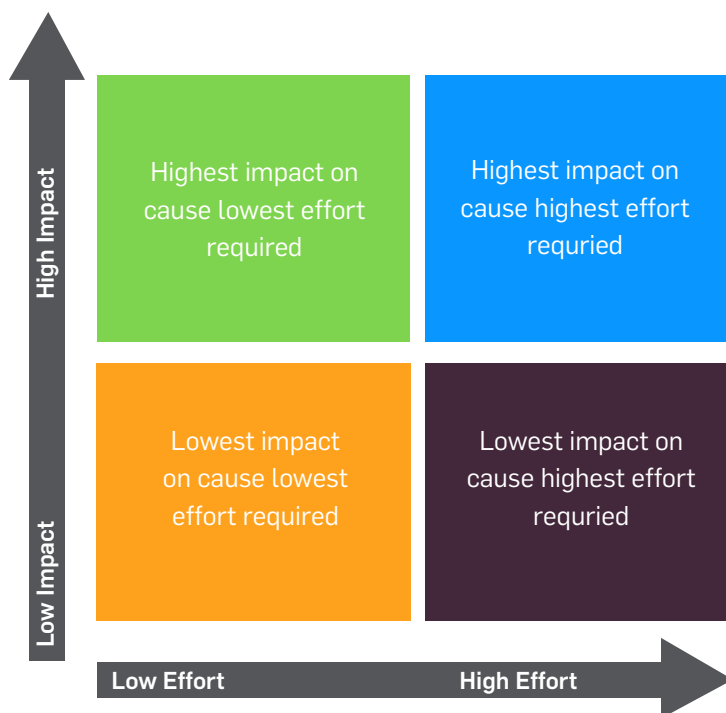
- 5 Share & Place** in an agreed upon quadrant (15-20 min)
Share around: Each person shares one action change idea at a time, and the team discusses and agrees upon where the idea goes on the poster. If others have a similar action or change idea, you can place them together.

- 6 Choose** one or more actions or change ideas to address the cause.

DEBRIEF (5 MIN)

How did we do upholding the norms?

How might we adjust this protocol in the future?



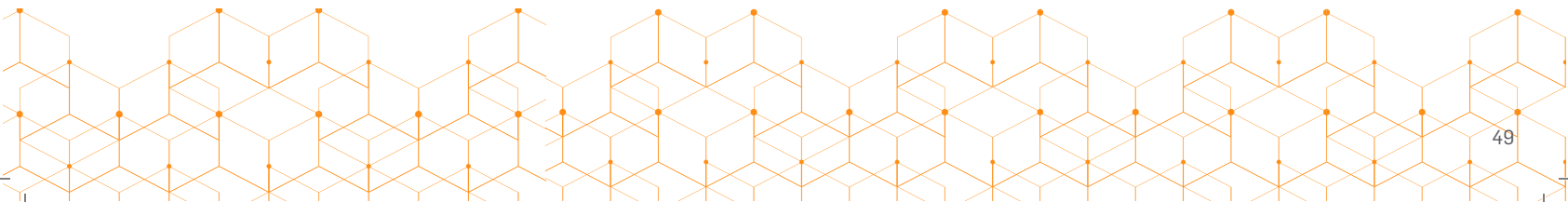


BASIC ACTION PLAN

Problem Statement

Prediction of Impact

WHAT	WHERE	HOW	SUCCESS MEASURE	WHO & WHEN





THE CI FUNNEL

This template can be used by LEAs alongside any CI model they choose. If multiple CI models are being used in an organization this template will allow you to compare work across CI models.

Focus (Data Review, See Think Wonder)

Root Cause (5 Why's, Empathy Interviews, Fishbone)

Change Action (High Impact/Low Effort Chart)

Predictions

Thinking about
the problem
(PLAN)

Evidence of Success and Implementation

Data Collection and Study

Working the
problem
(DO, STUDY,
ACT)

Refinement Strategy



FOCUS

Focus (Data Review, See Think Wonder: Data review Special Education achievement in math)

Root Cause (Empathy Interviews, Fishbone) Poor placement in Special Education math classes.

Change Action (High Impact/Low Effort Chart) Create Special Education specific math placement procedures for all secondary math classes

Prediction If we place students correctly, they will do better in the classes they are in

Thinking about
the problem
(PLAN)

Evidence of Success and Implementation

Higher GPSs in the secondary math classes for Special Education students after taking the placement tests

Data Collection and Study

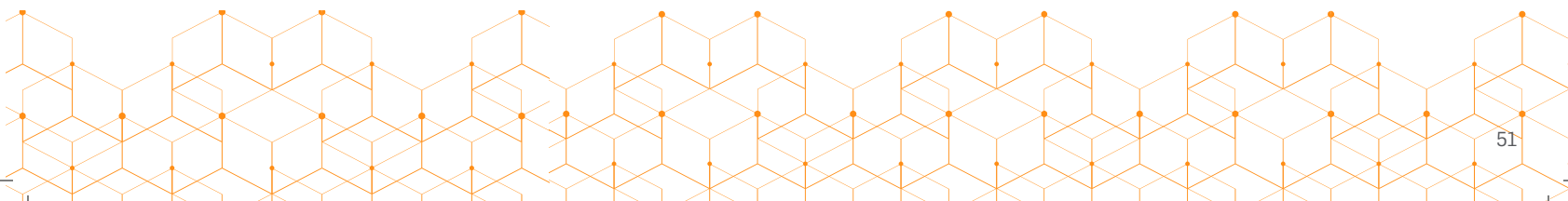
Every eight weeks teachers and leadership will review grades and discuss findings

Refinement Strategy

By March, the teachers and leadership team will make a recommendation about what comes next

Working the
problem
(DO, STUDY,
ACT)

IMPACT





PARTNER COGNITIVE COACHING PROTOCOL

PURPOSE

These questions provide prompts to the coach and inquiring LEA team in reflective practices. Coaches utilized these questions in aiding the team to reflect on their problem, change action, and data outcomes. LEA teams also utilized these questions during discussions with Partnership Network LEAs.

Materials

Handout of these questions

Roles

Coach/Listening LEA

Questions we've been using:

- 1 What is your selected area of focus?
- 2 What is your change action/actions?
- 3 What were your intended results?
- 4 What were your actual results?
- 5 What caused the results?
- 6 What will you do the same in the next cycle?
- 7 What will you do differently?

Cognitive Coaching Questions:

- 1 What are you hoping to accomplish _____ (with your change action)?
- 2 What might be some of the pieces of evidence you can collect?
- 3 What might you see/hear that will let you know you've reached your goal?
- 4 What will guide your decisions about _____ (your short cycle)?
- 5 What's the best that could happen with _____ (this short cycle)?

- 6 What might be the long- and short-term effects of _____ (your short cycle)?
- 7 What might you need to do to be the best prepared for this short cycle?
- 8 What might be some strategies you have used before that was effective?
- 9 What might be some of your choices?
- 10 How might your actions enhance student learning?
- 11 Over what factors might you have most control?
- 12 How might these strategies support student learning in other settings?
- 13 What are some of your predictions about how your next short cycle will go?
- 14 What might be the primary value of this short cycle to your students?
- 15 What kind of help might be useful to you with this short cycle?
- 16 How might some of your colleagues support you with this short cycle?

DEBRIEF

These questions were integrated into the Critical Friend Protocol as well as during Sharing of LEA's Short Cycle.

TEST & COLLECT DATA

THE CCEE PILOT PARTNER STORY: THE SHORT CYCLE

BACKGROUND

In the final year of the Pilot Partnership teams began to develop a full plan to implement a short cycle for their change action. The teams had now had a year of learning engrossed in CI and were now ready to create a change that would have a great impact on the pilot partner's identified problem of practice. There had been in year one, some work with design theory and innovation. This time, the teams are using their change action, and if necessary, breaking it down into smaller pieces to develop short cycles of inquiry to study the impact and implementation. Critical to the short cycle was the identification of process and outcome measures:

Process Measures

- Evidence-based best practices that represent an organizations effort to systematize its improvement efforts
- Drive improvement

Outcome Measures

- High level measurable outcome
- Dashboard, summative assessments, benchmark assessments

THE PROCESS

After being provided two different examples of how process and outcome measured can be identified, teams were provided with a blank template to list and plan both process and outcome measures. They discussed measures they should use to study both the impact and the implementation of the change action. In addition, they were given an implementation timeline to complete. Again, the key to this work is in the coaching between the creation of the metric identification and the implementation timeline.

LESSONS LEARNED

An important role that the pilot leads filled was in coaching the pilot partners in implementing, measuring, and studying the change implementation. It was imperative that pilot leads meet with each team to confirm data sets to be presented at the next summit, including their reflection and adjustments. Pilot leads provided support for pilot partners to stay focused on implementing change.

Summits were spaced apart (July, October, January, March, and May) which provided a timeline for short cycle reflection, presentation, and commitment on the next short cycle. "Team Time" was valuable for pilot partners to identify and develop short cycles. Pilot partners were paired with other pilot network teams to go deeper into their short cycle reflection and discussion. Both County representative(s) and pilot leads facilitated protocols with pilot partners.



**PROCESS & OUTCOME MEASURES**

Providing the teams with capacity building experiences around determining the appropriate measures of impact for the identified change began with a deep dive into the big three improvement questions (The Who, What, When, and Why of each question) and began with the CCEE work.

What are we trying to accomplish?

- What change action could we choose to take that would have the biggest impact?
- Who will implement the change action?
- Why do we believe this change action will have the biggest impact?
- When and on what timeline will we implement this change action?

What changes can we make that will result in improvement?

What: Engage partners with CCEE lead visits and partnership network meetings

Who: CCEE Team

Why: CCEE Theory of Action

Continuous improvement that is evidenced based

Communication and engagement

Equity focused actions

When: Regular CCEE lead visits and network meetings virtual and face to face.

How will we know that a change is actually an improvement?

- What key components to the change action can we measure?
 - CCEE lead visits
 - Partnership network meetings
 - Partner's capacity to:
 - Implementation of evidenced base, equity focused action using continuous improvement processes
 - Engage and communicate to stakeholders
- Increased student outcomes

Process Measures

- Evidence-based best practices that represent an organizations effort to systematize its improvement efforts.
- Drive improvement
- Outcome Measures
- High level measurable outcomes
- Dashboard, summative assessments, benchmark assessments

As the Pilot Partnership continued, we revisited and referenced process and outcome measures and continue to add layers as we continued to drill down to the school level. One of these layers is Technical and Adaptive changes, defined below. The following exercise was done with using an equity lens. You will be visually guided below through on how to analyze an area of focus and subsequently how to break it down and identify possible solutions to then creating your theory of action (TOA).

The materials below were developed in partnership with Collaborative Learning Solutions.

www.clsteam.net

	PROCESS MEASURES	OUTCOME MEASURES
CCEE lead visit	Scheduled/Calendar Agendas planned and focused Driven by pilot partner	Number of visits Agenda identified focus and/or other artifacts
Partnership network meeting	Scheduled/Calendar Content developed with outcomes in mind	Number of LEA teams in attendance Survey results
LEA implementation of evidenced based, equity focused actions using continuous improvement	Identified continuous improvement model Identified evidenced based, equity focused action(s)	Survey results Artifacts collected with identified continuous improvement models and change actions identified Interviews with LEA teams
LEA engagement and communication to stakeholders	Content and time to develop communication and engagement content	Artifacts around communication and engagement collected Interviews with LEA teams
Increased student outcomes	Time to determine student outcomes to measure	Identified student outcome measures

This is a (blank) learning grid that will be used throughout this section. Provided for user reference and ease.

AREA OF FOCUS	OBSERVATIONS	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)		
TYPE OF INCIDENT				TOA	LEADER MOVES
STUDENT SUBGROUPS					
STAFF				GOALS	
LOCATION					



A PERSONAL EXAMPLE

While this is a complete version, the Theory of Action was developed toward the end after the working through the learning grid. The sample in the next page will guide you through steps along the way while looking at a school.

