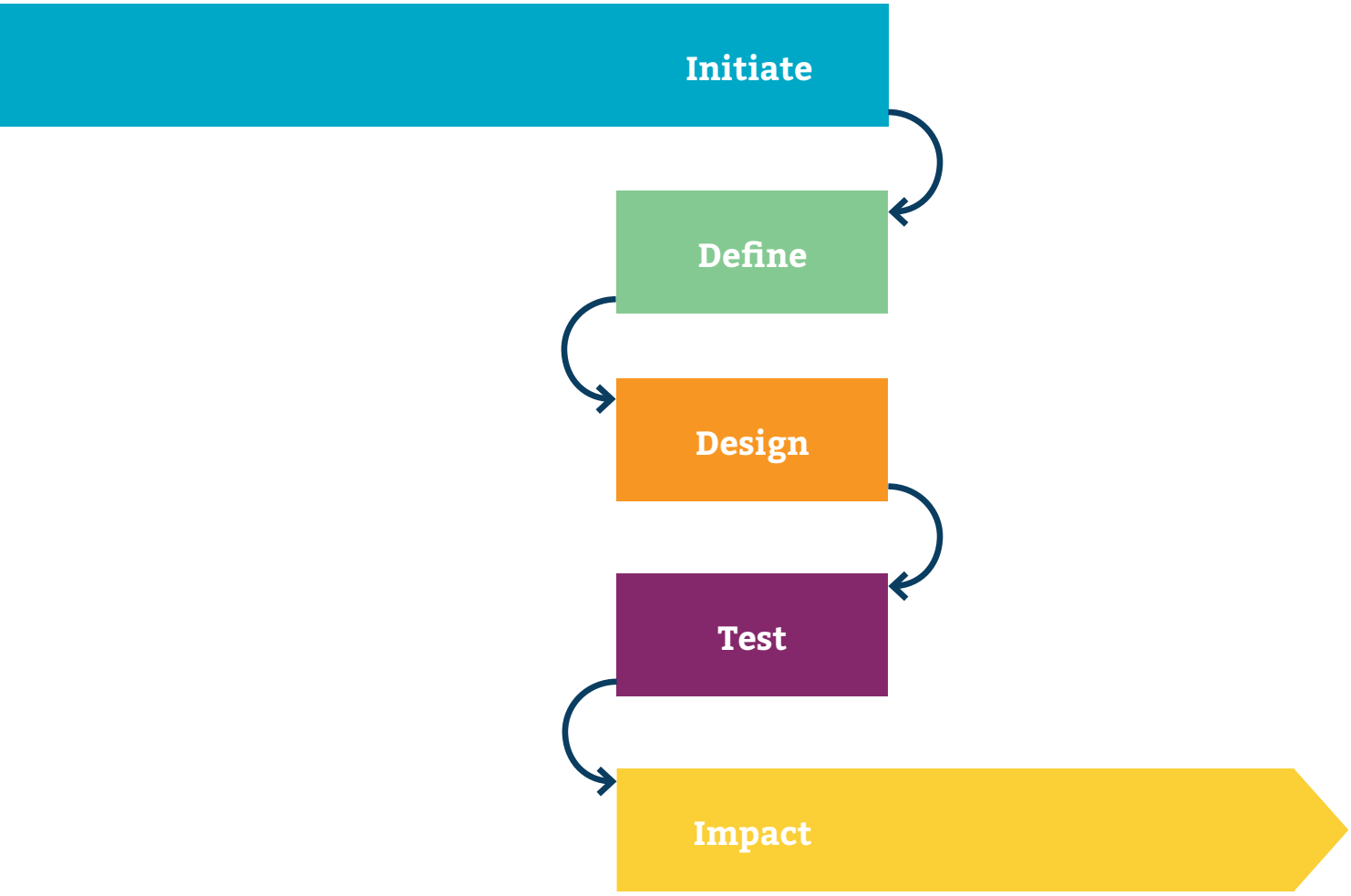
CONTINUOUS IMPROVEMENT TOOLKIT



Colorado Education Initiative

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CONTINUOUS IMPROVEMENT TOOLKIT

INTRODUCTION

Our team at the Colorado Education Initiative (CEI) cultivates system improvements and equity in K-12 education. Reimagining learning environments that better meet the needs of today's learners requires many tools in an organization's toolbox, and one practice that we use regularly and with great impact is continuous improvement.

WHY USE CONTINUOUS IMPROVEMENT?

Continuous improvement (CI) originated in the business sector as a technique for improving businesses regularly in small, incremental ways. The future of education requires a mindset where we are in a constant state of improvement, and we use CI with our school teams to help build the muscles and processes for doing just that.

The CI model lets us workshop new approaches and goals - whether they are challenges, like how do we make our LGBTQ youth feel more connected and supported? Or academic shifts, like how can we better support our English Language Learners in their science and social studies classes? CI is a simple and intuitive process that lets you learn from the implementation of any strategy and improve it to make sure it works best for the students you're trying to serve. It relies on design thinking, data-driven instruction, and other mindsets and techniques that we'll walk through in detail in this toolkit.

Traditionally in schools, when it comes to solving problems or making changes, teachers or administrators will identify a challenge and then try out new practices. Whether or not those practices work, how effective they are, or how they could be improved, are rarely revisited. With CI, the new practices are put into action, and then they're analyzed, adjusted, and scaled. These are educator-led processes for collaboration and improvement.

CI is a way for districts to be learning systems. This helps them evolve to be less reactive to problems that come up, instead learning from what teachers and schools are doing so they can scale that change more easily.

CEI'S DESIGN COMMITMENTS

Continuous improvement is an approach to change management, which is part of CEI's design commitments. These six design commitments, embedded within all of our projects, define what we believe are critical levers for system transformation.
For more information on these commitments, visit this website.

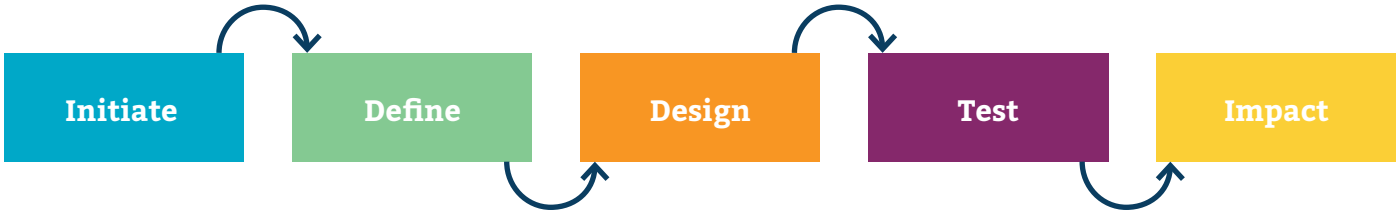
We have found CI is the best model in certain situations, but not in all. If you have decided that you are going to implement a school- or district-wide approach and you already know what the solution is, then CI is not the best option for you. CI is the best approach when:

You have a problem identified at the school or district level and you're not totally sure how to solve it. CI guides you to do the work to really understand the challenge, leading you to try out a bunch of different solutions to learn from so that you're able to see which works best.

You have a novel strategy that you're interested in, maybe an innovation or something you've just never done before. Here, parts of the CI process can help test and understand the new strategy before you start to scale it.

Lastly, if you have a strategy that you've been running for a long time but not getting the desired outcomes for students, CI can help tweak and improve the strategy and then scale it in a more effective way.

If CI is the right process for you, this toolkit will walk you through how to do it. In the sections below we'll walk through each phase of CEI's approach to CI and provide context, lessons learned and unique insights, and stories from our partners who have used CI with great success to improve equitable outcomes in their systems.



A NOTE OF THANKS

Some of CEI's closest partners contributed to this effort by providing examples, lending their voices, and giving feedback about our CI tools and processes:

Buena Vista School District, a small rural district nestled in the Colorado mountains, seeks to ensure every student reaches the peak of success.

Greeley-Evans School District 6, a suburban Colorado school district with an urban feel, offers a personalized, well-rounded, and excellent education, preparing students to be college and career ready.

Mesa County Valley School District 51, situated on Colorado's western slope, engages learners individually and guides them on a challenging path at their own pace, equips them with tools to succeed, and empowers them to find their own place in life.

Westminster Public Schools, located just north of Denver, prides itself on offering a learning environment where every child's education is built around what works best for them through its groundbreaking Competency Based System (CBS).

