Facilitating Improvement in Teacher Practice

Learning Module 2 Workbook
Systems Change
Acknowledgments

This module series includes work that has been adapted from successful strategies developed by Alicia Bowman and Kim Austin for the Regional Education Laboratory West (REL West) at WestEd. We would like to acknowledge the Center for the Collaborative Classroom and Washoe County School District in Reno, Nevada, for their partnership in this work. We would also like to acknowledge the Carnegie Foundation for the Advancement of Teaching for its contributions to the field that are cited in this work.

Alicia Bowman and Kim Austin at WestEd developed these workbooks as supplemental materials to the Facilitating Improvement in Teacher Practice slide decks developed under REL West.

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Progress check-in

Since our last session, share your progress on the action period questions.

- What are the priorities of your district?
- What are the priorities of the school(s) that you work in?
- What are the priorities of your teachers?
- Do any of these priorities intentionally focus on equity?
- Given what you know now, what is your initial theory of improvement?
Module 2 learning targets and agenda

Learning targets:
- Learn about systems and how you can impact system improvement.
- Understand the role of equity in systems improvement work.
- Begin to develop a theory of improvement for your work.

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PART 1
Definition of a system

A system is an interacting or interdependent group of things that form a unified whole.

An organizational system is characterized by a set of interactions among the people who work there, the tools and materials they have at their disposal, and the processes through which these people and resources join together to accomplish the system’s goals.

Our public school system exists as systems within systems. It is a complex system.

What is a system?

Complex systems are made up of many parts interacting with one another and their environment in multiple ways. These parts form networks that constantly interact with one another.

Source: Bowman, Dolle, & Takahashi (2019).
Within each of these layered systems, there are some common interdependent elements:

- Leadership.
- Context.
- Culture.
- Resources.
- Processes.

Leadership

*Leadership, in this system model, refers to the actions of leadership that build and sustain the system.*

These include but are not limited to communicating a clear mission, vision, and goals; engaging all stakeholders and leveraging multiple perspectives; using data and evidence to drive decisions; focusing attention on what is important; and modeling effective practices.

Context

*Context, in this system model, refers to all the contributing factors that make a particular system unique.*

These include but are not limited to historical context, policy and power structures, demographics (e.g., location, population, existing disparities), and organizational structures.

Culture

*Culture, in this system model, refers to how people work together and interact with each other, as well as shared beliefs and dispositions.*

Components of culture include but are not limited to shared purpose, relational trust, collective and self-efficacy, collaboration, and common practices.

Resources

*Resources, in this system model, refer to access to the necessary sources of supply and support that enable the system to function.*

Resources include but are not limited to people, time, money, materials, and technology.

Processes

*Processes, in this system model, refer to continuous and/or repetitive actions and operations that are used to accomplish work and manage day-to-day activities.*

Processes include but are not limited to planning, meeting structures, communication methods, common routines and practices, and decision-making.
Self-reflection

What did you learn about systems? What connections can you make to your current work?

What questions do you still have?
Seeing the system

“Organisations learn only through individuals who learn. Individual learning does not guarantee organisational learning, but without it no organisational learning occurs.”

– Peter Senge (1990)

We all have mental models of how the world works, including how our systems work. How an individual or group interprets and defines a problem determines how they will approach solving it.

In education, we tend to operate in crisis mode much of the time. We often get through the day by handling routine decisions with gut decisions. This “fast thinking” is unconscious and is shaped by the mental models created by our experiences and the norms inherent in the systems we operate in. This can shape how we react to and attempt to solve the problems in our system. When we are unaware of the mental models driving us, we can find ourselves solving the wrong problems.

Self-reflection

How did it feel to do the “fast thinking” activity? Can you think of times when you might default to fast thinking?
Continuous improvement interrupts fast thinking by intentionally taking us through a process that forces us to slow down and examine what is underneath the surface. Understanding the underlying factors of systems-related issues creates opportunities to change the system.

The event level
Refers to the symptoms of a problem that are easily seen. These are what we generally react to with fast thinking.