AREA OF FOCUS	OBSERVATION	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)
Improve Health: Lose Weight via Nutrition	Seldom eat breakfast Rely on coffee as appetite suppressant "Intermittent fasting" is a norm If no breakfast, sugar craving at 3:00pm Binge eating at 6:00pm Poor choices with 6:00 binge 2-3 beverages in evening if traveling	Travel schedule often dictates eating; irregularity is a norm Fewer calories the better Intermittent fasting is good for you Breakfast makes me hungry the remainder of the day Coffee will hold me over; it's an appetite suppressant I don't have time to prep meals/snacks when I travel	Replace one alcoholic beverage with another beverage of choice Allocate time to prepare for a snack/meal every 2-3 hours Engage in extended learning around diet and nutrition Follow Nicole's plan (3 meals around 300 calories and 3 snacks around 100)* *adjusted to 2000 calories

THEORY OF ACTION

IF I follow Nicole's plan at 2,000 calories per day with 6 meals/snacks per day THEN I will lose 1-2 pounds per week RESULTING IN better overall health

MOVES

Communicate plan with Nicole

Prepare for meals in advance (weekend)

Purchase healthy snacks

GOALS

Eat breakfast, lunch and dinner
(350-400 calories per meal)

Eat three snacks at 100-150 calories per meal)

SCHOOL EXAMPLE: SUSPENSION DATA

For this example, we are focusing on suspension data and start with the first four columns as we look at student data, in this case student suspensions.

AREA OF FOCUS	OBSERVATION	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)		
TYPE OF INCIDENT				TOA	LEADER MOVES
STUDENT SUBGROUPS					
STAFF				GOALS	
LOCATION					





AREA OF FOCUS	OBSERVATION	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)
Suspension Rates	<p>Rate across student subgroups</p> <p>Average incidents per student</p>	<p>Some might say we are experiencing these outcomes because...</p> <p>What structures (policies, procedures, practices) might be a factor in these outcomes?</p> <p>Student might say we are experiencing these outcomes because...</p>	

Suspension Data 2017 -2018

Based on the guidance look at the student data and begin writing in observations first.

School Name	Student		Incident					
	Suspension Rate	Average Suspensions per Student	Violence (Injury)	Violence (Non Injury)	Weapons	Illicit Drug	Defiance Only	Other
School	7.1%	1.91						
African American	16.9%	2.11	23%	24%	14%	14%	21%	24%
American Indian or Alaska Native	8.5%	2.46	1%	1%	0%	1%	1%	0%
Asian	2.4%	1.49	4%	2%	5%	4%	1%	3%
Filipino	1.9%	1.67	0%	0%	0%	0%	0%	0%
Hispanic or Latino	6.7%	1.81	59%	58%	71%	67%	62%	57%
Pacific Islander	5.1%	1.00	0%	0%	0%	0%	0%	0%
White	7.1%	2.16	9%	11%	7%	11%	12%	13%
Two or More Races	7.9%	2.12	3%	3%	2%	2%	2%	4%
Not Reported	11.1%	3.00	0%	0%	0%	0%	0%	0%
English Learners	4.8%	1.73	9%	8%	13%	11%	8%	8%
Foster Youth	21.4%	2.23	4%	4%	2%	3%	4%	3%
Homeless Youth	16.1%	2.15	5%	5%	6%	4%	6%	6%
Migrant Education	3.1%	1.37	0%	0%	0%	0%	0%	0%
Socioeconomically Disadvantaged	7.6%	1.92	63%	66%	66%	70%	66%	70%
Students with Disabilities	12.7%	2.29	18%	17%	14%	12%	16%	13%
Percentage of Suspension Events by Incident			4%	57%	2%	9%	13%	5%
Percentage of Suspension Events by Incident			83%				17%	

QUESTIONS AND GUIDANCE FOR ANALYSIS

For this example, we are focusing on suspension data and start with the first four columns as we look at student data, in this case student suspensions.

AREA OF FOCUS	OBSERVATION	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)
Suspension Rates	<div>What differences do we notice across racial/ethnic subgroups?</div> <div>What differences do we notice across program subgroups?</div> <div>Which groups have the greatest/least likelihood to perform well in this area of focus?</div> <div>What other data can be triangulation with this area of focus?</div>	<div>What policies or practices might influence these outcomes?</div> <div>(teachers, students, parents) might say this is occurring because...</div> <div>What dominant beliefs may be influencing these outcomes?</div>	<div>Technical Changes</div> <div>Quick and easy to implement</div> <div>Change occurs in one or few places</div> <div>Met with little resistance</div> <div>Adaptive Changes</div> <div>Changes in values, beliefs, roles, relationships</div> <div>Change occurs in multiple places</div> <div>Require time and experimentation</div>



OBSERVATIONS

Finally, when thinking of your possible responses, think of the technical and adaptive changes that are needed.

RACE/ETHNICITY

4 groups are higher than district average

AA highest suspension rate overall

Not Reported and AA have 1st and 2nd highest suspensions per student

PROGRAM

Foster Youth, Homeless, SWD highest rates

SWD highest suspensions per student

STUDENTS/FAMILY BELIEFS

1 Why?

Belief: Administrators and teachers are unfair

2 Why are they unfair?

Belief: Administrators and teachers are not comfortable teaching and serving the needs of a diverse student population

3 Why aren't they comfortable?

Belief: Culturally specific behaviors moderate how teachers and administrators view students

4 Why do culturally specific behaviors influence how these students are viewed?

Belief: Staff doesn't know, understand, and honor the lived experiences of their students, families, and community

5 Why doesn't the staff honor the lived experiences?

Belief: All stakeholders are not given the opportunity to collectively develop behavioral and academic expectations or to infuse local community norms and culture into school-wide practices

TEACHER/ADMIN BELIEFS

1 Why?

Belief: AA rate is expected because it mirrors societal outcomes for AA

2 Why does it mirror the outcomes?

Belief: AA do not value education

3 Why don't AA value education?

Belief: AA are not connected to school

4 Why aren't AA connected to school?

Belief: AA are not given a voice in decisions about what and how they learn

5 Why aren't AA given a voice?

Belief: We do not have high expectations for all students

RACE/ETHNICITY

4 groups are higher than district average

AA highest suspension rate overall

Not Reported and AA have 1st and 2nd highest suspensions per student

PROGRAM

Foster Youth, Homeless, SWD highest rates

SWD highest suspensions per student

AREA OF FOCUS	OBSERVATION	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)
Suspension Rates	<p>Race/Ethnicity 4 groups are higher than district average</p> <p>AA highest suspension rate overall</p> <p>Not Reported and AA have 1st and 2nd highest suspensions per student</p> <p>Program Foster Youth, Homeless, SWD highest rates</p> <p>SWD highest suspensions per student</p>	<p>Race/Ethnicity Some might say the AA rate is somewhat expected as it mirrors societal outcomes for AA</p> <p>Students might say administrators/teachers are prejudiced and unfair</p> <p>Program Foster Youth, Homeless and SWD all have significant challenges they bring to school</p> <p>We don't have an internal practice of monitoring administrative responses to student behavior</p> <p>Our responses to behavior are discretionary; we have not yet implemented behavior guidelines</p>	<p>Technical Changes Weekly monitoring of suspension by race/ethnicity and program to create awareness of suspensions</p> <p>Admin implements and follows Behavioral Guidelines</p> <p>Adaptive Changes Establish youth directed system for responding to office referred behavior (i.e. SJC)</p> <p>Professional Learning for leadership</p>

TECHNICAL

- Challenge is easy to define
- Can typically be resolved by experts
- Requires little time to resolve
- Professional learning is informative and procedural
- Often faces little resistance
- Can be solved by “top-down” leader moves

ADAPTIVE

- Challenge is difficult to define (complex)
- Is resolved collaboratively by people not experts
- Requires a lot of time
- Faces resistance
- Leader moves must address changes in beliefs, mindsets, and attitudes



NOW THAT YOU HAVE COMPLETED THE FIRST FOUR COLUMNS, WE WILL BUILD YOUR THEORY OF ACTION. THEN IDENTIFY, GOALS AND MOVES.

BUILDING YOUR THEORY OF ACTION

- A Theory of Action contains the emotional core of what drives people to commit to your intended purpose: the why
- Communicating your core beliefs is the most important thing you can do to inspire stakeholders to action.
- A Theory of Action makes your why, how, and what explicit by explaining your anticipated course of actions and outcomes
- A theory of action typically follows the following format:
 - IF we do "X", ("What")
 - THEN "Y" will happen: ("How" the what will work)
 - RESULTING IN "Z".... ("Why")

AREA OF FOCUS	OBSERVATION	BELIEFS STRUCTURES	POSSIBLE RESPONSE(S)
Suspension Rates	<p>Race/Ethnicity 4 groups are higher than district average</p> <p>AA highest suspension rate overall</p> <p>Not Reported and AA have 1st and 2nd highest suspensions per student</p> <p>Program Foster Youth, Homeless, SWD highest rates</p> <p>SWD highest suspensions per student</p>	<p>Race/Ethnicity Some might say the AA rate is somewhat expected as it mirrors societal outcomes for AA</p> <p>Students might say administrators/teachers are prejudiced and unfair</p> <p>Program Foster Youth, Homeless and SWD all have significant challenges they bring to school</p> <p>We don't have an internal practice of monitoring administrative responses to student behavior</p> <p>Our responses to behavior are discretionary; we have not yet implemented behavior guidelines</p>	<p>Technical Changes Weekly monitoring of suspension by race/ethnicity and program to create awareness of suspensions</p> <p>Admin implements and follows Behavioral Guidelines</p> <p>Adaptive Changes Establish youth directed system for responding to office referred behavior (i.e. SJC)</p> <p>Professional Learning for leadership</p>

USING THE CHART YOUR THEORY OF ACTION IS PRODUCED

1 IF we implement behavior guidelines (What)

2 THEN we will eliminate discretionary responses to behavior (How)

3 RESULTING IN a reduction in disproportionality of suspension rates among AA and SDW (Why)

LEADER MOVES ARE TECHNICAL AND/OR ADAPTIVE CHANGES. LOOK AT THE QUESTIONS FOR CONSIDERATION AS GUIDANCE WHEN THINKING ABOUT THIS SECTION.

Goals are the Process
and/or Outcome
measures

THEORY OF ACTION

LEADER MOVES

GOALS (PROCESSES
AND/OR OUTCOME

QUESTIONS FOR CONSIDERATION

What obstacles are in the way or making this happen?

What are the fiscal/time impacts?

What are the coherence/integration considerations?

Is there something I can remove/replace to make this happen?

What do I need to do differently?

What supports and/or system changes do I need to make these changes successfully?

What resources will be required?

Which audience do I need to engage in dialogue about our TOA and why?



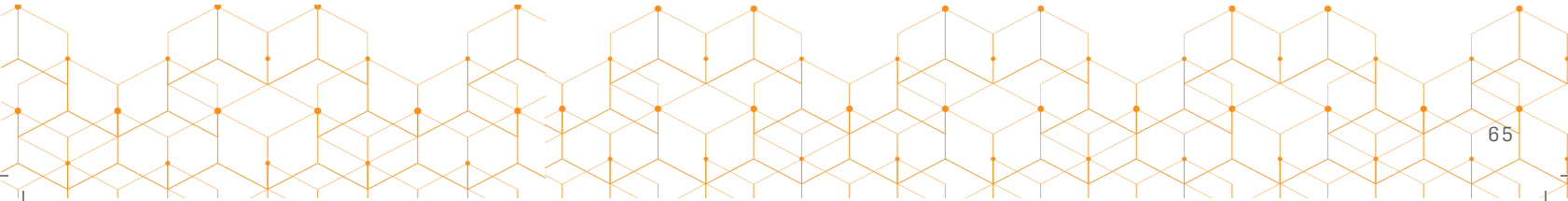


PROCESS & OUTCOME MEASURES TEMPLATE

CHANGE ACTION COMPONENT

PROCESS MEASURES

OUTCOME MEASURES





CONTINUOUS IMPROVEMENT: PDSA CYCLE FORM

Change Idea Being Tested _____

Learning Goal _____

Tester Name(s) _____ Date/Timeframe of the Test _____

DETAILS

Describe the who/what/when/where of this test.

1 PLAN

Predictions:

What do you think will happen when you enact this change idea in practice?