These four districts have engaged in continuous improvement processes together over the past few years through facilitation and support provided by CEI. The thread between them is clear: they each work tirelessly to engage each learner, foster agency, and promote success both within school and beyond. Each district also believes that to reach every learner, equity must be at the center of their work, and they see continuous improvement as critical in testing new ideas, monitoring student outcomes, and scaling promising practices in service of students furthest from opportunity.

This toolkit would not have been possible without their partnership and dedication to continuously improving learning experiences for their students. Thank you for going on this journey with us and never giving up on what is possible: for every student to be provided with the supports they need to thrive.

Initiate Phase

Once your team has decided to engage in CI, the first step is the Initiate Phase, and it has a few key components. These steps are linear, so unlike some of the other phases in CI that are continual, once you tackle these you don't need to revisit unless a reason arises.

1 STEP ONE: ESTABLISH YOUR TEAM

CI is a networked solution, which means you are not working alone or in silos. Instead, a team and the interaction between people is at the heart of the work. That means that establishing who is on the team is very important.

Your team should include:

- **Practitioner/s**: Group(s) of teachers to design and test strategies in short cycles.
- **District Learner**: A district-level support person to learn alongside practitioner teams and consider implications and impact of those learnings for the broader school/district community.
- **Continuous Improvement Coach**: Primary support person for practitioner teams. This should be someone embedded in the system – at the school or district level – who has existing relationships with both the practitioners and the district learner.
- **Users/Clients**: Most often, this will be students! Consider focusing on those furthest from opportunity in your school/district.
- **Data Support**: Someone to assist with data collection and analysis (could be at the school or district level).
- **Other**: Others you feel will be important additions to your team (e.g., a school-level administrator or family/community member).

Having the right team engaged in CI is really important because it moves away from the random acts of improvement and innovation that regularly happen in schools. If you have a school where everyone is doing great work, but there is no structure for educators to learn from one another and students are often experiencing something different in every class, there is likely a lack of cohesion or coherence. CI enhances the art of teaching with a disciplined learning approach that allows for scaled practice and impact. Implementing a team that is working on this together will help ensure there is learning across the system.

TOOL

Skills Inventory for Teams

It is important to select a team that represents diverse perspectives and backgrounds. That team might include educators, administrators, students, family and community members, counselors, and others.

After you have selected your team, use this tool to clarify the strengths, gaps, and interests of your team members. This will illuminate how you can deploy your team members in your work and identify gaps that you might need to fill.

2 STEP TWO: ESTABLISH WORK TIMELINE & ACCOUNTABILITY CHECK POINTS

Define time for each phase of the CI cycle and a check-in process that will allow for accountability. When it comes to CI, it's not about starting slow to go fast: it's starting small to **scale big**. We want to think about new school-wide practices, but it doesn't mean, "OK, we have a great idea, let's engage 100% of teachers and students immediately." With CI, you will start small, test a strategy, then apply it to larger groups over time. CI allows us to learn about the practice on a smaller scale while also taking into consideration the context of both the classroom and of teachers' experiences.

SPOTLIGHT FROM THE FIELD *1:51*

Listen to John Fischer, lead elementary math coach at Greeley-Evans School District, share how his district used CI.

"Start small, work out kinks, try to expand it, see new kinks."

LESSONS & INSIGHTS We have learned so many lessons over the years of implementing CI. Throughout each section we'll highlight some of those lessons.

INSIGHT: APPOINTING A CI COACH

Designating a person on your team as the "CI coach" can really help the process. In our work with teams, we encourage schools to have a person within the school or district that is responsible for tracking and supporting the continuous improvement process. This individual often manages the communication between team members, and can serve as a liaison between the district and school. Who makes a good CI coach? In our experience, people who are district-wide coaches are often a great fit since they already have the relationships with educators and work both on the ground-level and with administrators. The CI coach does not need to, and likely should not, be hired purely for this work. Find a person already embedded in the system and who intimately knows the people involved. The work will be stronger for it!

Define Phase

During the Define Phase you are focused on defining the aspiration for the work and creating your unifying goals. People need inspiration—they need a place to be headed, a north star, and the Define phase is where you will work on that.

1 STEP ONE: DEFINE YOUR TEAM'S ASPIRATION FOR YOUR WORK

Define your team's aspiration: an inspiring and unifying goal to create excitement and buy-in for the work ahead. You can't engage in continuous improvement without having a goal. What are you aiming for? Creating your aspirational goal gives your team a rallying point and will help move you forward when the work inevitably gets tough, or tedious, or hits a roadblock. Your goal is, broadly speaking, what you want to achieve for your students, schools, and district. This goal will be the place from which all the rest of the work unfolds.

TOOL

Youth Connections Compassionate Insights

As your team works to develop the driving purpose in your work, the compassionate insight tool can provide an opportunity for team members to express their aspiration for the work. Use the compassionate insight MadLib to articulate individual aspirations and then share these with the team. Building alignment in purpose can be an inspirational and impactful process as you set your goals.

ARTIFACT

Graduate Profiles

There are many ways to establish a north star for your work. One way is to create a community-informed Graduate Profile, which is a document that communicates the competencies you aspire to for learners in your system. View examples at the link above.

2 STEP TWO: IDENTIFY YOUR GAPS

Identify your gaps through a current state data analysis: who is not being served well? Before digging into your data, think about what you know or expect to see in your school's (and district's) proficiency and growth data.

TOOL

Data Analysis

This tool will guide your team through the data analysis process, from personal reflections and observations to hard data like growth and proficiency.

ARTIFACT

CDE Dashboard

The CDE District and School Dashboard is a comprehensive warehouse of data on every school and district in the state. Use this tool to explore demographic and performance data disaggregated by subgroups.

3 STEP THREE: DEFINE YOUR PROBLEM STATEMENT

Define your problem statement—be explicit about DEI insights, which will help you create strong equity-focused aim statements (a step coming soon).

SPOTLIGHT FROM THE FIELD *4:27*

Listen to Kevin Denton, former principal at Buena Vista High School, share what challenge his team decided to focus on.

4 STEP FOUR: EMPATHY BUILDING TO HELP GATHER DATA AND MAKE MEANING

Empathy building is an important component of meaningful data inquiry. "Hard" data is a great starting point to understand what's going on in the system, but to get the full context around an experience, it's important to go to the end users - students, often - to understand why and how the system is generating data. The numbers won't tell you the full story about why something is happening, so you have to go a step further. We recommend what we call "empathy building," time where you interview the end user, observe their experiences, or immerse yourself by shadowing a student or students for a day. These empathy building activities, particularly with people who don't share your identity or who are furthest from opportunity at your school, will help you better understand how to improve or redesign systems to work best for everyone and give you more information on your context and problem. Data inquiry + empathy building = our best bet to revamp and rework our systems. Use the tools below to learn more about empathy building strategies like interviews, observations, and immersion activities and how to conduct them.

TOOL

Discovery Toolkit

Once you have synthesized the data that informs and defines your challenge, it is important to contextualize that data by building a greater understanding of the experience of your users. By leveraging empathy building techniques in the Discovery Toolkit, you can triangulate your data with authentic user experience data.

TOOL

Social Emotional Development (SED) Snapshot

As you use the Social Emotional Development Snapshot, think of yourself as an equity detective looking for clues that point to the ways that social emotional learning practices are present or absent in your context. Be sure to pay close attention to how students furthest from opportunity experience—or don't experience—these practices.

TOOL

Social Emotional Learning - Memorable Learning Experience

Listening to the stories of your students and coworkers can be a powerful way to uncover the true experiences and deeper needs of your school and community. This protocol is designed for you to listen deeply to the experiences of your students, families, and fellow teachers to uncover how they are currently experiencing learning environments. Your goal is to uncover themes, insights, and emotions that can help you to better understand their perspective.

5 STEP FIVE: DEFINE YOUR ROOT CAUSES

Here is where you drill down to figure out the root cause behind your problem. Sometimes we think we're at a root cause, but really we're just scratching the surface and we have to go even deeper. After listening to the Spotlight below, use the Fishbone Diagram and the Five Whys to help uncover your root cause.

SPOTLIGHT FROM THE FIELD *9:32*

Listen to colleagues at Mesa County School District 51 reflect on how they used CI within a networked approach to support schools across their large district.

TOOL

Discovery Action Plan

The Discovery Action Plan supports teams to plan for empathy building. When you have selected the tool you want to use to understand the authentic experience of your users, this guide will help you make a plan for who is most important to build empathy with and how you will do it.