The pattern level
Refers to the patterns of recurring issues over time. This level allows you to use data to identify and anticipate outcomes that you want to interrupt.

The structures level
Refers to the underlying structures (e.g., policies, practices, behaviors) in a system. A deeper look at these allows you to identify barriers and design new solutions.

The mental models level
Refers to the attitudes, beliefs, expectations, and values that allow the structures in your system to operate the way they do. Shifting mental models allows for transformation.

To see your system, you need to look underneath the surface and understand how your leadership, context, culture, resources, and processes may be at the root of the problem you are trying to solve.
Self-reflection

Think about a problem that your school or district is grappling with that impacts student outcomes. What factors at the classroom level may be holding your problem in place?

What factors at the school level may be holding your problem in place?
PART 2 –

Surfacing Inequities

““Every system is perfectly designed to get the results it gets.” – Dr. Paul Batalden

Exploring our education history

Read the section of the timeline that has been assigned to you. The timeline includes selected important legislation and events throughout history that have centered around equity and access for students. The timeline is found here: https://www.raceforward.org/research/reports/historical-timeline-public-education-us

As you read, reflect on the timeline and identify an entry that stands out to you to discuss in a small group.

Self-reflection

What thoughts came up for you as you looked at our history? What stood out to you?
Trio conversations

How do you think the piece of history you chose shaped the mental models around education during that period? How may it still be influencing our education systems today?

Systems change and equity

Inequities in our systems did not begin with us. Many of them are structural and are inherently part of the U.S. education system. Inequity is seen throughout our systems. Improvement begins with dissatisfaction in the status quo. Equity work is interrupting the status quo. In education, we are generally working to reduce variation in service, outcomes, access, or experience. The distinction between engaging in continuous improvement and using continuous improvement as a method to achieve equitable outcomes is intentionality. Equity work does not happen by accident; you have to plan for it.

To be intentional about equity work, it is necessary to discuss the equity issues in your system. A common definition is a starting point for these conversations. For this work, we are using the definition of educational equity that was developed by the National Equity Project.

“The critical issue is not what works, but rather what works, for whom and under what set of conditions.”

Source: “The Six Core Principles of Improvement,” Carnegie Foundation for the Advancement of Teaching
Educational equity means that each child receives what he or she needs to develop to his or her full academic and social potential.

Working towards equity involves:

- Ensuring equally high outcomes for all participants in our educational system; removing the predictability of success or failures that currently correlates with any social or cultural factor.
- Interrupting inequitable practices, examining biases, and creating inclusive multicultural school environments for adults and children.
- Discovering and cultivating the unique gifts, talents, and interests that every human possesses.


**Equity pause**

An equity pause is an explicit pause point for a team to reflect together about their work in the service of equity.

Equity pauses are built into agendas as a regular part of a meeting routine. Including this structure creates a natural interruption point to discuss assumptions, viewpoints, and make meaning around issues of equity.

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**Equity Pause**

Take a moment to consider the inequities in your district.

- What is helping your work move forward and what might be getting in the way?
- What parts of your system might contribute to those inequities?
- Have you noticed any new or amplified inequities as a result of COVID-19?
How systems improve

“Every system is perfectly designed to get the results it gets.” – Dr. Paul Batalden

The Traditional Way to Improvement

![Diagram showing the traditional way to improvement]


The traditional way to improvement in education tends to involve a planning team developing a plan, over an extended period of time, that is then rolled out with the hope of solving a problem or improving outcomes.

What we usually get...

Failures we don't understand...

![Diagram showing failures in the traditional way to improvement]

Starting over again from scratch and “initiative fatigue”...


Unfortunately, this often leads to uneven implementation and failures that are not fully understood. When the plan is not as effective as hoped for, it is often thrown out, and a new plan is developed. This can lead to initiative fatigue.

The process for improvement that we outline in this series utilizes elements from continuous improvement methodologies and the teacher inquiry cycle.
“Improvement science” is one version of continuous improvement. It is the ongoing **disciplined** effort to discover **evidence-based changes** leading to organizational **learning** and quality reliably at scale. Improvement science supports systemwide improvement through documentation and measurement, allowing a system to learn from the many successes and failures that happen during improvement efforts. These continuous improvement methods can be used at any level of the system.