Data to collect

2 DO

Briefly describe what happened during the test (surprises, difficulty getting data, obstacles, successes, etc.)



3 STUDY

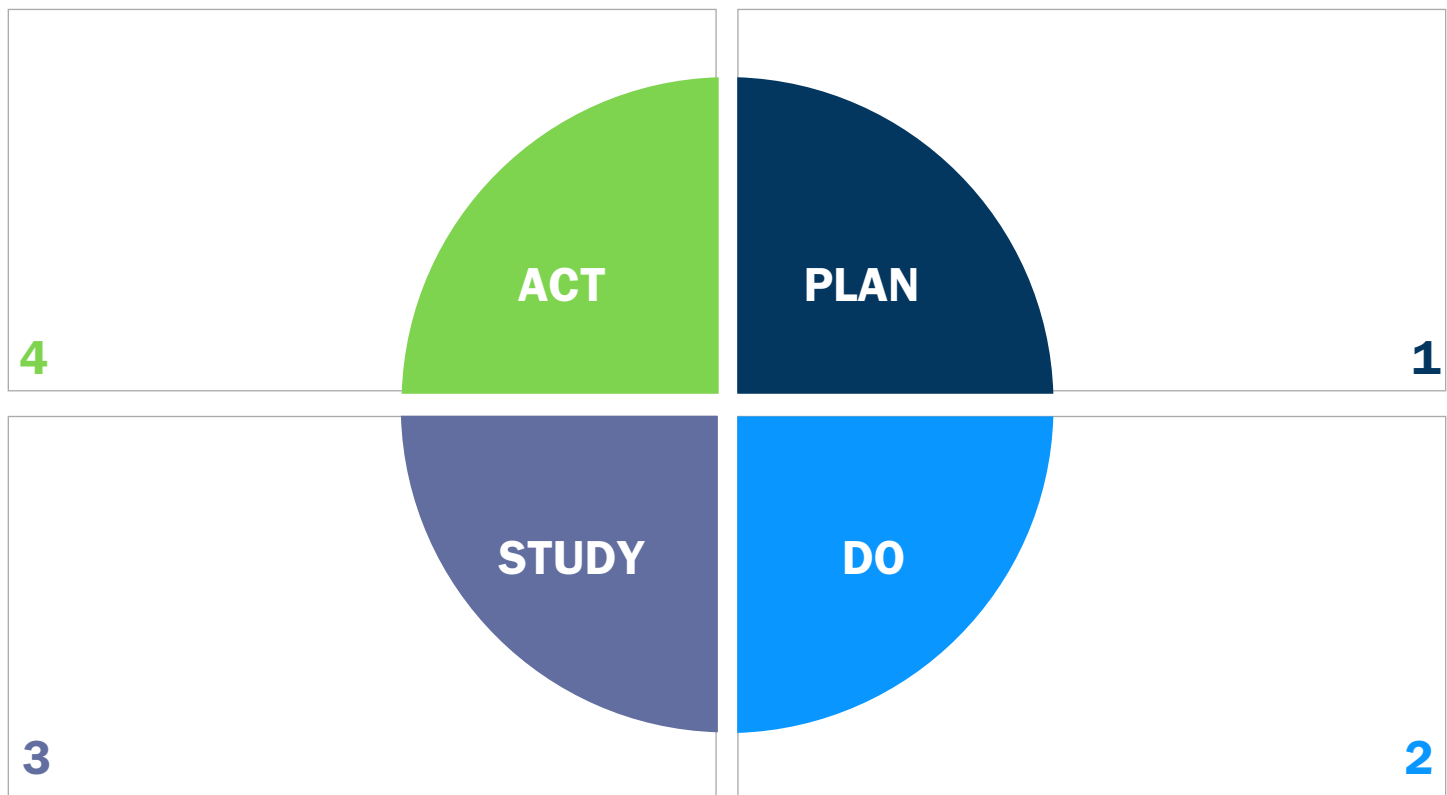
What were the results?

What did you learn?

4 ACT

Describe any modifications to the change idea and plans for future cycles.

CONTINUOUS IMPROVEMENT: PDCA CYCLE FORM





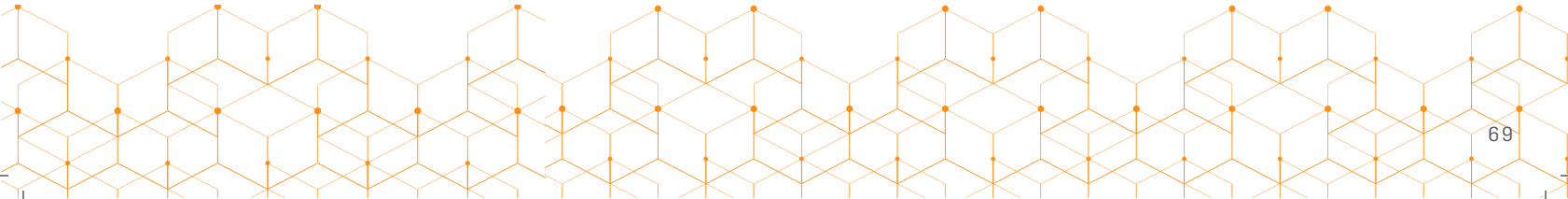
IMPLEMENTATION TIMELINE: EXAMPLE

	PLAN ACTION	OUTCOMES	IMPLEMENTATION/ DO	DATA/STUDY	REFLECTION/ACT
JULY	<ul style="list-style-type: none">• Plan “Accountable Talk” PD• Develop Look Fors• Create Survey	<ul style="list-style-type: none">• Completed PD plan• Completed Look Fors• Completed survey			
AUGUST			<ul style="list-style-type: none">• Provide the PD• Administer Survey	<ul style="list-style-type: none">• Analyze data from survey	As needed based on data analysis: <ul style="list-style-type: none">• Revise PD• Adjust action• Adjust next PD• Adjust Look Fors
SEPTEMBER	Implement Accountable Talk				
OCTOBER					
NOVEMBER					
DECEMBER					



	PLAN ACTION	OUTCOMES	IMPLEMENTATION/ DO	DATA/STUDY	REFLECTION/ACT
JULY					
AUGUST					
SEPTEMBER					
OCTOBER					
NOVEMBER					
DECEMBER					

JANUARY					
FEBRUARY					
MARCH					
APRIL					
MAY					
JUNE					



SPREAD AND SCALE



THE CCEE PILOT PARTNER STORY

BACKGROUND

As pilot partners seek to scale up and spread their change initiatives, it was important to keep them focused on doing a trial and starting small. Pilot partners focused on working out the issues and problems that came up in the short cycle, allowing them to be more thoughtful and precise as they spread the change to other areas in the LEA. But moreover, it was vital to begin to think about the supports necessary at every level of the system. The teams spent between July 2018 and May 2019 immersed in their short cycles. The plan was for each team to present the results and next steps planned in the implementation of the change action.

THE PROCESS

Pilot partners were asked to present the results of their first short cycle and discuss next steps for implementation. Pilot partners were given time to plan the second short cycle which in many cases included scaling up or spreading the identified change action. They engaged in designing common understanding around clear communication through Potluck Dish protocol (p. 95) and hashtag activity (p. 96-97).

LESSONS LEARNED

Pilot partners struggled to think through the supports necessary for scaling their change actions up and out, therefore, more time was spent on how to sustain a continuous improvement practice. Pilot partners were able to think more about measures to use for impact and implementation in their third and fourth cycle while also considering how to sustain positive impact. The pilot leads directly engaged with the pilot partners on the conversation on sustaining continuous improvement after the pilot partnership as they designed their fourth cycle.

Pilot partners spread the CI work within their LEA through management retreats and Professional Learning Communities (PLC). As a result, educators throughout various levels were able to conduct their own short cycles to identify problems of practice within their LEA.

Making the learnings of the pilot partners public with other pilot partners and with stakeholders in their LEA is critical to the work and the unification of LEA communities. To do so, pilot partners were asked to share their LEA profile (p. 87), create a display board (p. 88-89), and a PowerPoint presentation (p. 90-94), to communicate their CI journey.





RESOURCES & ACTIVITIES SPREAD AND SCALE

FACILITATOR'S GUIDE TO THE SHORT CYCLE PRESENTATION AND CRITICAL FRIEND PROTOCOL

Opening Remarks/Framing:

Step 1: Presenting LEA's Short Cycle Presentation (14 minutes)

- Data, Root Cause Analysis, Focus, Problem of Practice, Change Action, Theory of Action, and PDSA including time-line and Data Outcomes vs. Theory of Action/prediction
- Share an issue or concern you have as you plan your next Short Cycle framed as a question.
- Make sure you let the listening LEA know exactly what you want to get from their discussion.

FACILITATOR FOLLOW-UP QUESTIONS (IF NOT ADDRESSED IN PRESENTATION):

1. What is your issue or concern you have as you plan your next short cycle framed as a question?
2. What were your intended results? What were your actual results?

Step 2: Listening LEA Asks Probing and Clarifying Questions (5 minutes)

- Ask questions to learn more about the issue
- Remember to withhold advice

FACILITATOR GUIDANCE

1. Make sure people are asking clarifying (e.g. tell me more about...) or probing questions (e.g. how were you able to...?)
2. What let you know you've reached your goal?
3. What's the best that could happen with your short cycle?

Step 3: Listening LEA Discusses Presenting LEA Question/Issue (10 minutes)

- Each person in the Listening LEA team provides feedback both 3 positives and 1 clarifying/critical.
- Please use a supportive tone and provide practical suggestions.

FACILITATOR GUIDANCE

1. Presenting LEA's issue or concern they have as they plan their next short cycle is _____.
2. Our best practice that worked in the past is _____.
3. I wonder if there might be another issue?

Presenting LEA Takes Notes

Once the listening LEA begins to discuss Presenting LEA's (issue/concern) question, it is critical that you are not drawn into the discussion. Your role is to listen and take notes. It is very important to try to withhold any reaction to what is being said, but to remain impartial and listen.

Step 4: Presenter Response (5 minutes)

Presenting LEA summarizes the feedback: "I heard you say..." "Overall, I heard..."

Refrain from trying to continue the discussion

Step 5: Debrief (1 minutes)

- Facilitator critiques the process (specific positive/constructive feedback)
- What worked, what did not?

FACILITATOR GUIDANCE:

1. Presenting LEA did a great job on _____ (e.g. short cycle, plan, do, study, providing positive feedback and posing a challenge etc.)
2. Presenting LEA can elaborate more of _____ (e.g. posing issue or concern etc.)

Protocol #2 Partner Lead's Short Cycle Presentation and Critical Friend - Adapted from Tuning Protocol National School Reform Faculty



SUSTAINING THE CONTINUOUS IMPROVEMENT CULTURE AND THE FIVE CULTURAL PITFALLS PREVENTING YOU FROM SUCCEEDING

This handout is intended to be used by individuals and teams to analyze their team culture based on the 5 Cultural pitfalls in *How To Succeed With Continuous Improvement* by Joakim Ahlström.

1 THE LOW-HANGING FRUIT TRAP

Common during the first phase of CI journey, because the fruit is easy to attain and be a quick and sure win for the team. While randomly picking the low hanging fruit may provide your team with some results it does not build the capacity of the team or allow for systemic habits for improvement.

Where are you and your colleagues?

How do you get out of the trap?

2 THE REALITY ILLUSION

When you assume that another person understands and perceives a situation, event, etc. in the same manner as you do. This fails to account the way facts are perceived vary by individuals, each individual has their own reality.

Where are you and your colleagues?

How do you get out of the trap?

3 THE EMPEROR'S NEW CLOTHES

Most common in organizations that have spent a lot of time and resources to create and implement the 'right' structure, tools and methods. While the right tools are being used the purpose behind the work has been lost and/or forgotten, they go through the motions of CI work without deep thought on intention.

Where are you and your colleagues?

How do you get out of the trap?

Adapted from:
www.succeedwithci.com/files/culturalpitfallsanalysis.pdf

4 THE EFFICIENCY PARADOX

Being seen busy, active and stressed are praised. Departments are busy keeping people busy but the organization fails to get much done. There is a feeling of guilt when you reach a moment to reflect.