TOOL

Fishbone Diagram

A fishbone diagram, which facilitates cause and effect analysis, can help in brainstorming possible causes of a problem and sorting ideas into useful categories. The problem or effect is displayed at the head or mouth of the fish. Possible contributing causes are listed on the smaller "bones" under various cause categories. When using a fishbone diagram, include team members who have personal knowledge of the processes and systems involved in the problem or event to be investigated.

TOOL

5 Whys

After you have identified the challenge you are working to solve, use the 5 Whys protocol to uncover the root causes of your challenge. This activity builds a clearer picture of the true challenge you are facing and will elevate the assumptions you have about your challenge.

INSIGHT: YOUTH CONNECTIONS

Youth Connections is a collection of districts from around Colorado working to foster a culture and climate that meets middle and high school students' social, emotional, and academic needs. One of the Youth Connection schools decided to use continuous improvement to solve a critical problem in their community. When reviewing Healthy Kids Colorado data, a survey that collects data about students' mental health and wellness, the school found something troubling: their LGBTQ students reported higher rates of suicidal ideation and actions compared with any other population in their community. What was happening in school to contribute to that? That became the aspirational goal for this school—discovering why and designing solutions for that data point to be lowered, and at best, obsolete. Using a root cause analysis, the CI team worked to identify the primary challenges that LGBTQ students were having and what their experience was like in school. They used empathy interviews to help paint a picture of the context for that data; without that insight the team may have created solutions that further alienated their students or even put them at a greater risk.

6 STEP SIX: IDENTIFY AND TEST YOUR ASSUMPTIONS

Identify and test your assumptions within your root cause. Conduct empathy-building and further data analysis.

7 STEP SEVEN: CREATE YOUR AIM

We encourage our educators to create an aim that is focused around equity: what are the gaps you have or see in outcomes for students, particularly around students who are furthest from opportunity? There is a universal design principle that says if you're designing for students furthest from opportunity, chances are other students - those who already experience success in the system - will benefit as well. Think about the curb cuts in sidewalks for wheelchairs: they were created primarily for people in wheelchairs to be able to better navigate sidewalks, but everybody, including fully able-bodied people, uses them. It's important to note that without the necessary empathy work, it's actually possible to design anti-equitable solutions if a person of privilege is standing in the position of designer. To have an equity focus, you must be doing authentic and meaningful work with the people who are directly affected by the issue at hand.

TOOL

Create an Equity-focused Aim

Use this tool to create an Aim Statement for your continuous improvement work that is focused on students furthest from opportunity in your context.

SHADOW YOUR STUDENTS - AN EMPATHY BUILDING TECHNIQUE

Shadowing a student is a powerful learning experience, especially as you review your data points. For instance, one school partner saw that Latinx students had lower attendance than their white counterparts in school. Why? Shadowing a student helped them uncover the experience behind the data. How are Latinx students being engaged differently? How are they working with different teachers? What types of unconscious bias was emerging? Walking with a student for a day in their shoes can help you better understand how to improve your system to meet their needs.

TOOL

Shadow a Student

This complete Shadow a Student guide is a powerful empathy-building tool that can help you deeply investigate the student experience and uncover processes and strategies that need improvement.

CI MINDSETS

These three mindsets are essential when it comes to continually improving. We help our partners cultivate and practice these throughout our time together.

Bias to Action requires educators to just jump in; once a problem is identified, waste no time in tackling it head on.

Start Small reminds educators to think about the small pieces and goals they can test out and learn from. The entire system doesn't need a solution from the start.

Fail Forward and Learn is perhaps the most important element. Use failures as opportunities to learn. Don't waste time being discouraged; keep learning and improving.

Design Phase

1 STEP ONE: DESIGN YOUR HYPOTHESIS

Design your hypothesis for how change will happen using the tools below: a driver diagram and a logic model. The driver diagram and driver pathway are essential in figuring out where you're going, what you're hoping to achieve, and which component parts will get you there. When you're thinking about change in a large system like a school or district, there are so many pieces that all impact the one thing you're working towards. For example, there could be dozens of reasons for low attendance or low engagement. This step is about teasing them all out. Before you start to create solutions to get to that end, thoughtfully map out the pathways that will lead you towards that goal. After that, you can think about which are most promising, select one to start with, and then design around that one single pathway. During this step, you will also set up interim goals or checkpoints along the way—that way you're aiming at the big picture but you have small achievable goals to get you there.

ARTIFACT

Sample Driver Diagram

A driver diagram is one way to map out your hypothesis. Driver diagrams show the relationship between the overall aim of the project, the primary drivers that contribute directly to achieving the aim, the secondary drivers that are components of the primary drivers, and specific change ideas to test for each secondary driver.

TOOL

Logic Model

A logic model is another approach to defining your hypothesis. Use this tool to map out your theory of change for your continuous improvement effort.

SPOTLIGHT FROM THE FIELD *3:22*

Listen to how Greeley School District used the driver diagram to map what they were testing.

ARTIFACT

Logic Model Examples

2 STEP TWO: DESIGN YOUR MEASUREMENT FRAMEWORK

Now it is time to define your **process** and **outcome** measures. What are you planning for, what activities are you doing, and how are they going? Those are your process measures, or outputs. On the outcome side, what are the results of what you tried? Most importantly: these are not accountability metrics! These are targets you set to learn about the impact of your work. You might learn that you did not meet your targets, but it will inform how you adjust your work in the future.

TOOL

Measurement Outcomes Chart

After you have identified your measurement plan, this template can be used to help your team get specific about the tools you plan to use to measure your outcomes and who will support data collection.

SPOTLIGHT FROM THE FIELD *2:25*

Listen in and learn more about the outcome measures for Greeley's project.

BEGIN WITH THE END IN MIND

Oftentimes, when people begin CI they are really attracted to process measures because they are easier to think about. "We are going to conduct 10 interviews," or "We are going to use exit tickets at the end of each English class." Outcome data, which asks you to consider how your processes are actually impacting student outcomes, is much harder to measure.

When our team at CEI first started using CI in our work, we used to start with the mindset of "let's just go out and test some things and do a lot of process measuring, and then let's think about the outcomes down the road a little further." We learned that's absolutely the wrong way to go about it. What we need to do - and now encourage you to do - is start with the end in mind. Begin with the ultimate outcome that you are trying to reach, and although that may not be what you can measure from the very beginning, you can track back indicators of that outcome from the start so that you're always looking at that outcome, even during a very small test.

For example, rather than wait for the end of year to look at state standardized testing data as a way to see whether you achieved the outcome you were seeking, think about how you can use benchmark assessments, unit tests, and teacher-created assessments throughout the year to help paint the picture of where you're going when it comes to outcomes. Additionally, consider gathering perceptions from students about their progress, using quick interviews, focus groups, or perception surveys. These different data can provide earlier evidence of whether you're making progress toward your outcomes of interest.

TOOL

Process vs. Outcome Measures

Use this tool to reflect on the two kinds of measures you should be paying attention to: process and outcome measures.

3 STEP THREE: SELECT YOUR TOOLS FOR MEASUREMENT

You have defined your hypothesis for change using a logic model and/or driver diagram, and you have set your process and outcome measures. The next step in the process is to develop short- and long-term measurement plans so that you can monitor the impact of your change efforts all along the way. In this step, you should think about what evidence of impact you will likely see first, what might be mid-term indicators, and what will be lagging, longer-term indicators. This is the final step before designing solutions to test.

TOOL

Measurement Framework

This template will help you create a measurement plan that is grounded in your overall aim. Once you have filled it out, you will be ready to progress monitor the impact of your improvement efforts on short-, medium-, and long-term horizons.

4 STEP FOUR: DESIGN YOUR CHANGE

It's time to plan your test! There are many ways to do this, but they all have one thing in common: strategies are tested in quick, low-risk cycles, ideally no longer than eight weeks. Strategies should be focused on specific students with equity at the forefront. Remember that a strategy that works for one group of students will likely benefit all students, so be sure you design tests that target your improvement efforts on meeting the specific needs of students furthest from opportunity.

TOOL

Plan Do Study Act Planning Guide

Now you are ready to run a test! The Plan Do Study Act (PDSA) cycle is one way to design it. Using this method, you can create a plan for a 2 to 6 week test, including the goals of your test, what you expect to happen, and the resources you need. After you run your test, this guide includes a reflection section to help you figure out what to do next.