The teacher inquiry cycle is the vehicle we use to introduce improvement routines and a disciplined approach to learning at the classroom level to improve teacher practice.

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**What is your experience with doing improvement work?**

*How is this approach the same? How is it different?*
Theory of improvement

A theory of improvement helps to focus your continuous improvement work. It provides clarity and intentionality to what you are trying to accomplish. A theory of improvement articulates the changes in your system that you believe need to be made to create the change in outcomes or performance that you are seeking. They are often represented as if-then statements.

By definition, a theory of improvement is unproven, but it should still be as accurate as possible. The more certain you are regarding the causes of the problem, the more likely it will be that your theory is accurate.

As you learn more about the problem through the continuous improvement process, you should continue to update your theory.

Example Sentence Frame:

If we ____________________________,
then we will impact ____________________________,
that will result in ____________________________,
which will make progress towards our goal of ____________________________.

Example Theory of Improvement

If we increase the amount of time our EL students get to engage in both listening and speaking activities, using academic language with their peers,
then we will impact the academic language fluency of our EL students,
that will result in increased access to grade-level academic material,
and improved English language fluency and ELA proficiency for our EL students,
which will make progress towards our goal of improved reclassification rates.

Self-reflection

How might a theory of improvement help you focus your improvement work? How might a theory of improvement be useful in your communication with staff and teachers?
Next steps

Module review

During this module our learning targets were to:

Learn about systems and how you can impact system improvement.

- Definition of a system.
- How systems improve.

Understand the role of equity in systems improvement work.

- Seeing the system.
- Surfacing inequities.

Learn about some ways to investigate your system.

- Investigating your system.

Action period for Module 2

Between now and the next session, learn about your system:

- What are the priorities of your district?
- What are the priorities of the school(s) that you work in?
- What are the priorities of your teachers?
- Do any of these priorities intentionally focus on equity?
- Given what you know now, what is your initial theory of improvement?

During the modules, we will ask you to work with a team. Is there a team that you work with that is positioned well to do teacher inquiry work?

- Bonus reading: Continue to support your learning with this blog post from REL West, Now is the time for teachers to use data-based inquiry cycles.
Appendix 1: U.S. Education timeline

**A timeline of U.S. education**

1647: The General Court of the Massachusetts Bay Colony decrees that every town of 50 families should have an elementary school and that every town of 100 families should have a Latin school. The goal is to ensure that Puritan children learn to read the Bible and receive basic information about the Calvinist religion.

1779: Thomas Jefferson proposes a two-track educational system, with different tracks, in his words, for “the laboring and the learned.” Scholarship would allow a very few of the laboring class to advance, Jefferson says, by “raking a few geniuses from the rubbish.”

1785: The Continental Congress (before the U.S. Constitution was ratified) passes a law calling for a survey of the “Northwest Territory,” which includes what is to become the state of Ohio. The law creates “townships,” reserving a portion of each township for a local school. From these “land grants” eventually came the U.S. system of “land grant universities,” the state public universities that exist today. To create these townships, the Continental Congress assumes it has the right to give away or sell land that is already occupied by Native people.

1790: Pennsylvania state constitution calls for free public education but only for poor children. It is expected that rich people will pay for their children’s schooling.

1805: New York Public School Society formed by wealthy businessmen to provide education for poor children. Schools are run on the “Lancasterian” model, in which one “master” can teach hundreds of students in a single room. The master gives a rote lesson to the older students, who then pass it down to the younger students. These schools emphasize discipline and obedience, qualities that factory owners want in their workers.

1817: A petition presented in the Boston Town Meeting calls for establishing a system of free public primary schools. Main support comes from local merchants, businessmen, and wealthier artisans. Many wage earners oppose it because they don’t want to pay the taxes.

1820: First public high school in the U.S., Boston English, opens.

1827: Massachusetts passes a law making all grades of public school open to all pupils free of charge.