Where are you and your colleagues?

How do you get out of the trap?

5 THE FRIENDSHIP FALLACY

People are rarely held to be accountable and responsible with a waning committed towards improvement initiatives. People fear asking of others to avoid possibilities of negative feelings and responses arising out of being asked to do their job.

Where are you and your colleagues?

How do you get out of the trap?





Rethinking Scale: Moving Beyond Numbers to Deep and Lasting Change

by Cynthia E. Coburn

The issue of “scale” is a key challenge for school reform, yet it remains undertheorized in the literature. Definitions of scale have traditionally restricted its scope, focusing on the expanding number of schools reached by a reform. Such definitions mask the complex challenges of reaching out broadly while simultaneously cultivating the depth of change necessary to support and sustain consequential change. This article draws on a review of theoretical and empirical literature on scale, relevant research on reform implementation, and original research to synthesize and articulate a more multidimensional conceptualization. I develop a conception of scale that has four interrelated dimensions: depth, sustainability, spread, and shift in reform ownership. I then suggest implications of this conceptualization for reform strategy and research design.

After many years of intense educational reform, educators, policymakers, and researchers still grapple with the question of how pockets of successful reform efforts might be “scaled up.” This issue has attained an increasingly high profile in the United States with the rise of prominent reform networks (e.g., Accelerated Schools, Coalition of Essential Schools [CES], Comer Schools, Success for All, and the New American Schools projects) and increased federal funding for research-based comprehensive school change initiatives. Yet as the issue of “scale” emerges as one of the key challenges for educational reform, it remains largely undertheorized in the educational literature (Elmore, 1996; Gamson, 1998).

To date, most educational research that focuses on scale has tended to define it in unidimensional ways, involving solely or predominantly the expansion of numbers of schools reached by a given reform effort. But taking an external reform initiative to scale is a complex endeavor. It not only involves spreading reform to multiple teachers, schools, and districts as highlighted by conventional definitions, it also involves all the challenges of implementing reform documented by decades of implementation research (Elmore, 1996) and of sustaining change in a multilevel system characterized by multiple and shifting priorities (McLaughlin & Mitra, 2001; Stokes, Sato, McLaughlin, & Talbert, 1997). It is the simultaneity of these challenges, in all their complexity, that makes the problem of scale fundamentally multidimensional. While there is a small but growing body of work that raises theoretical challenges to the predominant definition and provides

evidence for the multidimensional nature of scale, this work has yet to be brought together and synthesized. Thus, the traditional definition continues to hold considerable weight, framing most empirical studies and forming the foundation of many theoretical discussions on scale.

How educational researchers and reformers define scale matters, for it influences both the ways reformers and policymakers craft reform strategies and the ways researchers study the problem of scale. As Hatch (1998) argues, reformers draw on sets of assumptions—both explicit and unarticulated—about the goals, challenges, and processes of change as they develop strategies for working with schools and districts. Notions of the nature of scale constitute one set of these assumptions and, as such, shape the kinds of choices reformers make.¹ And for researchers, different definitions of scale focus the analytic eye in strategically different ways, suggesting alternative indicators of the processes and outcomes of scale.

In this article, I bring together seeds of an alternative conceptualization from literature on scale with relevant research from reform implementation and my own research to synthesize and articulate an elaborated conceptualization of scale. I argue that definitions of scale must include attention to the nature of change in classroom instruction; issues of sustainability; spread of norms, principles, and beliefs; and a shift in ownership such that a reform can become self-generative. In so doing, I hope to address key issues that research suggests are central to the challenges of implementing and sustaining external reform initiatives in multiple classrooms, schools, and districts. I then suggest implications of this elaborated conception for both research and reform strategy, arguing that it calls for researchers to broaden research designs to capture heretofore neglected outcomes, and for reformers to direct increased attention to additional dimensions of scale that may prove critical to schools’ abilities to sustain and deepen reform over time. Finally, I highlight tensions raised by this conception, tensions that I believe stem from the very multidimensionality of the construct.

Reconceptualizing Scale

Most research on scale tends to define what it means to “scale up” an external reform in quantitative terms, focusing on increasing the number of teachers, schools, or districts involved (Blum, 1997; Bodilly, 1998; Datnow, Hubbard, & Mehan, 2002; Datnow, Stringfield, McHugh, & Hacker, 1998; Fullan, 2000; Hargreaves & Fink, 2000; Honig, 1994; Hubbard & Mehan, 1999; Klein, McArthur, & Stecher, 1995; Legters, Balfanz, Jordan, & McPartland, 2002; McDermott, 2000; Slavin, 1997; Slavin & Fashola, 1998; Slavin & Madden, 1994; Smith et al., 1998;

Stringfield & Datnow, 1998; Stringfield, Datnow, Ross, & Snively, 1998). In an admirably concise formulation of the predominant view, Stringfield and Datnow define scaling up as “the deliberate expansion to many settings of an externally developed school restructuring design that previously has been used successfully in one or a small number of school settings” (1998, p. 271). Within this conceptualization, theorists differ in whether they define scale to involve *replication* of the reform in greater numbers of schools (Cooper, Slavin, & Madden, 1997; Fuchs & Fuchs, 1998; Legters et al.; Slavin; Slavin & Madden; Taylor, Nelson, & Adelman, 1999) or emphasize a process of *mutual adaptation* (Datnow et al., 2002; Hubbard & Mehan; Klein et al.; Mead & Simon, 1996; Stringfield & Datnow) whereby schools are encouraged to adapt reform models to the needs of their local context. Another variation of this theme incorporates concerns for *geographic proximity*, defining scale in terms of an increase in the number of schools involved in a reform effort to achieve a critical mass in a bounded area such as a school district (Bodilly). But whether by replication or adaptation, within a bounded geographic area or not, at root, for these theorists, the problem of scale tends to be framed, at least explicitly, as the problem of increasing the numbers of teachers, schools, or districts involved in a reform.

This definition is attractive in its simplicity, its intuitiveness, and its measurability. But what does it really mean to say that a reform program is scaled up in these terms? It says nothing about the nature of the change envisioned or enacted or the degree to which it is sustained, or the degree to which schools and teachers have the knowledge and authority to continue to grow the reform over time. By focusing on numbers alone, traditional definitions of scale often neglect these and other qualitative measures that may be fundamental to the ability of schools to engage with a reform effort in ways that make a difference for teaching and learning.

There is a growing body of work, however, that raises questions about traditional definitions of scale, suggesting, among other things, the need for greater attention to the depth of implementation and a shift in reform ownership (e.g., Elmore, 1996; McLaughlin & Mitra, 2001). Other studies, many of which explicitly invoke the unidimensional definition of scale, nevertheless provide evidence for its multidimensional nature (e.g., studies that highlight the challenges of sustainability or suggest elements required for a shift in knowledge and authority). Finally, there are a few studies that provide initial guidance about the kinds of research designs that may be necessary to capture additional dimensions of scale (e.g., Corcoran, 2003; Datnow, Borman, & Stringfield, 2000; Datnow & Yonezawa, in press). Taken together, the results of these various research streams suggest that an expanded and refined definition of scale is in order.

In this article, I draw on a comprehensive review of existing theoretical and empirical literature on scale,² relevant research on reform implementation, and our own research on attempts to take an external reform called the Child Development Project (CDP) to scale³ to synthesize and articulate an elaborated conceptualization of the problem of scale. I argue that expanding a reform to multiple settings is a necessary but insufficient condition for scale. That is, scaling up not only requires spread to additional sites, but also consequential change in classrooms, endurance over time,


and a shift such that knowledge and authority for the reform is transferred from external organization to teachers, schools, and districts. Thus, I propose a conceptualization of scale comprised of four interrelated dimensions: depth, sustainability, spread, and shift in reform ownership. In the sections that follow, I take each of these four dimensions in turn, developing and illustrating the concept. I then suggest implications for reform strategy and research design.⁴

Depth

In practice, most reformers and researchers place a high priority on the nature and quality of implementation of reforms that are being taken to scale. Yet this priority is not embedded in traditional definitions of scale, the numerical emphasis of which often obscures questions of what counts as school change. At best, the absence of explicit attention to the nature and quality of change provides limited conceptual guidance on what it really means for an external reform to be successfully implemented. At worst, it diverts attention from the central purpose of most attempts to take reform to scale: to improve teaching and learning for large numbers of students.

This lack of focus on the nature of change within the definition of scale itself is particularly problematic given what we know about the challenges of making change in classroom practice. The history of public schooling is replete with evidence of reforms that barely scratched the surface of schooling, failing to reach into the classroom to influence instruction (Cuban, 1988; Elmore, 1996; Elmore, Peterson, & McCarthy, 1996; Sarason, 1971; Tyack & Cuban, 1995). Furthermore, when teachers do bring reforms into their classrooms, they do so in ways that vary, at times substantially, in depth and substance (Coburn, 2002; Datnow et al., 2002; EEPa, 1990; Jennings, 1996; Spillane, 1999; Spillane & Jennings, 1997; Spillane, Reiser, & Reimer, 2002). Because teachers draw on their prior knowledge, beliefs, and experiences to interpret and enact reforms, they are likely to “gravitate” toward approaches that are congruent with their prior practices (Spillane 2000, p. 163), focus on surface manifestations (such as discrete activities, materials, or classroom organization) rather than deeper pedagogical principles (Coburn, 2002; Spillane, 2000; Spillane & Callahan, 2000; Spillane & Zeuli, 1999), and graft new approaches on top of existing practices without altering classroom norms or routines (Coburn, 2002; Cuban, 1993). All of this suggests that reaching the classroom cannot be taken for granted and that what counts as classroom implementation must be carefully defined.

To that end, I propose that the nature of change take center stage in conceptualizations of scale. More specifically, to be “at scale,” reforms must effect deep and consequential change in classroom practice (see also Elmore, 1996; McLaughlin & Mitra, 2001; Olson, 1994a on this point). By “deep change,” I mean change that goes beyond surface structures or procedures (such as changes in materials, classroom organization, or the addition of specific activities) to alter teachers’ beliefs, norms of social interaction, and pedagogical principles as enacted in the curriculum. By *teachers’ beliefs*, I am referring to teachers’ underlying assumptions about how students learn, the nature of subject matter, expectations for students, or what constitutes effective instruction. Many external reform initiatives promote a view of



teaching and learning that challenges conventional beliefs about one or more of these dimensions. The question is: Do teachers' encounters with reform cause them to rethink and reconstruct their beliefs? Or do they alter reforms in ways that reinforce or reify pre-existing assumptions?

By *norms of social interaction*, I am referring to teacher and student roles in the classroom, patterns of teacher and student talk, and the manner in which teachers and students treat one another. This dimension is an important component of depth because many external reform efforts explicitly target these central aspects of classroom life. For example, reforms rooted in constructivist learning theory seek to alter traditional student and teacher roles (e.g., ATLAS and Fostering a Community of Learners). Reforms that emphasize collaborative learning seek to increase student-student talk around matters of teaching and learning (e.g., Success for All). And reforms that address the environment for learning in schools and classrooms seek to shape the nature and quality of teacher-student and student-student relationships (e.g., CDP, CES, and Comer Schools). But beyond a reform's specific focus, norms of social interaction reveal much about teachers' views about where expertise and knowledge is located in the classroom and how knowledge is developed (Bransford, Brown, & Cocking, 2000; Spillane & Zeuli, 1999; Stokes et al., 1997).⁵

Finally, and perhaps most importantly, depth involves changes in *underlying pedagogical principles* embodied in the enacted curriculum. Following Cohen and Ball (1999), I define enacted curriculum as the ways that students and teachers engage with particular materials or activities over time. Abundant research has illustrated the way pre-specified tasks and curriculum are often transformed as they are enacted (Coburn, 2001; Hoffman, et al., 1998; Spillane & Jennings, 1997; Spillane & Zeuli, 1999; Stein, Grover, & Henningsen, 1996), with implications for the nature of pedagogical approaches, representations of subject matter, and learning opportunities for students. Thus, it is important to look beyond the presence or absence of specific materials or tasks to the underlying pedagogical principles embodied in the ways teachers engage students in using these materials and tasks.