Test Phase

The Test Phase is about rolling up your sleeves and actually trying out your idea—and making sure to gather some data along the way. During this phase, you will decide what outcomes you are looking for and what data you will collect to inform those outcomes. It's important to define grain size about the data you're collecting to take the next step. Testing can take many forms: simple, teacher-created unit tests, project rubrics, reviews of student work, etc. Or they can be more formal and robust, such as benchmark assessments at the district level.

1 STEP ONE: RUN YOUR TEST (PDSA)

Tests should be conducted in fairly quick cycles—anywhere from 2-6 weeks.

2 STEP TWO: COLLECT DATA

An important element of data collection is having a person who's not running the test support in collecting some of the data, such as the CI coach on the team. Having someone support a teacher running a short cycle test is valuable in seeing the whole picture of the work. It's also important to remember that teachers collect data all the time - exit tickets, running records, etc. - so this process is really about using and repurposing the data that's already being collected and pulling it up to the next level, to investigate a large problem and work towards a more systems-focused goal.

3 STEP THREE: DETERMINE IMPACT OF THE TEST

Triangulate process measures and outcome data to determine impact of the test

ARTIFACT

Buena Vista PDSA

SPOTLIGHT FROM THE FIELD *8:15*

Listen to how the Buena Vista team tested student-led conferences.

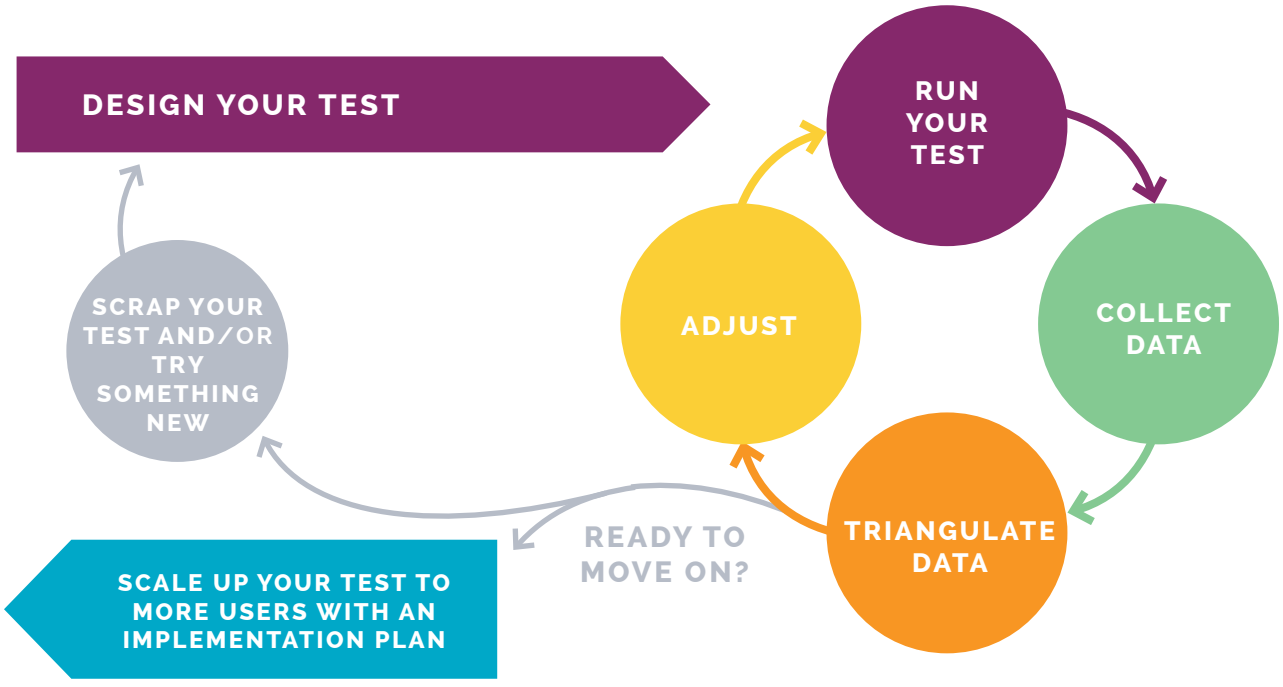
TOOL

Facilitation Guide for Data Analysis

After you have run your test and collected data, it is important to engage in analysis. Use this protocol to analyze the data from your test, all within a planning period or PLC session.

4 STEP FOUR: ADJUST!

5 STEP FIVE: TEST AGAIN AND CONTINUE TO COLLECT DATA



Impact Phase

During the Impact Phase, your team will collaborate to reflect on the outputs (process measures) and outcomes of the test, asking yourselves and each other: What was I expecting to happen? What actually happened? What were the successes and challenges? And what caused these results? By analyzing the data and anecdotes from both outputs and outcomes, educators can determine best practices to carry into the future and ways to revise the aspects that need more work.

During this phase you might return to the Design Phase or the Test Phase depending on the results of the test. You will be contemplating: What have we learned, and what will we do with this learning? How do we coordinate a strategic response to new learnings at a system level?

1 STEP ONE: CROSS TEAM AAR AND DECIDE ON NEXT STEPS

First, we recommend engaging in a facilitated conversation called an After Action Review (AAR). The intention is to take time to reflect on your school or district's work and begin to surface ideas and next steps for moving forward. In a fast paced setting like a school, AARs are a powerful way to stop at specific times to learn from the work that has been done. This simple process supports data-informed decision making at every level of the system.

TOOL

After Action Review

One of the goals of continuous improvement is to develop a learning system in your district. In order to go from isolated learning in schools to broader systems change, teams need to lift up on their learning and identify the most meaningful practices and scalable changes. The After Action Review can help you identify the most important and promising learnings from your CI process. What did you intend to achieve? What did you actually achieve? How do you know? And what will you do about it?

CONDITIONS NEED TO SHIFT FOR IDEAS TO TAKE HOLD.

In order for the work your team has done to really be sustained and also built on for future CI cycles we have seen a few key conditions be relevant. The first is the importance of the role of the leader. The leader of your organization has to create the atmosphere for growth and reflection, people have to feel safe to take risks and to look critically at the impact of what has been accomplished and where the shifts need to be in the future. The second is time. In a continuous improvement cycle, time is viewed differently than in other change management systems. Short-cycle innovations aimed at helping you learn and then iterate again are the foundation. It's not a one and done experience, it's a mindset shift. The third is an openness to priorities shifting. Continuous improvement means continuous learning and as you learn and approach what you think is your problem and a solution, priorities might change, and having the flexibility and awareness and openness to that is important.

TOOL

90 Day Action Plan

Once you have identified a strategy worth scaling, it is time to shift to implementation mode. This action planning template is designed for you to thoughtfully and specifically plan for meaningful scale of your promising strategy.

Model for Continuous Improvement Toolkit

Initiate	Skills Inventory for Teams	Workbook
Define	Compassionate Insights	Workbook
	Graduate Profiles	Workbook
	Data Analysis	Workbook
	Discovery Toolkit	Hyperlink
	CDE Data Dashboard	Hyperlink
	Social Emotional Development Snapshot	Workbook
	Memorable Learning Experience	Workbook
	Fishbone Diagram	Workbook
	Five Whys	Workbook
	Discovery Action Plan	Hyperlink
	Create an Equity-focused Aim	Workbook
	Shadow a Student	Hyperlink
Design	Sample Driver Diagram	Workbook
	Logic Model	Workbook
	Logic Model Examples	Workbook
	Measurement Outcomes Chart	Hyperlink
	Measurement Framework	Workbook
	Plan Do Study Act Template	Workbook
	Process vs. Outcome Measures	Workbook
Test	Facilitation Guide for Data Analysis	Workbook
Impact	After Action Review Protocol	Workbook
	90 Day Action Plan	Workbook

Colorado Education Initiative

Skills Inventory

Initiate

Mark with an X the skills that each team member is skilled in, or has interest in learning/ doing through this project.

NAME	Relationship Building & Interpersonal Communication	Data Collection & Analysis	Listening & Reflecting	Experience Design	Sales, Marketing, Communication	Visual Design	Instruction & Teaching	Research	Community Organizing	Project Management	User Experience (UX) Research	Team Leadership	Strategic Planning	Budget Management
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Compassionate Insights

Define

Name

School

I am passionate about solving

because

Name

School

I am passionate about solving

because

Graduate Profiles

Define

What is a Graduate Profile?