1830s: Most southern states have laws forbidding teaching people in slavery to read. Even so, around 5 percent become literate at great personal risk.

1846–1856: 3.1 million immigrants arrive, a number equal to one eighth of the entire U.S. population. Owners of industry need a docile, obedient workforce and look to public schools to provide it.

1837: Horace Mann becomes head of the newly formed Massachusetts State Board of Education. Edmund Dwight, a major industrialist, thinks a state board of education is so important to factory owners that he offers to supplement the state salary with extra money of his own.

1840s: Over a million Irish immigrants arrive in the United States, driven out of their homes in Ireland by the potato famine. Irish Catholics in New York City struggle for local neighborhood control of schools as a way of preventing their children from being exposed to a Protestant curriculum.
1848: Massachusetts Reform School at Westboro opens, where children who have refused to attend public schools are sent. This begins a long tradition of “reform schools,” which combine the education and juvenile justice systems.

1848: The war against Mexico ends with the signing of the Treaty of Guadalupe-Hidalgo, which gives the United States almost half of what was then Mexico. This includes all of what is now the U.S. Southwest, plus parts of Utah, Nevada, and Wyoming, and most of California. The treaty guarantees citizenship rights to everyone living in these areas, mostly Mexicans and Native people. It also guarantees the continued use of the Spanish language, including in education.

1851: State of Massachusetts passes its first compulsory education law. The goal is to make sure that the children of poor immigrants get “civilized” and learn obedience and restraint, so they make good workers and don’t contribute to social upheaval.

1852: Two years after California became a state, the legislature passes a bill barring African American children from schools. The First State Convention of Colored Citizens of the State of California met in 1854 and in a public pronouncement chafed against this discriminatory measure.

1864: Congress makes it illegal for Native Americans to be taught in their native languages. Native children as young as four years old are taken from their parents and sent to Bureau of Indian Affairs off-reservation boarding schools, whose goal, as one BIA official put it, is to “kill the Indian to save the man.”

1865–1877: African Americans mobilize to bring public education to the South for the first time. After the Civil War, and with the legal end of slavery, African Americans in the South make alliances with White Republicans to push for many political changes, including for the first time, rewriting state constitutions to guarantee free public education. In practice, White children benefit more than Black children.

1870: California devised a formula of ten. When African Americans, Asian Americans, or American Indians numbered ten students, a school district was empowered to create separate schools for White and non-White children.

1872: Harriet Ward attempts to enroll her daughter Mary Frances in an all-White school in San Francisco. When the principal refuses to admit her, Ward files suit. Ward v. Flood (1873) was California’s first case challenging educational segregation. However, the California Supreme Court, in its ruling, foreshadowed the logic of the U.S. Supreme Court in Plessy v. Ferguson (1896) in using the principle of “separate but equal.”

1885: The case of Tape v. Hurley would force local and state officials to address public education for Chinese youth. In 1884, Joseph and Mary Tape, both immigrants from China, attempt to enroll their U.S.-born daughter Mamie into the neighborhood public school. Principal Jennie Hurley refuses admittance and the Tapes file suit. The state Superior Court confirms the right of Mamie Tape to attend the neighborhood school.

1893–1913: Size of school boards in the country’s 28 biggest cities is cut in half. Most local district- (or “ward”) based positions are eliminated, in favor of citywide elections. This means that local immigrant communities lose control of their local schools. Makeup of school boards changes from small local businessmen and some wage earners to professionals (like doctors and lawyers), big businessmen, and other members of the richest classes.

1896: Plessy v. Ferguson decision. The U.S. Supreme Court rules that the state of Louisiana has the right to require “separate but equal” railroad cars for Blacks and Whites. This decision means that the federal
government officially recognizes segregation as legal. One result is that southern states pass laws requiring racial segregation in public schools.

1905: The U.S. Supreme Court requires California to extend public education to the children of Chinese immigrants.

1917: Smith-Hughes Act passes, providing federal funding for vocational education. Big manufacturing corporations push this, because they want to remove job skill training from the apprenticeship programs of trade unions and bring it under their own control.