Some may argue that these components of depth are more appropriate for principle-based reforms than for materials or activity-based reforms that might have greater elaboration or even scripting. However, most if not all reforms, even those that are *not* explicitly principle based, "carry" sets of ideas about what constitutes appropriate instruction. That is, ideas about the nature of the subject matter, valued student outcomes, how students learn, and appropriate and effective pedagogy are embedded in the materials or activities. Thus, these approaches *do* put forth particular pedagogical principles, albeit in an often-implicit manner. Thus, it is appropriate to track the enactment of these pedagogical principles. In addition, many activity- or materials-based reforms, including those that are scripted, construct activities in ways that seek to alter norms of teacher-student and student-student interaction. Critics might also argue that the components of depth I propose are more appropriate for reforms that promote "ambitious pedagogy" than those promoting more conventional approaches to teaching and learning. Although I agree with theorists who suggest that it is more challenging to make consequential change in practice the further proposed practice is from existing practice (Cohen & Ball, 2000), I argue that any reform that seeks

to promote change in classroom practice can be implemented at varying degrees of depth.⁶

A conception of scale that fully incorporates depth has key implications for research design, suggesting not only an increased emphasis on measures of classroom change, but also a focus on measures that capture beliefs, norms, and pedagogical principles as enacted in the classroom. While many studies of scale do include some measure of the degree of implementation in classrooms, researchers often measure implementation in terms of the presence or absence of materials or prescribed activity structures (e.g., Berends, 2000; Berends, Kirby, Naftel, & McKelvey, 2001; Cooper et al., 1997). Other studies provide such limited methodological information about classroom implementation that it is difficult to ascertain the degree to which researchers rely upon surface-level changes in materials or activities or changes in underlying norms, beliefs, and principles (e.g., Smith et al., 1998; Supovitz, Poglinco, & Snyder, 2001). Yet, as Spillane and Jennings (1997) demonstrate, it is possible to come to very different conclusions about the degree of implementation of reform practice depending upon whether a researcher focuses on activity structures and material use versus what Spillane and Jennings call "'below-the-surface' differences in pedagogy" (p. 453). Thus, measuring deep and consequential change in classroom practice requires explicit attention to beliefs, norms, and pedagogical principles.

Existing research in reform implementation and a few studies of scale suggest a range of possible strategies for capturing these dimensions of classroom change. Although not a study of scale, researchers with the QUASAR project (Quantitative Understanding Amplifying Student Achievement and Reasoning) investigated changes in mathematics instruction over a 5-year period videotaping classroom instruction and analyzing mathematical tasks as they unfolded in teachers' classrooms. In other words, they studied the enacted curriculum, analyzing the nature of the cognitive demands and such features of the tasks as the potential for multiple solutions and the requirements for student explanation or justification (Stein, Grover, & Henningsen, 1996; Stein, Henningsen, & Grover, forthcoming). In a study of scale-up of external school reforms in 13 schools, Datnow and Yonezawa (in press) used an observation instrument that combined ethnographic field notes with a structured observation protocol. By combining these approaches, not only were they able to capture the presence or absence of design elements, such as the use of cooperative learning or alternative assessment, but they also were able to analyze the character and quality of social interaction and the enactment of pedagogical principles underlying the designs. For example, the instrument required observers to analyze ethnographic field notes to determine if and how pedagogical principles in the CES, such as "tone of decency," "teacher as coach," and "personalization," were enacted in the classroom.

The increased emphasis on depth as a key element of scale calls into question the degree to which classroom implementation can be assessed using survey methods alone. Capturing depth may require in-depth interviewing and classroom observation, refocused on such indicators as the nature of instructional tasks, discourse patterns in the classroom, and teachers' conceptions of knowledge and learning. Other methods less often used in studies of scale, such as the systematic collection of student work samples or the use of teacher logs (see, for example, Ball, Camburn,

Correnti, Phelps, & Wallace, 1999), may also have the potential to capture fundamental changes in classroom instruction.

Sustainability

As a second element of scale, consequential change must be sustained. The concept of scale primarily has meaning over time. The distribution and adoption of an innovation are only significant if its use can be sustained in original and even subsequent schools. Reforms can be adopted without being implemented, and can be implemented superficially only to fall into disuse. Yet, while the idea of sustainability is fundamental to scale-up, few conceptualizations address it explicitly. It only rarely appears in theoretical and empirical pieces (Elmore, 1996; McLaughlin & Mitra, 2001, are exceptions). Most discussions address issues of sustainability and scale separately, obscuring the way that scale, in fact, depends upon sustainability. And, perhaps most seriously, only a minority of studies of scale have employed designs that have allowed these studies to investigate sustainability. For example, of the 44 publications on efforts to scale up external reforms reviewed for this article, only 18 publications involved investigations of schools that had been involved in the reform for 4 or more years. And only one explicitly looked at schools involved in reforms for which an implementation period with additional resources and attention had officially ended. Instead, most studies focus on schools in their first few years implementing a new external reform, failing, in our view, to capture sustainability.

Yet there is ample evidence that sustainability may be the central challenge of bringing reforms to scale. Schools that successfully implement reforms find it difficult to sustain them in the face of competing priorities, changing demands, and teacher and administrator turnover (Berends, Bodilly, & Kirby, 2002; Bodilly, 1998; Comer, Haynes, Joyner, & Ben Avie, 1996; Cuban, 1993; Fink, 2000; Hargreaves & Fink, 2000; Hatch, 2000; Healy & DeStefano, 1997; Louis & Miles, 1990; MacIver, Stringfield, & McHugh, 2000; McLaughlin & Mitra, 2001; Muncey & McQuillan, 1996; Stringfield & Datnow, 1998; Tyack & Cuban, 1995). Externally developed school reforms may be especially vulnerable to this problem because implementation typically involves a short-term influx of resources, professional development, and other forms of assistance to facilitate implementation that dissipates over time as external developers turn their attention to other sites (Datnow et al., 2002; MacIver et al.; McLaughlin & Mitra; Stokes, 1997).

This suggests the need for a renewed and vigorous dialogue, not just about the challenges of sustainability, but about strategies for providing schools with the tools they will need to sustain the reform, especially after initial influx of resources dissipates. Interestingly, recent research suggests that depth may play an important role in schools' and districts' capacity to sustain change. At the classroom level, teachers with a deep understanding of the pedagogical principles of a reform are better able to respond to new demands and changing contexts in ways that are consistent with underlying principles of reform, thus sustaining and, at times, deepening reform over time (Coburn & Meyer, 1998; McLaughlin & Mitra, 2001). But because classrooms are situated in and inextricably linked to the broader school and system, teachers are better able to sustain change when there are mechanisms in place at multiple levels of the system to support their efforts. This includes the

presence of a supportive professional community of colleagues in the school that reinforces normative changes and provides continuing opportunities to learn (McLaughlin & Mitra; Stokes et al., 1997), knowledgeable and supportive school leadership (Berends et al., 2002; Comer et al., 1996; Datnow et al., 2002; Fullan & Steigelbauer, 1990; Hargreaves & Fink, 2000; Legters et al., 2002; McLaughlin & Mitra; Muncey & McQuillan, 1996; Murphy & Datnow, 2003), connections with other schools or teachers engaged in similar reform (Cooper, Slavin, & Madden 1998; McDonald et al., 1999; Muncey & McQuillan), and normative coherence or alignment between the district policy context and the reform (Berends et al., 2002; Comer et al.; Datnow et al., 2002; McLaughlin & Mitra). Reformers, then, need to ask two questions: (a) Which strategies are effective at developing and nurturing depth in teachers' enactment of the reform? and (b) How can reformers work to create the key conditions in schools and districts that support and sustain classroom change over time?

The explicit focus on sustainability as a key element of scale also has implications for research design. At a most basic level, it highlights the need for designs that actually allow researchers to assess whether or not changes in schools and classrooms persist over time. Existing studies suggest a range of possible strategies to capture sustainability. In our research on the CDP, we studied schools and districts for 2 years after formal funding for the 4-year initiative had ended. Thus, the schools in the study been involved with the reform effort for 6 years. Furthermore, they had experienced a transition from a 4-year period of intensive involvement with reform developers, additional influx of resources, and some protection from the district, to one where they had to continue the reform with few additional resources or special treatment from the district. This research design allowed us to investigate whether or not and how schools sustained the reform after an external partner and funding dissipated. Other studies in the literature on scale employ designs that sample schools with a range of years of experience participating in the reform (Cooper et al., 1998; Datnow et al., 2000). For example, in a mixed-method study of implementation and sustainability of Success for All, Cooper and his colleagues (1998) sampled schools that had participated in Success for All from 1 to 8 years. In another example, in their 3-year study of the Core Knowledge program, Datnow et al. (2000) sampled schools that were new to the program and schools that had been involved in the program for at least 2 years at the start of the study that were identified as "advanced" in their implementation. At a minimum, these designs allow researchers to be certain that studies of scale actually included schools that moved beyond initial implementation to sustain external reform efforts over time. But these designs could also potentially provide researchers a rich opportunity to explore if and how the challenges and processes involved with sustaining reform efforts differ at different stages of a school's experience with the reform. We know a lot about challenges to sustainability in the early years of reform. But how do these challenges differ as reforms mature and initial energy, personnel, and funding dissipate? Research designs such as these become vitally important as issues of sustainability move to the forefront of conceptualizations of scale.

Spread

As should be clear, the central insight of traditional definitions of scale—the spreading of reform to greater numbers of classrooms and schools—remains the core of the expanded conceptualization offered here. I have already discussed the importance of taking into consideration *what* is spread, suggesting that scaling up must involve more than the spread of activity structures, materials, and classroom organization; it must also involve the spread of underlying beliefs, norms, and principles to additional classrooms and schools. But this more explicit focus on norms and principles also suggests a modification in the notion of spread itself. Rather than thinking of spread solely in terms of expanding outward to more and more schools and classrooms, this emphasis on the normative highlights the potential to spread reform-related norms and pedagogical principles *within* a classroom, school, and district. For example, at the district level, spread not only involves increasing the number of schools that participate, but also the ways in which reform norms and principles influence district policies, procedures, and professional development (see, also, Comer et al., 1996, on this point). Spread at the school level not only involves the reform moving to more and more classrooms, but also reform principles or norms of social interaction becoming embedded in school policy and routines. At the classroom level, a reform can spread within as teachers begin to draw on reform norms and principles in aspects of their practice beyond specific reform-related activities or subject matter (McLaughlin & Mitra, 2001).

While I do not mean to suggest that all reformers do or should seek to foster spread within, recognizing this aspect of spread may be especially important given evidence of the key role of normative coherence at the school, in district, and in the broader environment in sustaining reform. As discussed earlier, teachers and schools are more likely to be able to sustain and deepen reform over time when school and district policy and priorities are compatible or aligned with reform. Spreading reform norms, beliefs, and principles within schools and districts may be a key mechanism for developing this normative coherence (Coburn & Meyer, 1998). Thus, this type of spread may be especially important for reforms that challenge conventional or institutionalized approaches to teaching and learning in significant ways.

Broadening notions of spread to include spread within the system raises strategically different issues for reformers. For example, it suggests a different way to think about the role of the district in spreading a reform effort. Typically, reformers have focused on the degree to which the district can provide support or protection for schools implementing a reform (Bodilly, 1998; Hatch, 1998; McDonald et al., 1999; Olson, 1994b; Slavin & Madden, 1996). Recasting spread to include spread of norms and principles within suggests that the district's role may be important beyond the support it provides to schools or as a way to create geographic proximity; the district may be a strategic site for spread itself. External reformers might then focus on threading reform ideas throughout the district office, creating knowledgeable leaders who can influence policy, procedures, and values.