- A document co-created with input from key stakeholders that a school or district uses to specify the cognitive, personal, and interpersonal competencies that students should have when they graduate.
- A clear visualization of priority goals for teaching and learning that can be easily communicated to students, parents, faculty, and staff to align their collective efforts.
- Provides a shared vision of your destination for graduates of your system.

Creating Graduate Profiles

Schools, districts, and communities across the state have leveraged graduate profiles as permission and/or motivation to pursue new teaching and learning practices.

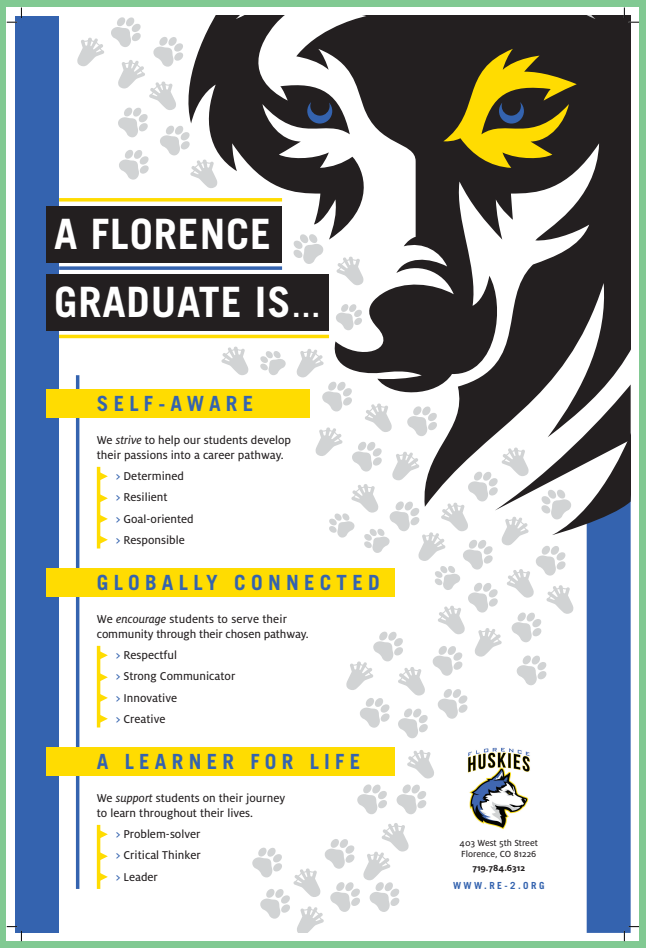
To support communities in creating graduate profiles, CEI has designed an intentional process that has been effectively implemented in several communities over the past two years. First, schools/districts build empathy with a broad array of stakeholders in their communities – businesses, families, civic leaders, community members, students, staff – to collect data about what competencies they desire for the graduates of their systems. Then, CEI supports schools to theme the data and map it to the Essential Skills, which are embedded in the Colorado Academic Standards (e.g., creativity and innovation, critical thinking and problem solving, communication and collaboration, and more). After theming, CEI facilitates design and revision sessions that culminate in the final product.

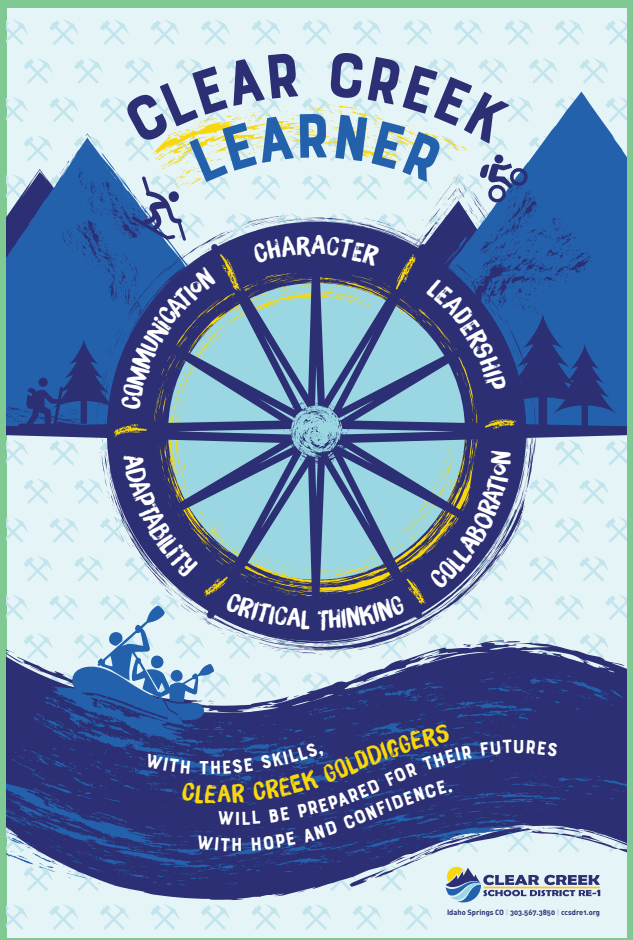
For more information, contact Amy Spicer, Senior Director of Implementation, Partnership, and Strategy at aspicer@coloradoedinitiative.org

Examples

View sample Graduate Profiles samples on the following page.

Graduate Profiles (continued)





Data Analysis

Define

PERSONAL REFLECTION AND OBSERVATIONS

Before digging into data, take a few minutes to record what you know or expect to see in your school's (and district's) proficiency and growth data.

1 Where do you think the largest gaps exist in your school's results (e.g., certain subgroups of students, grade levels)?

2 What else would you expect to see in your results? For instance, how do you anticipate your school or district results compare to the state averages?

CMAS RESULTS EXPLORATION: CDE DASHBOARDS

Steps for accessing and exploring your school-level publicly available data:

- Go to www.cde.state.co.us/code/schooldashboard
- Select the school (blue) tab in the top left. Then begin typing in your school name under the dropdown to quickly find your school(s).
- For the purpose of this project, focus today's review on the ACHIEVEMENT and GROWTH grey tabs.
- Start exploring the data by selecting the assessments, grade levels, disaggregations, and reference lines (comparison points) of most interest to you. You can select multiple disaggregations at once (e.g., race/ethnicity and FRL).

3 What results stick out to you most about your school's (or district's) data? Why?

4 Based on these data, what are some potential areas for improvement? Consider areas where (a) there are gaps between subgroups of students, (b) there has been a steady or dramatic decline in recent years, and/or (c) your school results are substantially lower than the state average or the reference lines.

5 What additional questions do you have from looking at these data? What local data do you have that can help tell you more information about any of these areas for improvement?

Data Analysis (continued)

YOUR LOCAL DATA (NON-PUBLICLY AVAILABLE)

Your local data might include results from local, district- or teacher-created assessments or benchmark data, as well as any other data your school or district uses to evaluate student learning.

6 What additional insights do your local data provide about student mastery and learning in your school(s)? Are there any other areas for improvement that surfaced from your review?

7 What questions do these data bring up? What additional information would you like to have about what you're seeing? What do you want to investigate further in your school(s)?

Based on the Data Reflection you just did as a team, what is the highest priority challenge you'd like to address through this project?

Observing the Conditions for Learning

Sherlock Holmes sat silent for a few minutes with his fingertips still pressed together. “You appeared to read a good deal upon her which was quite invisible to me,” Watson remarked. “Not invisible but unnoticed, Watson. You did not know where to look, and so you missed all that was important.”

– The Adventures of Sherlock Holmes by Sir Arthur Conan Doyle

Observing as an Equity Detective

Ideally, when a detective arrives at the scene of a crime, they would find the criminal along with conclusive, irrefutable proof of guilt. Because this doesn’t happen, a detective must instead collect clues: a fingerprint, a loose strand of hair, a piece of paper with a scribbled note. The detective doesn’t know which items will help them solve the crime – perhaps the fingerprint belongs to the victim, maybe that scribbled note is completely innocuous. Still, they collect all the clues because the combination allows them to piece together an explanation that points them in the right direction.

As you use the Social Emotional Development Snapshot, think of yourself as an equity detective looking for clues that point to the ways that deeper learning practices might be present in your schools. And look for evidence where social emotional development practices engage students furthest away from opportunity. When you spot something interesting, write it down. You don’t have to know for certain that what you’re seeing is linked to social emotional development or equity. You just have to think it’s possible.

The Social Emotional Development Ecosystem Learning Environments Characteristics

Safe: Physically Safe, Emotionally Safe, Identity Safe
“I feel safe to be my whole self at school and share my ideas, opinions and culture with others.”