1921: California school law (Political Code 1662) is amended to read as follows:

“The governing body of a school district shall have power to exclude children of filthy or vicious habits, or children suffering from contagious or infectious diseases, and also to establish separate schools for Indian children and for children of Chinese, Japanese, or Mongolian parentage. When such schools are established, Indian children or children of Chinese, Japanese, or Mongolian parentage must not be admitted into any other school.”


1930–1950: The NAACP brings a series of suits over unequal teachers’ pay for Blacks and Whites in southern states. At the same time, southern states realize they are losing African American labor to the northern cities. These two sources of pressure result in some increase of spending on Black schools in the South.

1932: A survey of 150 school districts reveals that three quarters of them are using so-called intelligence testing to place students in different academic tracks.

1945: At the end of World War II, the G.I. Bill of Rights gives thousands of working-class men college scholarships for the first time in U.S. history.

1947: The Anderson Bill passes, the direct result of the Mendez case. This measure repeals all California school codes mandating segregation dating back to the 1850s and is signed into law by then Governor Earl Warren, who seven years later would preside over the Brown case.

1948: Educational Testing Service is formed, merging the College Entrance Examination Board, the Cooperative Test Service, the Graduate Records Office, the National Committee on Teachers Examinations, and others, with huge grants from the Rockefeller and Carnegie Foundations. These testing services continue the work of eugenicists like Carl Brigham (originator of the SAT), who did research “proving” that immigrants were feeble-minded.

1954: Brown v. Board of Education of Topeka. The Supreme Court unanimously agrees that segregated schools are “inherently unequal” and must be abolished. Almost 45 years later in 1998, schools, especially in the north, are as segregated as ever.

1957: A federal court orders integration of Little Rock, Arkansas, public schools. Governor Orval Faubus sends his National Guard to physically prevent nine African American students from enrolling at all-White Central High School. Reluctantly, President Eisenhower sends federal troops to enforce the court order, not because he supports desegregation, but because he can’t let a state governor use military power to defy the U.S. federal government.

1968: African American parents and White teachers clash in the Ocean Hill/Brownsville area of New York City over the issue of community control of the schools. Teachers go on strike, and the community organizes freedom schools while the public schools are closed.
1974: *Milliken v. Bradley.* A Supreme Court made up of Richard Nixon’s appointees rules that schools may not be desegregated across school districts. This effectively legally segregates students of color in inner-city districts from White students in wealthier White suburban districts.

1974: *Lau v. Nichols,* California, a unanimous U.S. Supreme Court ruling that establishes the judicial mandate for bilingual education for Chinese-speaking students. The case became a significant milestone within the legacy of Asian American activism and a remedy to inequality in education.

1976: The California Supreme Court holds that education is a fundamental right under the equal protection clause of the state constitution in *Serrano v. Priest.* The high courts in Connecticut and Wyoming followed suit in 1977 and 1980.

Late 1970s: The so-called “taxpayers’ revolt” leads to the passage of Proposition 13 in California, and copycat measures like Proposition 2-1/2 in Massachusetts. These propositions freeze property taxes, which are a major source of funding for public schools. As a result, in 20 years California drops from first in the nation in per-student spending in 1978 to number 43 in 1998.

1980s: The federal Tribal Colleges Act establishes a community college on every Indian reservation, which allows young people to go to college without leaving their families.

1990s: Most states and districts adopt Outcome-Based Education (OBE) in some form or another. (A state would create a committee to adopt standards and choose a quantitative instrument to assess whether the students knew the required content or could perform the required tasks.)

1990s: The standards-based National Education Goals (Goals 2000) are set by the U.S. Congress. Many of these goals are based on the principles of outcomes-based education, and not all the goals were attained by the year 2000 as was intended.

1992: California became the second state in the nation to enact charter legislation granting local school and county boards of education the ability to grant “charters.” These charters began with up to a five-year contract between the granting agency and charter school operator, delineating mutually agreed-upon goals and operating procedures.


1994: The Goals 2000: Educate America Act (P.L. 103-227) is signed into law on March 31, 1994, by President Bill Clinton. The Act provides resources to states and communities to ensure that all students reach their full potential.