Taking into account “spread within” also has implications for research. If we broaden notions of spread to include “spread within,” we must also broaden the indicators used to measure

spread. However, because research on scale has so rarely explored this dimension of spread, there are few models to draw upon for guidance. One strategy is to draw on wisdom from implementation research that investigates the enactment of pedagogical principles and shifting norms of interaction at the classroom level and apply this wisdom to different levels of the system. For example, to capture spread within the district, researchers could borrow the notion of enacted curriculum and track the degree to which pedagogical principles of the reform are embedded in district policy and enacted in district professional development. Corcoran's (2003) study of the Merck Institute for Science Education's (MISE) work in four districts provides an illustration of this approach. He documents how collaboration with MISE influenced science frameworks, teacher observation procedures, allocation of instructional resources, and approaches to professional development in participating districts. Researchers could also investigate shifts in district's standard operating procedures over time (e.g., procedures for curriculum decisions, ongoing interaction with school leaders, roles for teacher leaders) to ascertain the degree to which the reforms influence these norms of interaction.⁷ Similar strategies might also be applicable at the school level.

Finally, to capture “spread within” at the classroom level, researchers could investigate the degree to which teachers draw on pedagogical principles and norms of interaction in areas of the classroom beyond those subjects, times of day, or particular activities targeted by reform (see McLaughlin & Mitra, 2001, for an example of this strategy). In broadening indicators of spread in this way, researchers have the potential to capture aspects of spread that may prove important for understanding the influence of external reforms on schools and systems.

Shift in Reform Ownership

Finally, to be considered “at scale,” ownership over the reform must shift so that it is no longer an “external” reform, controlled by a reformer, but rather becomes an “internal” reform with authority for the reform held by districts, schools, and teachers who have the capacity to sustain, spread, and deepen reform principles themselves. In most cases, when schools embark on external reform efforts, the knowledge and authority for the reform is situated outside the school, usually with the outside provider responsible for spreading the reform. Yet, ultimately, it is the teacher's, school's, and, in some cases, district's responsibility to enact and sustain the reform in ways that make a difference to students. One of the key components of taking a reform to scale, then, is creating conditions to shift authority and knowledge of the reform from external actors to teachers, schools, and districts. Or, as Stokes et al. (1997) argue, the reform must transition from “an externally understood and supported theory to an internally understood and supported theory-based practice” (p. 21). With this shift in ownership, the reform becomes self-generative (McLaughlin & Mitra, 2001).

Most conceptualizations of scale are virtually silent on the shift from external to internal (McLaughlin & Mitra, 2001, are the exception). Reformers and researchers who talk about the importance of “reform ownership” (see, for example, Cooper, 1998; Datnow & Castellano, 2000; Legters et al., 2002; Olson, 1994b; Slavin, 1997; Slavin & Fashola, 1998) often understand this concept as “buy-in” or acceptance, rather than a shift in knowledge

of and authority for the reform. These discussions of ownership are also much more likely to concern initial adoption and implementation (e.g., how to ensure teacher “buy-in”) rather than long-term sustainability and growth (e.g., how to develop capacity for school faculty to take the initiative to maintain reform in the face of constantly changing priorities). In addition, reformers have tended to have been much more concerned about how to develop their own capacity to continue to provide professional development and technical assistance as reforms spread (Bodilly, 1998; Olson, 1994b; Slavin & Madden, 1996, 1999; Stringfield & Datnow, 1998)—a task that grows geometrically with greater and greater spread—than how to work with schools and districts to develop the capacity necessary for them to assume authority and knowledge for the reform.

Although this component of scale is rarely explicitly incorporated into studies of attempts to take external reform efforts to scale, there are a few studies that provide hints about what such a transition might entail. Davila and Gomez (1995) describe a scale-up strategy that hinged on developing a cadre of knowledgeable teacher leaders who, over time, assumed responsibility for providing ongoing professional development to teachers new to the reform (see, also, Coburn & Meyer, 1998, on this point). Given high rates of teacher and administrator turnover in some communities as well as experienced teachers’ needs to deepen their approach over time (Muncey & McQuillan, 1996), it is likely that teachers and administrators will need ongoing professional development to sustain, deepen, and spread reform. This suggests that developing the capacity to provide reform-related professional development or other structures for ongoing teacher and administrator learning may be a central feature of shifting authority and ownership for the reform.

In another study, McLaughlin and Mitra (2001) point out that shift in reform ownership also requires transferring substantive and strategic decision making from the reform organization to district and school leaders. This shift requires that reformers cultivate deep, reform-centered knowledge among key leadership and model ways to draw upon that knowledge in ongoing decision making (McLaughlin & Mitra; Stokes et al., 1997). Teachers, school leadership, and district leadership need to exercise this reform-centered decision making as they work to sustain practice in the face of new circumstances, initiatives, and priorities that may or may not conflict with reform. For example, our study of the CDP suggests that leaders with in-depth understanding of reform principles were better able to interrogate new policy and reform initiatives to ascertain the degree to which they were coherent with the CDP, rejecting or altering initiatives that they deemed incongruent and weaving the CDP into new initiatives and priorities that appeared congruent (Coburn & Meyer, 1998). Furthermore, schools and districts may need this depth in substantive and strategic decision making if they are to fully take on the responsibility of spreading reform over time.

Finally, shift in ownership may require that schools and districts develop the capacity to generate continued funding for reforms. Many reform efforts are supported by external grant funds or policy initiatives that are finite. Yet, activities such as ongoing professional development and other efforts to spread and deepen reform also require funding. Thus, reform ownership may re-

quire the capacity to think creatively about reallocating existing funding streams and/or the capacity to locate and secure additional grant funding to support activities that deepen and spread reform over time (Coburn & Meyer, 1998).

All of this suggests that depth of reform-centered knowledge—not only at the classroom level but also among leaders at multiple levels of the system—is a key element in shifting ownership and authority of reform. It further suggests that shift in reform ownership may be a central element in sustaining and spreading reform in the face of shifting priorities, changes in funding, and challenges to policy coherence.


Placing reform ownership as a central element of scale raises the priority for directing reform attention and resources to strategies that have the potential for enabling schools and districts to assume ownership for the reform over time. To date, discussions of the shift from external to internal have been relatively absent in the literature, and yet, there are many strategic questions to consider. What strategies are effective in cultivating the capacities necessary to assume authority for reform? Are these strategies different at different levels of the system (classroom, school, district)? Should they vary for different kinds of reforms? How can reformers lay the groundwork for a shift from external to internal from the early days of engagement with a school or district?

This reconceptualization of scale also has implications for researchers. Shift in reform ownership has rarely been incorporated into studies of attempts to take external reform efforts to scale; thus, it represents a new outcome for studies of scale. Existing research suggests several preliminary indicators for shift of reform ownership at the school and district levels: (a) the presence of structures and mechanisms for ongoing teacher learning about reform (e.g., professional development, teacher study groups); (b) the presence of established strategies to provide continued funding for reform activities; (c) the degree to which districts have taken responsibility for continued spread of reform; and (d) the use of reform-centered ideas or structures in school or district decision making. However, more research is clearly needed to elaborate, extend, and validate these indicators.

Discussion

The problem of scale remains one of the most pressing issues in educational reform and improvement. In an effort to capture the multidimensional nature of the problem, I offer an elaborated conceptualization of scale that requires that reform not only reach more widely but also more deeply into schools to effect and sustain consequential change. It emphasizes the spread of norms, beliefs, and pedagogical principles both between and within classrooms, schools, and districts. And it includes an additional outcome—the shift in ownership—that may prove key to schools’ and districts’ abilities to sustain and spread the reform over time. By highlighting depth, sustainability, spread, and ownership, this expanded conceptualization brings them to the forefront of discussions of reform strategy, articulating goals and raising questions about effective approaches to help schools and districts achieve these goals. It also points to the need for new research designs better suited to capture this more complex vision.

Broadening the definition of scale in this way, however, also highlights inherent tensions for both researchers and reformers. For researchers, this conceptualization emphasizes dimensions of



scale that are more challenging to measure. It is more challenging to measure conceptual change or enacted pedagogical principles than the presence or absence of activities or materials. It is more challenging to measure the spread of norms of interaction than the number of teachers or schools involved in an initiative. And it is arguably more challenging to measure the shift in authority over and knowledge of reform than reform adoption and sustainability. There are also tradeoffs in resources, time, and effort in studying breadth versus depth. Research strategies that capture depth and shift in ownership, most often qualitative, tend to be more expensive and time consuming than survey and other quantitative methods better suited to capture breadth.

But it seems important to wrestle with these challenges to ensure that we develop research designs that capture what is important rather than only what is easily measurable.⁸ To that end, we need continued conceptual and methodological development to identify and validate measures of such heretofore neglected dimensions of scale as spread within schools and districts, and shift in reform ownership at multiple levels of the system. We need to explore creative and cost-effective ways to study schools that have been engaged in reform initiatives for more than a few years. And if our argument is persuasive that we need to investigate the multiple dimensions of scale to fully understand the long-term dynamics and success of reform scale-up, we need a continued dialogue on how to strike the appropriate balance between depth and breadth.

For reformers, there are also tensions. Like researchers, reform organizations must navigate the tension between breadth and depth. The capacity building at multiple levels of the system that may be necessary for depth and reform ownership is likely to be expensive and resource-intensive, which may limit developers' ability to expand as broadly (see Comer et al., 1996; McDonald et al., 1999; Muncey & McQuillan, 1996; Slavin & Madden, 1999 for further discussion on this point). This tension may grow increasingly acute the more the reform diverges from existing practice and the more complex or comprehensive the reform's approach and goals (Cohen & Ball, 2000; Cuban, 1988). That is, the more challenging a reform is to teachers' existing beliefs and practices, or the more aspects of classroom practice or levels of the system it engages, the more it may need well-elaborated materials and sustained, ongoing professional development to achieve depth.⁹ Similarly, reforms of this nature may require more effort on the part of reformers to work with multiple levels of the system to encourage normative coherence and sustainability.¹⁰ This suggests that the more ambitious a reform, the more challenging it may be to simultaneously achieve spread, sustainability, and depth.

It is possible that some of the tension between depth and breadth can be mitigated through the design of the reform itself. For example, the more that knowledge and guidance is built into the reform via greater elaboration or even scripting, the less reformers may need to invest in professional development. But this approach elicits other tensions. Absent some mechanism for teachers and others in the system to learn pedagogical principles and norms from the reform, it may be difficult for them to develop the deep knowledge and authority necessary for reform ownership. Similarly, this approach does not address the challenges of normative coherence at multiple levels of the system.

Finally, there are also tensions between reform ownership and fidelity, especially for reforms that place a high priority on fidelity to particular activity structures. As knowledge and authority shifts from external reform organizations to school and district personnel, the decisions about what aspects of the reform to emphasize or adapt no longer lie with the external reform organization. For reform organizations that advocate fidelity to underlying norms or principles, this is not troubling as long as school and district personnel have deep reform-centered knowledge. With such knowledge, teachers and others will theoretically be able to make decisions about the reform in ways that remain faithful to the underlying philosophy and pedagogical principles, thus mitigating some of the tension between reform ownership and fidelity (Brown & Campione, 1996; McLaughlin & Mitra, 2001). If, however, precise activity structures are key to the reform, as is sometimes the case with many reforms that advocate a replication approach to spread, the tension may prove difficult to navigate.

The research agenda on scale is still in the process of formation. With the growing number of external reforms with a longer history of development and use, conditions are ripe for studies that grapple with the challenges of creating research design to further explore the multidimensionality of scale. With attention to this multidimensionality, research can begin to speak more clearly and persuasively about the tensions and tradeoffs involved in different strategies to take reform to scale.

NOTES

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¹ Bodilly (1998) and Glennan (1998) provide a good illustration of this phenomenon with the New American Schools (NAS). NAS conceived of scale as increasing the numbers of schools in a bounded geographic area to create a critical mass. This construction influenced their decision to work closely with what they call "jurisdictional operating environments," most often districts, to spread reform models. In another vein, it is likely that reformers who view scale as replication of reform (e.g., Robert Slavin and Success for All) are apt to make strategically different choices in the nature of the materials, professional development, and strategies for follow-up than those reformers who conceptualize scale in terms of co-creation or mutual adaptation (e.g., Ted Sizer and the Coalition of Essential Schools) (McDonald et al., 1999; Olson, 1994b; Slavin & Madden, 1994, 1996).