Filled with Trust
“I trust my teachers and feel that they trust me.”

Relationship Rich
“I feel connected to peers and adults. I feel comfortable talking to people at school and I believe that adults would care if something was wrong in my life. ”

Buffers Stress
“I have healthy ways to release stress and feel like I can come down from stressful situations.”

Intentional Social Emotional Skill Building
“I am learning about my strengths and places that I can improve to be a more successful.

SED Snapshot (continued)

Define

Name

Date

Observation Guide

Directions: Select a student who will be on your team for the project and shadow them for a full day.

Look for clues that social emotional development is happening. As you see them, write them down. If you see a behavior more than once put a checkmark by it.

See which students are engaged in these behaviors and activities. Note their identity, background, race, primary language, etc.

Safe: Physically, Emotionally, Identity

What evidence is there that this student is bringing their whole self to school?

Filled with Trust

What evidence is there that this student has trust and is trusted?

Relationship Rich

What evidence is there that this student has meaningful relationships at school?

Buffers Stress

What evidence is there that this student has opportunities to buffer stress?

Intentional Social Emotional Skill Building

What evidence is there that this student is building social and emotional skills throughout the school day?

Observation Examples

I saw this student…

… working on a project with students from different backgrounds from their own.
… sharing an idea with the class that they were not sure was right.
… talking about growth mindset in class.
… practicing a mindfulness strategy.
… talking to a teacher about their life outside of school.

SED Snapshot (continued)

Define

Name

Date

Reflection Guide

Assess your schools progress in each category.

SCORE 1: How often do you see students engaging in environments that point to evidence of these learning environment characteristics? **1: Never 2: Sometimes 3: Often 4: Always**

SCORE 2: How often do you see students *furthest from opportunity* engaging in environments that point to evidence of these learning environment characteristics? **1: Never 2: Sometimes 3: Often 4: Always**

Safe: Physically, Emotionally, Identity

Score 1	Score 2
3	3

Filled with Trust

Score 1	Score 2
3	3

Relationship Rich

Score 1	Score 2
3	3

Buffers Stress

Score 1	Score 2
3	3

Intentional Social Emotional Skill Building

Score 1	Score 2
3	3

Learning and Insights from your observation

I learned...

Exploring the Experiences of Educators and Students

"Stories create community, enable us to see through the eyes of other people, and open us to the claims of others."

– Peter Forbes, photographer and author

This protocol is designed to support you to learn about your school through the experiences of the students and educators you work with every day.

Listening to Understand

Listening to the stories of your students and coworkers can be a powerful tool to uncover the true experience and deeper need of the people in your school and community. This protocol is designed for you to listen deeply to the experiences of your students and fellow teachers to uncover how they are currently experiencing the learning environments in the school. Your goal is to uncover themes, insights, and emotions that can help you to better understand their perspective.

As you use the Social Emotional Learning Experience Protocol think of yourself as an equity detective looking for clues that point to the ways that learning environments might be like in your schools. Look for evidence where social emotional development practices engage students furthest away from opportunity. When you hear something important, write it down. You don't have to know for certain that what you're hearing is linked to social emotional development or equity. You just have to think it's possible.

The Social Emotional Development Ecosystem Learning Environments Characteristics

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Buffers stress
"I have healthy ways to release stress and feel like I can come down from stressful situations."

Intentional social emotional skill building
"I am learning about my strengths and places that I can improve to be a more successful.

Empathy Interview Guide

Student Interview (5 to 10 minutes)
Ask these questions of a student. Try to pick a student who reflects a background and perspective that might be different from your own. Take notes and listen closely while they do the talking.

Tell me a story about a time that you felt like you had a great relationship with a teacher.

What made that relationship great?

Tell me about a time that you felt you really belonged in school—that you were meant to be there.

Why did you feel like you belonged? How did that impact your learning?

What makes you feel like you belong somewhere?

Teacher Interview (5 to 10 minutes)
Ask these questions of an adult. Try to pick an adult who reflects a background and perspective that might be different from your own. Take notes and listen while they do the talking.

Think back to when you were in school. Tell me about a time that you felt really excited to be at our school.

What made you so excited about this experience?

Tell me about a time that you felt you really belonged in school—that you were meant to be there.

Why did you feel like you belonged? How did that impact your learning?

What makes these experiences memorable?

Family and Community Interview (5 to 10 minutes)
Ask these questions of an adult. Try to pick an adult who reflects a background and perspective that might be different from your own. Take notes and listen while they do the talking.

Think back to when you were in school. Tell me about a time that you felt really excited to be at our school.

What made you so excited about this experience?

Tell me about a time that you felt you really belonged in school—that you were meant to be there.

Why did you feel like you belonged? How did that impact your learning?

What makes these experiences memorable?

Reflection Guide

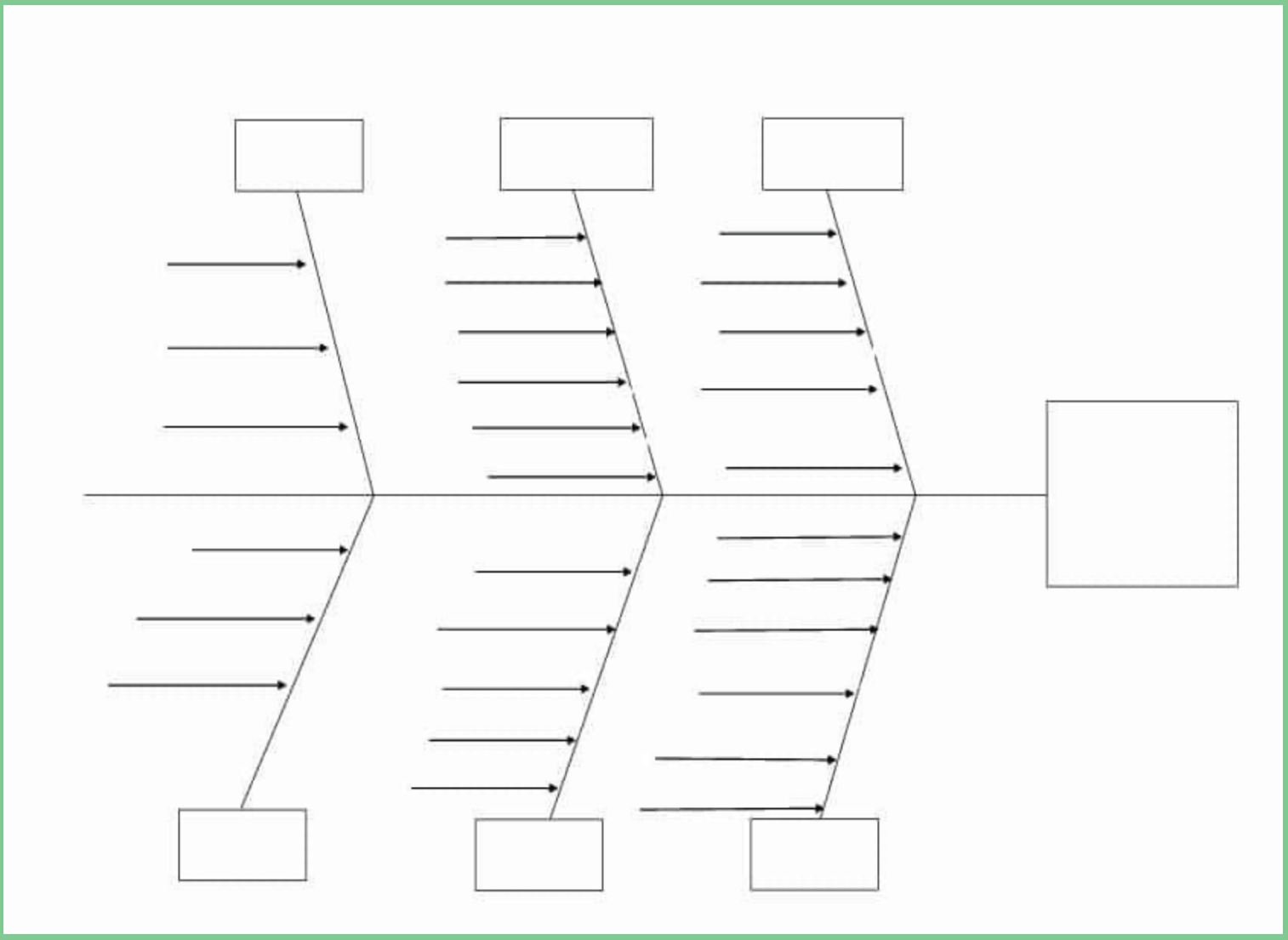
What insights did you gain from these conversations? What patterns can you identify? How does this compare to your own experience?