1996: California passes Proposition 209, which outlaws affirmative action in public employment, public contracting, and public education. Other states jump on the bandwagon with their own initiatives, and right-wing elements hope to pass similar legislation on a federal level.

1997: President Clinton signs the bill reauthorizing and amending the Individuals with Disabilities Education Act (IDEA). The amendments require states to

- include students with disabilities in state and districtwide testing programs;
- establish performance goals and indicators for students with disabilities;
- ensure that students with disabilities have access to the general curriculum;
• ensure that the IEP (individualized education program) addresses positive behavioral intervention strategies, if appropriate, in the case of a student whose behavior impedes his or her progress;
• ensure, along with local education agencies, that parents are members of any group that makes placement decisions or any other decisions regarding the child; and
• inform parents about the educational progress of their child, by means such as periodic report cards, at least as often as parents of nondisabled children.


2002: The No Child Left Behind Act requires all public schools receiving federal funding to administer a statewide standardized test annually to all students. Schools that receive Title I funding through the Elementary and Secondary Education Act of 1965 must make Adequate Yearly Progress (AYP) in test scores (e.g., each year, fifth graders must do better on standardized tests than the previous year’s fifth graders).

2006: Beginning with the class of 2006, students in California public schools are required to pass the California High School Exit Examination (CAHSEE) to demonstrate competency in grade-level skills in reading, writing, and mathematics to earn a high school diploma.

2008: State Superintendent of Public Instruction Jack O’Connell delivers his fifth annual State of Education Address and unveils an ambitious, comprehensive plan aimed at closing California’s pernicious achievement gap that exists between students who are White and students of color, as well as with English learners, students in poverty, and students with disabilities.

2010: More than 40 states adopt the same standards for English and math. These standards are called the Common Core State Standards (CCSS). Educational standards describe what students should know and be able to do in grades K–12 in English language arts and math.

2010: The Texas School Board adopts revisions to the Texas social studies curriculum. The revised curriculum plays down the role of Thomas Jefferson among the founding fathers, questions the separation of church and state, and claims that the U.S. government was infiltrated by Communists during the Cold War.

2011: The Arizona state legislature passes a bill (HB 2281) that effectively bans ethnic studies programs in Arizona. The new law prohibits any curricula that
1. promote the overthrow of the United States government;
2. promote resentment toward a race or class of people;
3. are designed primarily for pupils of a particular ethnic group; and
4. advocate ethnic solidarity instead of the treatment of pupils as individuals.

Under this law, the state can withhold up to 10 percent of a district’s funding for a violation.

2011: California adopts the Fair, Accurate, Inclusive, and Respectful Education Act, also known as the FAIR Education Act (Senate Bill 48). The law compels the inclusion of the political, economic, and social contributions of persons with disabilities and lesbian, gay, bisexual, and transgender people into educational textbooks and the social studies curricula in California public schools by amending the California Education Code.
It also revises the previous designation of “Black Americans, American Indians, Mexicans, Asians, [and] Pacific Island people” to instead be “Native Americans, African Americans, Mexican Americans, Asian Americans, Pacific Islanders, and European Americans.” It also amends an existing law by adding sexual orientation and religion into a list of characteristics (which already included race, ethnicity, nationality, gender, and disability) that schools are prohibited from sponsoring negative activities about or teaching students about in an adverse way.

2016: The California Multilingual Education Act gives California public schools more control over dual language acquisition programs. Proposition 58 effectively repeals the English-only requirement of Proposition 227.

2017: California adopts AB 19: California College Promise, which allows first-year, full-time students at all 114 California community colleges to attend their first year of college for free.

2017: California adopts AB 699 and AB 21: Immigration and Citizenship Status. These bills prohibit public schools, community colleges, and California State University and University of California campuses from collecting information or documents about the immigration status of students, faculty, and staff and their families.

2017: California officially abandoned its high school exit exam, following a two-year hiatus of the test beginning in 2015. Students are no longer required to pass the exit exam as a condition of receiving their diploma for graduation.