² To identify literature on scale, I searched the ERIC database (1992–2002) using the following descriptors: "scaling up," "scale-up," "scale" and "reform," and "scale" and "innovation." (A search simply using the term "scale" was not practical for the ERIC database as it elicited 7,097 hits, many of which had to do with measurement issues.) I also searched the National Clearinghouse for Comprehensive School Reform (www.goodschools.gwu.edu/) using the descriptors "scale," "scaling up," and "scale-up." I then reviewed reference lists from the resulting studies, yielding many additional citations. Finally, to address reviewers' concerns about the limitations of these databases in identifying books, I searched the publication lists of the top 10 scholarly publishers

who publish books on educational research and reform. From all these searches, I selected only those pieces to review that met the following criteria. First, publications needed to be focused on the processes or outcomes of attempts to scale up external school reform efforts focused on improving classroom instruction. Thus, I excluded articles focused on state and district policy (such as standards and accountability programs) and the scale up of nonclassroom interventions (such as one-on-one tutoring programs, governance structures, or school-community collaborations). Second, because I was interested in several different genres, I selected pieces that were empirical studies, position papers or conceptual pieces, and descriptive accounts of reform strategies. In all, 44 books, articles, or book chapters from 19 different empirical studies, 18 position papers or conceptual studies, and 10 descriptive accounts of reform strategy met these criteria and, therefore, were included in the review.

³ The Child Development Project (CDP), a program of the Developmental Studies Center (DSC) in California, is a whole school reform program for elementary schools that emphasizes developing the social, ethical, and intellectual dimensions of learning among children (Battistich, Schaps, Watson, & Solomon, 1996; Battistich, Solomon, & Watson, 1998; Developmental Studies Center, no date; Watson, Battistich, & Solomon, 1997). In 1991, after 10 years of developing their model through close collaboration with two schools, the DSC engaged in a 4-year effort to bring the CDP to 12 schools in six districts. We began a study of the CDP in 1995, the year after the end of formal funding and the formal relationship between the DSC and the districts ended. Using a mixed-methods design, we followed a subset of schools and districts for 2 years after the end of formal funding. We then linked our data with data collected by DSC researchers during the 4 years of the project to track teachers', school leaders', and district personnel's experiences with the reform over 6 years (see Coburn & Meyer, 1998; and Stokes et al., 1997, for additional information on the study).

⁴ I limit the discussion to scaling up to external school- or classroom-based reforms focused on classroom instruction as most of the evidence on scale-up is rooted in studies of external reform initiatives. It is possible that the conceptualization I offer here may have relevance to issues of scale with policy initiatives. But given substantive differences in mechanisms of spread, funding, and authority relations with policy, it seems premature to extend the conceptualization beyond external reform initiatives absent additional evidence of its applicability.

⁵ It is important to note that norms of social interaction may be influenced by classroom organization (ways of grouping children) or activity structures (e.g., guided reading groups or writers' workshops). However, altering these elements does not necessarily result in shifting norms of interaction. For example, cooperative learning groups have the intention of increasing student-to-student interaction around matters of teaching and learning. Yet, as many researchers have pointed out, just because students are seated in cooperative groups does not mean that they are actually working cooperatively (Datnow et al., 2002; Datnow & Yonezawa, in press; Spillane & Jennings, 1997).

⁶ In this way, our conception of depth diverges from Hargreaves and Fink (2000) who, in defining depth as learning for social and emotional understanding, put forth a conception that is more rooted in constructivist or "ambitious" pedagogy.

⁷ Of course, the specific indicators that one would track would depend upon the focus of reform. For example, with Comer's School Development Project, which advocates for the use of collaborative and inclusive decision making as a central aspect of the reform (Comer et al., 1996; Cook, Habib, Phillips, Settersen, Shagle, & Degirmencioglu, 1999; McDonald et al., 1999), researchers could conceivably track changes in norms of interaction in district decision-making processes to evaluate the degree to which they reflect project norms. In another example, the CDP embraced a constructivist and situated approach to teacher professional development (Dasho & Kendzior, 1995; Develop-

mental Studies Center, no date; Lewis, Watson, & Schaps, 1997). In our research on the CDP, we investigated the degree to which districts drew on these pedagogical principles as they designed their own opportunities for continued professional development for teachers and principals. This, then, served as a key indicator of spread within the district for this reform.

⁸ This point was inspired by recent writing (e.g., Berends et al., 2002) on the challenges of accurately measuring student learning and achievement.

⁹ See Cohen and Ball 2000 for a more extended discussion of this point.

¹⁰ Some reformers have also argued that concentrating spread within a district is one way to reduce the human and fiscal resources devoted to managing the district policy environment (Comer et al., 1996) while increasing the likelihood of sustainability and spread (see Bodilly, 1998).

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COMMUNICATING YOUR JOURNEY



AT A GLANCE LEA PROFILE

LEA _____

FOCUS _____

LEA Description/Demographic

Problem of Practice Statement

Short Cycle #3:

Impact (Process and/or Student Outcome):

Short Cycle #1:

Impact (Process and/or Student Outcome):

Short Cycle #4:

Impact (Process and/or Student Outcome):

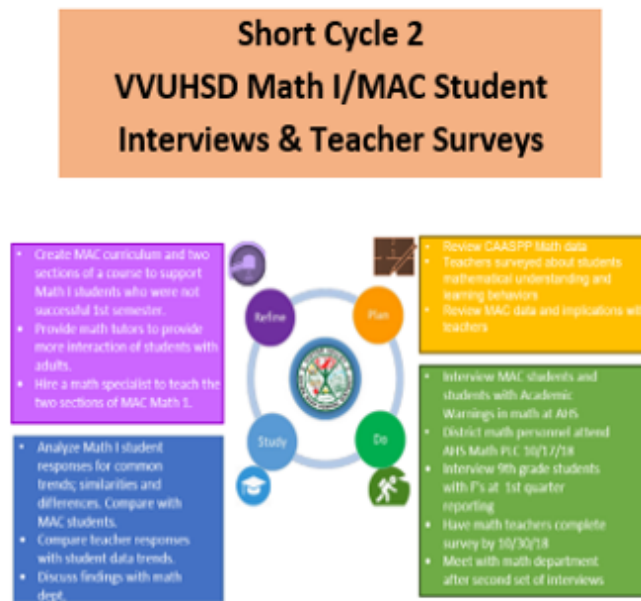
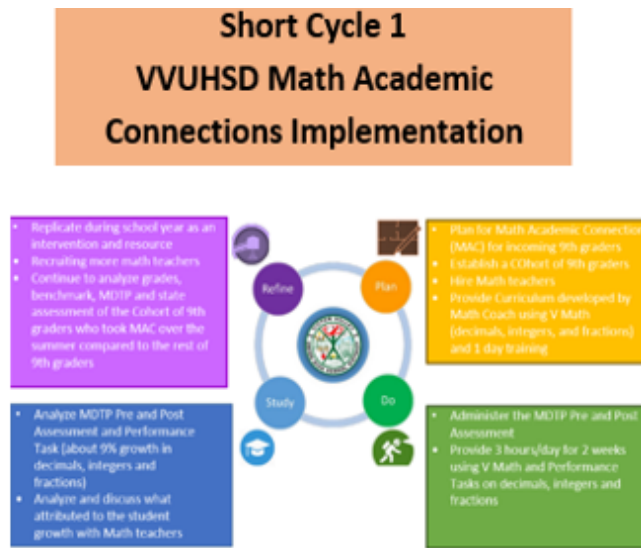
Short Cycle #2:

Impact (Process and/or Student Outcome):

Next Steps/Sustainability:



DISPLAY BOARD EXAMPLE



Handout #3 Board Display Example



Redefined, Redesigned, i
Teaching and Learning
Continuous In

Ron Williams, Ed.D.,
Carol Cronk, Ed.D., Coordina
Christine Foote, Director,

VVUHS Profile

- Eight Public Schools
- Approximately 10,300 students
- Approximately 1,100 staff members
- Numerous awards and accomplishments
- Approximately 85% Free and Reduced Lunch

Hispanic Latino - 65% African American - 20%
White - 8% Asian - 2% Two/More Races - 3%
Other - 2% Foster Youth - 1.5% Homeless - .9



The VVUHS
team @ the
June 2018
Management
Retreat.

The Victorville Way



- Corrective Action
- Analyze Difference



- Study Actual Results
- Compare Against Intended Results



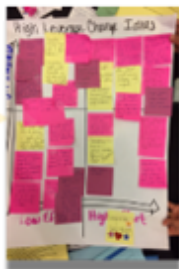


ned, and Re-Imagined our
 Learning Environments for
Improvement
 J.D., Superintendent
 Director, Educational Services
 Director, Educational Services

ts
 Lunch
 20%
 -3%
 - .9%



Our High Leverage
 Change Ideas for
 our Action Plan!



Vay: Our C. I. Model



Short Cycle 3 VVUHSD Math I Investment Strategy Implementation

- Increase sections of Summer Academic Connections.
- Utilize MAC curriculum from beginning of year.
- Replicate Math 1 plan at other high school sites (tutors, math specialist, instructional plan).

- Review academic growth of Math 1 students from beginning of year through second semester.
- Survey and interview teachers to determine their growth and growth of their students.



- Find instructional materials and create a pacing plan for second semester Math 1 essential standards for year.
- Advertise and interview potential math specialists for AHS.
- Collaborate with TechEd to obtain Chromebook carts for all math teachers.

- Create MAC curriculum and two sections of a course to support Math students who were not successful 1st semester.
- Provide math tutors to provide more interaction of students with adults.
- Hire a math specialist to teach the two sections of MAC Math 1.
- Create a credible final exam for MAC Math 1.
- Purchase Chromebook carts.

Short Cycle 4



VVUHSD Next Steps

Continue to expand continuous improvement cycles in the district as a way for managers to share and refine their work:

- District
 - Human Resources - staffing
 - Business Services - interim reports
 - Ed Services - curriculum
- Sites
 - Alignment of SPSAs with LCAP and Strategic Plan

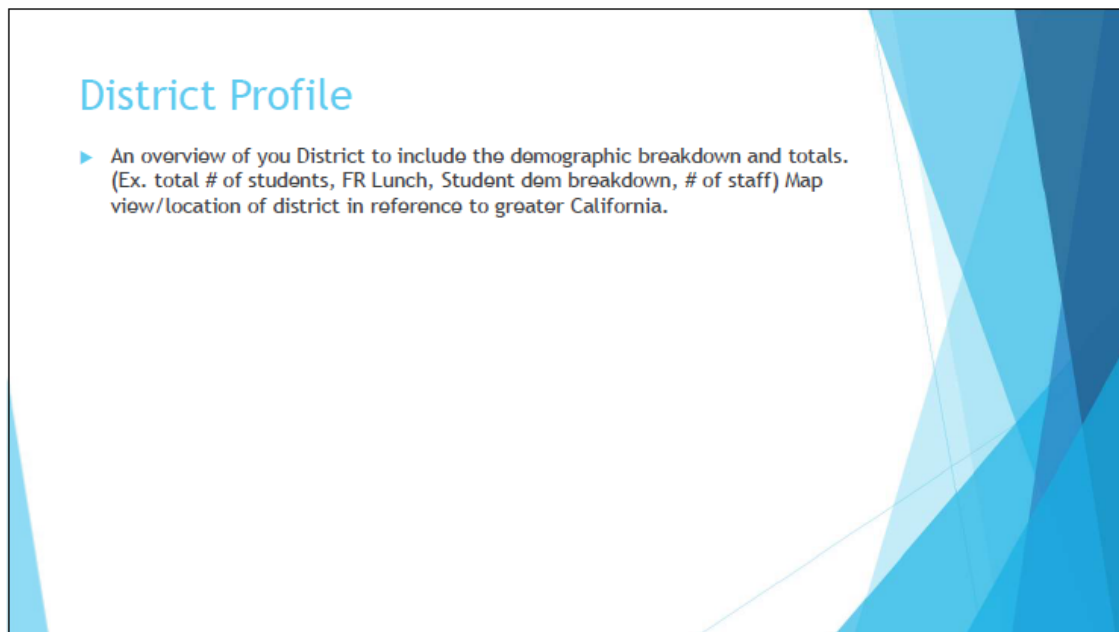


CONTINUOUS IMPROVEMENT POWERPOINT TEMPLATE

Pilot Partners used the flowing layout to share their CI work



1



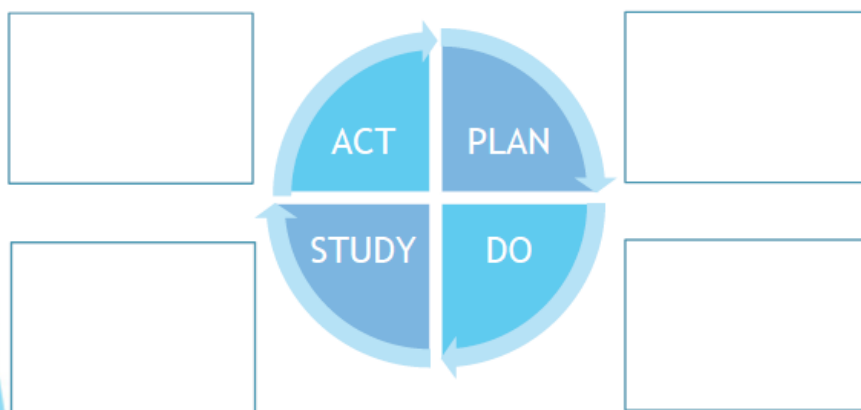
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Our Problem of Practice