Learning and Insights from your interview

I learned...

Fishbone Diagram

Define



5 Whys Activity

Define

Challenge

1

Why is this happening?

2

Why is this happening?

3

Why is this happening?

4

Why is this happening?

5

Why is this happening?

Equity-Focused Aim

Define

From a Challenge to an Aim

Create a challenge statement based on data analysis of subgroups in your school or district that do not traditionally meet with success equal to their peers.

Example:

The gap between ELL and non-ELL students in English Language Arts (ELA) scores widens from 15% to 22% from 7th to 8th grade.

Write your challenge here:

Now, make an aim out of your challenge. Make sure it is a SMARTI aim:

Specific
Measurable
Achievable
Relevant
Time-bound
Inspiring

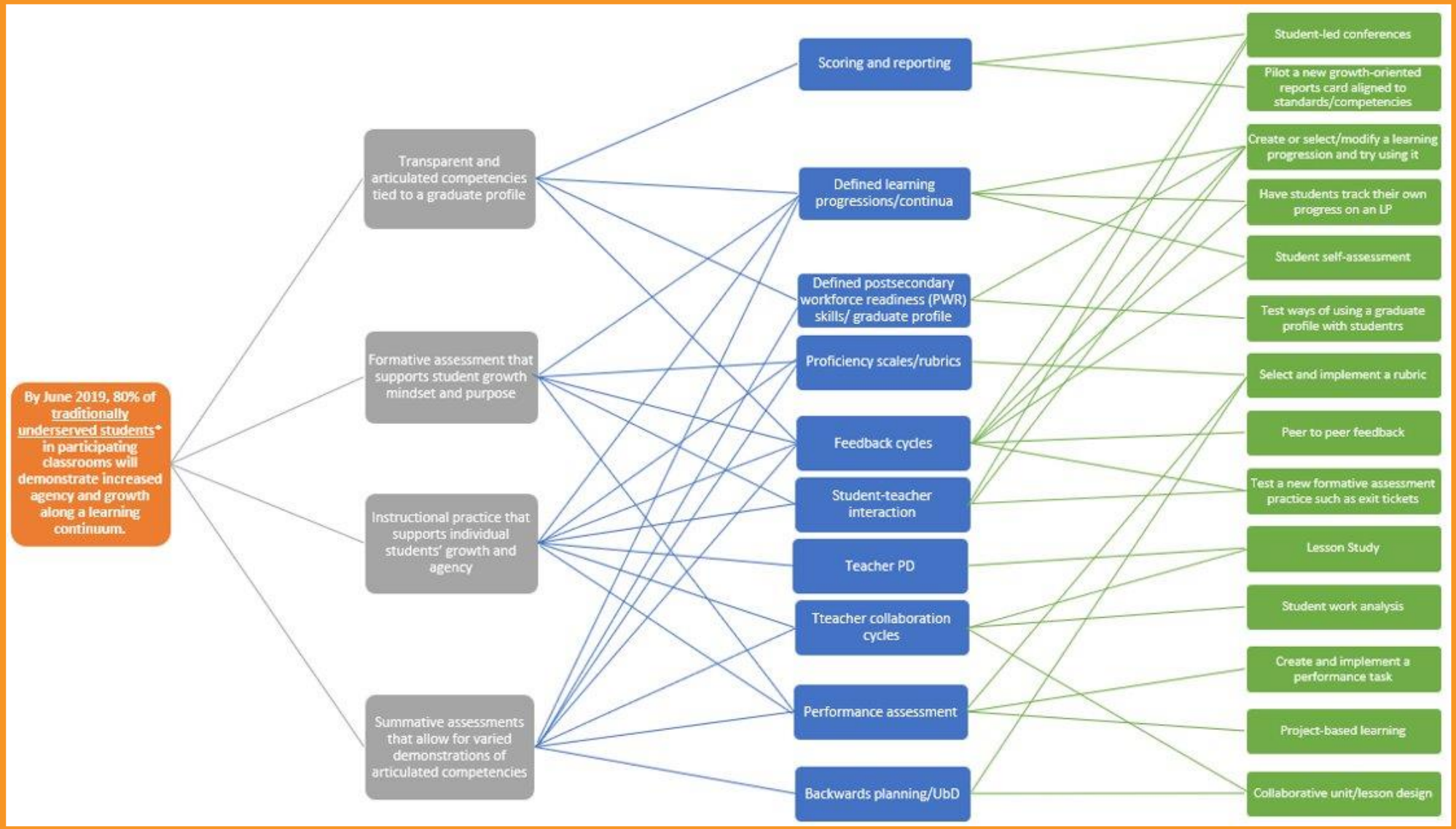
Example:

The gap between ELL and non-ELL students in ELA will reduce by 4% for 8th grade students by June 2021.

Write your SMARTI Aim Statement here

Sample Driver Diagram

Design



Colorado Education Initiative

Sample Driver Diagram

Model for Continuous Improvement

Logic Model

Design

Problem Statement

Program Goal

1 Inputs What resources do we have to work with?

2 Outputs

Activities

What happens in our organization? What services do we provide?

Participation

What are the tangible products of our activities? What do we know about those products — how often/ to whom/ how many/ how satisfied?

3 Outcomes - Impact

Short

What changes do we expect to occur within the short term - during or immediately following the end of an intervention?

Intermediate

What changes do we want to see occur after that?

Long

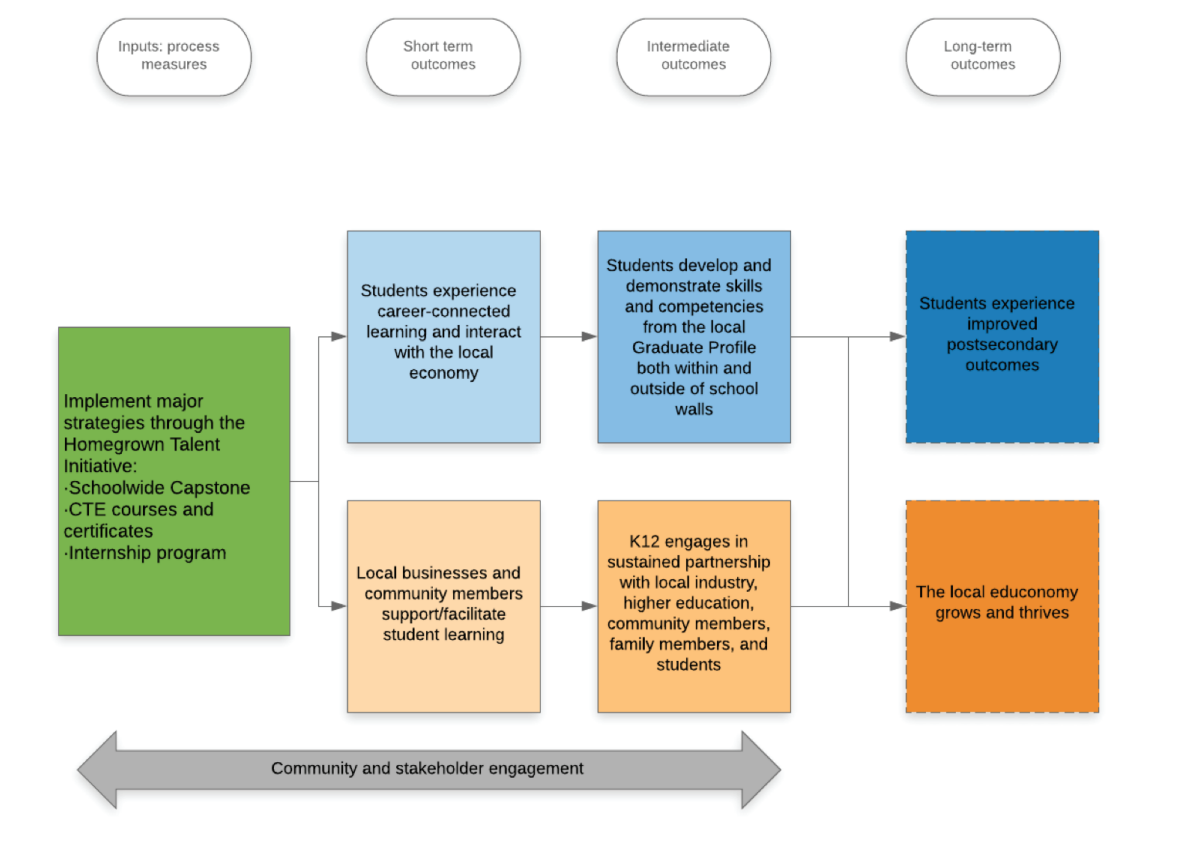
What changes do we hope to see over time?

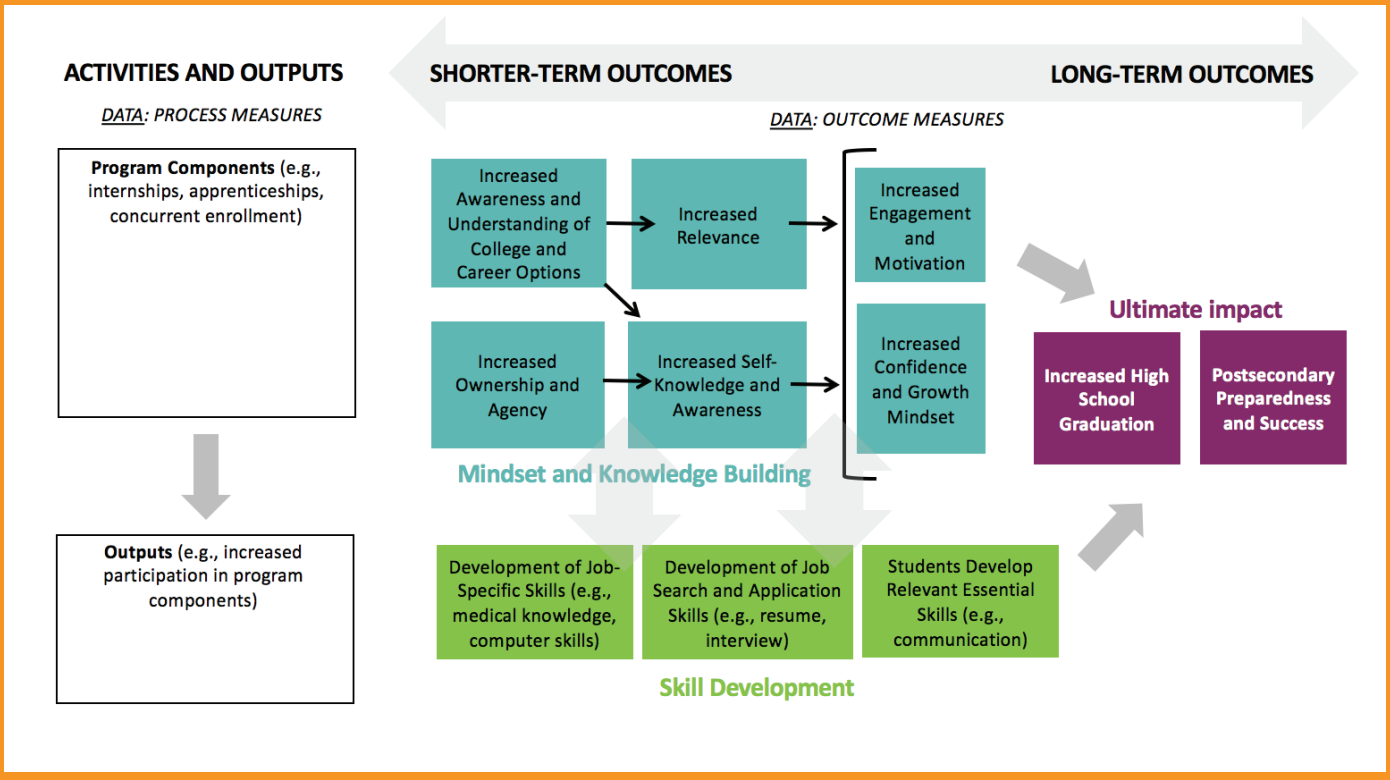
Target Population

External Factors

Logic Model Examples

Design





Measurement Framework

Design

This outlines outcome measures that you will evaluate and monitor regardless of specific change idea or test that you're implementing. Test-specific measures are identified through your PDSA planning guide or other document used to describe your test.

Challenge Statement

	AIM	PRIMARY DRIVER	SECONDARY DRIVER
Description			
Indicators of Success *What does it look like when working well? How will you know you're have an impact on this?* *This will describe what you're looking for across the early, mid-, and long-term data sources identified below.*			
DATA SOURCES	*Consider both existing data sources and new ones you might need to put in place for this work.*		
Long-term/Lagging *Often data sources that are available only once per year.* **Responsible:**			
Mid-term/ Intermediate **Responsible:**			
Early/Leading *Data sources more frequently available – that can give you the earliest indicators that you're making progress.* **Responsible:**			

Plan Do Study Act (PDSA)

Design

Team: **Date(s) of Test:**

Change Idea:

Goal of this Test:

Our Aim:

PLAN

Details of this test: Who, what, when, where, how. Include resources needed.

What do we want to learn from this test?

Predictions: What do we think will happen?

Data: What data will we collect to test our predictions?

Process Data
Quality of Implementation

Responsible:

Outcome Data
From your outcome measurement plan

Responsible:

When will we debrief our results? Who will schedule our debrief?

Plan Do Study Act (PDSA) (cont'd)

Design

DO

What actually happened during the test? What surprised us? What was difficult? What was successful?

STUDY

Examine both your process and outcome data. What were the results? Were our predictions correct?

What did we learn? What new questions have emerged?

ACT

What will we do next? Iterate? Scale? Scrap? What will our next step look like?

Process vs. Outcome Measures

Design

OUTPUT REFLECTION

Reflect on the strategies and processes that you implemented with students.

What activities, communication, and strategies did you plan for this week? (Student and teacher activities)

What were successes and challenges that occurred during these activities, communications, and strategies?

What caused these results? How do you know?

OUTCOME REFLECTION

Reflect on the outcomes you expected students to learn.

What activities, communication, and strategies did you plan for this week? (Student and teacher activities)

What were successes and challenges that occurred during these activities, communications, and strategies?

What caused these results? How do you know?

4-SQUARE DATA ANALYSIS PROTOCOL

After you have run your test and collected data, it is important to analyze that data. This protocol should take 30 to 45 minutes. If the data you collected involves student work samples, consider sorting into categories ahead of time (e.g., low-medium-high or met/did not meet expectations).

Description of Test:

Data we Collected:

What trends did we see in the data?

Why do we think we saw these results?

What do we do now based on what we saw? What obstacles might we encounter that we should plan for ahead of time?

What learnings will you communicate with others? Who will you communicate with and when?

After-Action Review

Protocol for Group After-Action Review

This facilitated conversation is inspired by two processes we often use at CEI: our after-action reviews (AARs), discussions where we internally debrief our events, and focus groups, where we facilitate conversations with groups of our partners to more deeply understand their perspectives. This conversation will draw from protocols, questions, and practices we use in both of those activities, but overall, the intention is to give you all a chance to reflect on your continuous improvement efforts.

Output Reflection

In this section you will be reflecting on the strategies and processes that you implemented. You will reflect on what worked well, what challenges occurred, and what caused these results.

What activities, communication, and strategies did you plan (both student- and teacher-facing)?

What were successes and challenges that occurred during these activities, communications, and strategies? How do you know?

SUCCESSES	What caused these results? How do you know? What data have you collected?

CHALLENGES	What caused these results? How do you know? What data have you collected?

After-Action Review (continued)

Outcome Reflection

In this section you will reflect on the outcomes you expected students to demonstrate during this effort. You will reflect on what you expected to happen, what actually happened, and what you will do next.

What were you expecting students to learn or demonstrate through this effort (e.g., SEL Skills, academic skills, graduate profile competencies)?

What outcomes did you actually see?

What caused these results? How do you know? What data have you collected?

KEEP DOING	STOP DOING	CHANGE OR ITERATE

90-Day Action Plan

Impact

STRATEGY	STRATEGY IMPLEMENTATION GOAL	MILESTONES

ACTION STEPS To reach our objective we will...	STATUS	BY DATE	ACCOUNTABILITY Person / People	COST

Colorado Education Initiative

90-Day Action Plan

Model for Continuous Improvement

PRODUCED, WRITTEN AND DESIGNED BY

gather&create