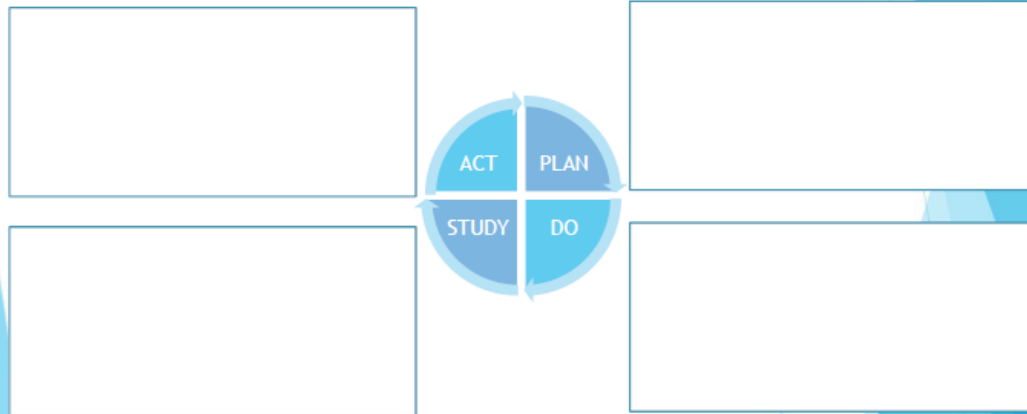
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(District Name) CI Model



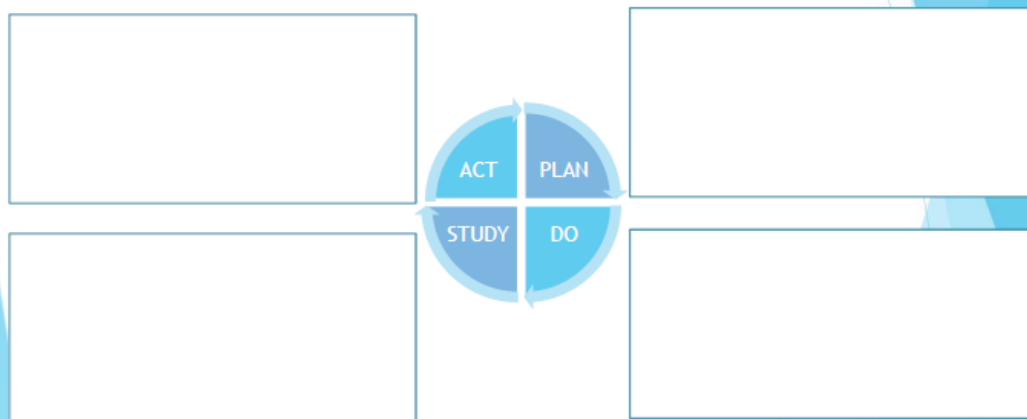
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Short Cycle 1 (Insert Focus for the cycle)



5

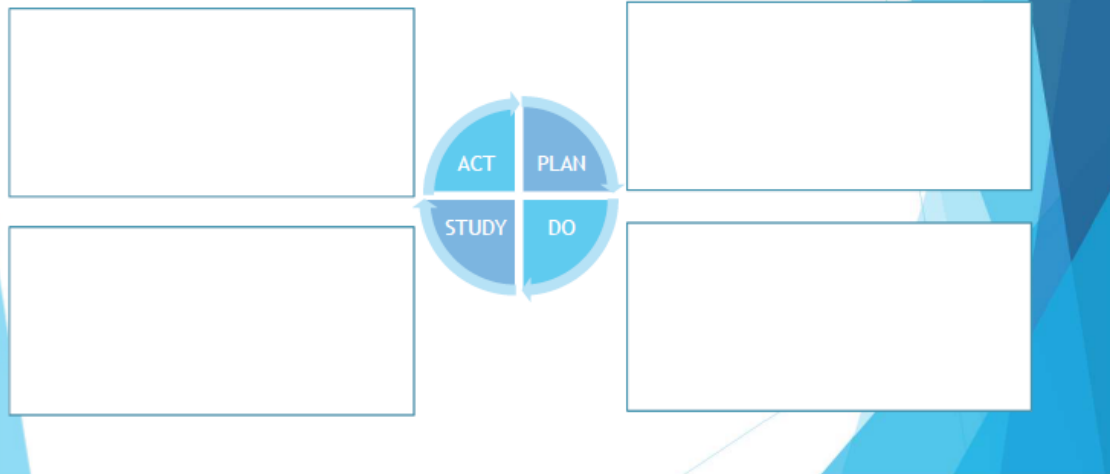
Short Cycle 2 (Insert Focus for the cycle)



6

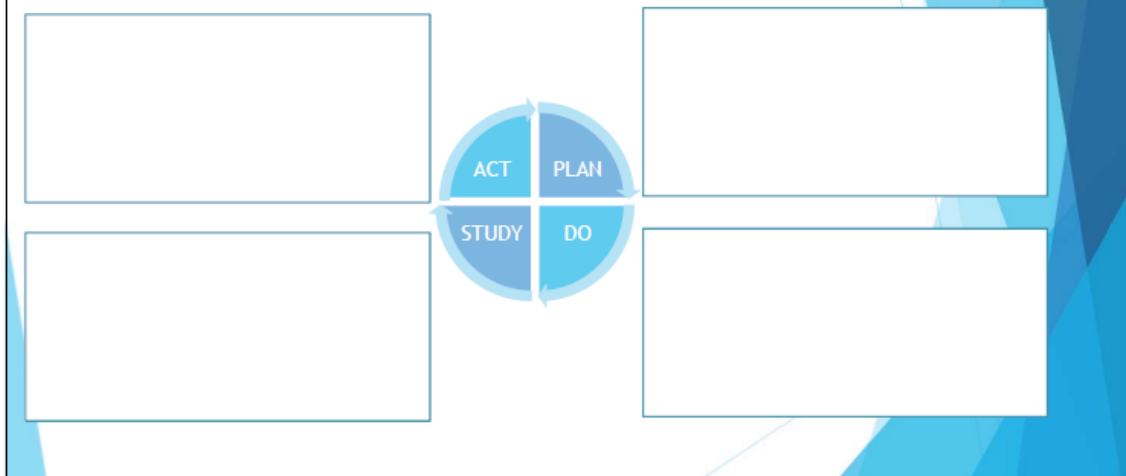


Short Cycle 3 (Insert Focus for the cycle)



7

Short Cycle 4 (Insert Focus for the cycle)



8

Our Impact

- ▶ Incorporate an overview of the Impact your team was able to do as a result of the cycles.
- ▶ Impact (Process and/or Student Outcome)

9

(Insert District Name) Next Steps for Sustainability:

- ▶ Include the next steps for Sustainability that the District will execute.

10



THE POTLUCK DISH PROTOCOL

PURPOSE

The process is designed establish a common understanding around the importance of clear communication.

Time

15 minutes

Materials

- Sticky Notes
- Pens

Roles

Timekeeper/facilitator, who both participates and keeps the process moving.

Participants will need to describe their potluck dish in under a minute.

PROTOCOL

- 1 Each participant writes the directions for making their family classic potluck dish on a sticky note.
- 2 Beginning with the facilitator, each participant at the table shares his/her potluck dish.
- 3 The group identifies one specific dish to share with the larger group.
- 4 Facilitator informs the larger group, to listen for dishes they would like to make, and see if they can ascertain how to make the dish from what is shared.
- 5 Group 1, shares their potluck dish and directions to make it with the larger group. Each group shares their potluck dish.
- 6 Facilitator asks if anyone heard a dish they would like to make.
- 7 When someone volunteers, the facilitator asks them if they can repeat how to make the dish.
- 8 The person who owns the potluck is asked if they did everything they just stated, would the dish be potluck ready.
- 9 Repeat 7 and 8 as time allows.

DEBRIEF

How was this a useful way to explore the importance of clear communication?



COMMUNICATING TO INFORM & ENGAGE: HASHTAG CHALLENGE

OBJECTIVE

Partnership teams will be able to:

- Realize their ability to create digital content related to their district's continuous improvement work, i.e. areas focus, engagement, high level action(s), evidence
- Analyze and evaluate how 'hashtagging' can be a tool for engagement/promotion of CI work and school pride/identity

Essential question

How can LEAs create and use social media hashtags to engage with their stakeholders?

Social Media Survey Check

The types of social media platforms that exists for each partnership LEA team. Do they use it often? Do they create they content?

I will present an example: Poway Unified High School District #TeamPUSD

Vocabulary Check

Hashtag (noun) on social media websites, a word or phrase preceded by a hash mark (#), used within a message to identify a keyword or topic of interest and facilitate a search for it.

Trending (adjective) widely mentioned or discussed on the Internet, especially on social media websites– i.e. trending topics on Twitter

Repost (noun) to share or resend a message, link, image etc. on message boards, i.e. retweet

Materials

Campaign design handouts
Cell phones (teams will use their smart phones)
Twitter account – personal or LEA (optional)
Laptop connected to projector screen
Post-It easel pads
Markers

Team Time Lesson

As social media engagement among school communities continues to rise, LEAs should be more involved in creating hashtag campaigns. These social media campaign can be effective in generating stakeholder engagement, spreading awareness, and influencing action. In this team time activity, partnership teams will design their own campaign based on their CI work.

Team Time Procedure

(Refer to the Campaign Design handout)



COMMUNICATING TO INFORM & ENGAGE

TEAM TIME ACTIVITY

THE HASHTAG CHALLENGE

Campaign Design

1 Reflect on your team's CI work thus far. Pinpoint ONE overarching theme to form the basis of your hashtag campaign for Twitter and/or Facebook. The theme could be related to your team's focus, stakeholder engagement, or a high-level action, etc.

2 Once a theme has been pinpointed, write down the answers to these questions.

Getting at 'The Why'

Why is this campaign important? _____

Determining 'The Who'

Who is the intended audience? Who do you want to engage with? _____

Tackling 'The How'

Based on your team's WHY and WHO, brainstorm possible hashtags for your campaign. Select the team's favorite hashtag. Use a marker and write it on a large Post-It.

3 Take pictures! Use your smart phones. Go outside or inside & take pictures that reflect how the work at the summit is connected to your overall hashtag campaign. GET CREATIVE!!!!

4 Select 1-2 images to use for a hashtag campaign post. Email picture(s) to:

5 Create a post (text + hashtag) to complement the picture(s). The post should a) inform your stakeholders and b) generate engagement

6 Finally, use a marker and write the post under your chosen hashtag on the large Post-It.

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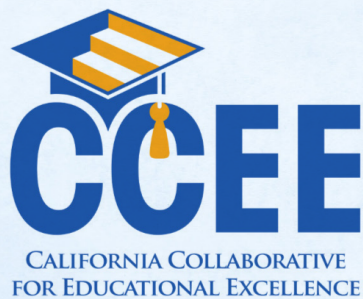
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Working to strengthen the System of Support for every student.