This video is part of a series of professional learning modules designed to support the facilitation of improvement teams. The Regional Educational Laboratory West, or REL West, developed these modules in partnership with Washoe County School District. This video is aligned with Module 2 on systems change. In this video, you’ll learn what a system is and how to define a system, key components of a system and your role in your system, the importance of a systems lens to improvement efforts.

A system is an interacting or interdependent group of things that form a unified whole. That’s a general definition, of course, but it applies when thinking about an organization, which is made up of the people working there. An organizational system is characterized by the regular set of interactions among those people, the tools and materials they have at their disposal, and the processes through which these people and resources join together to accomplish their goals. Our public school system exists as a system within systems. It is a complex system. Complex systems are made up of many smaller systems and parts of systems interacting and constantly affecting each other. All levels of the system—state, district, school, and classroom level—produce ripples of actions and reactions that impact each other.

Complex systems, like a public school system, include several common interdependent elements: leadership, context, culture, resources, and processes. Leadership refers to the actions of formal and informal leaders that build and sustain the system. Some components of leadership include communicating a clear mission and vision, engaging all stakeholders to get multiple perspectives, and using data and evidence to drive decisions. Context refers to all of the contributing factors that make a particular system unique, including historical context, both implicit and explicit policy and power dynamics, existing disparities, and organizational structures.

Culture refers to how people work together and interact with each other as well as shared beliefs and dispositions. Some components of culture include developing a shared purpose, trust, collective- and self-efficacy, and collaboration. Resources refer to having access to the necessary sources of supply and support that enable your system to function. That can include people, time, money, materials, and technology. Processes refer to continued and repetitive actions and operations that are used to accomplish the work and manage day-to-day activities. Processes can include meeting structures, communication methods, common routines and practices, as well as how you make decisions. One of the central principles of an improvement approach is to understand that every system is perfectly designed to get the results it gets. If we want to improve outcomes, we need to change the system. Continuous improvement is intended to support systems change.
Now, let’s explore how to understand and examine your own system. Continuous improvement is a process that intentionally forces us to slow down and examine what is underneath the surface of our system. When visualizing a complex system, it helps to think of an iceberg. Seeing your system requires that you look deeper than the events at the surface to understand the underlying factors of system-related issues. This creates opportunities to change the system. The top level of the system is the event level. This is what you see above the surface of the water and what people tend to react to because it’s what they can see. Changes made only at the event level may not achieve the intended results because they may ignore the root causes of a problem that are not visible. But to develop a deeper understanding of the system and to really see it, you need to look below the surface.

Just below the surface is the pattern level. The pattern level refers to the patterns of recurring issues over time. It allows you to use data to identify and anticipate outcomes that you might want to interrupt. Below the pattern level, you can see the underlying structures level of your system. These structures consist of the policies, practices, and behaviors in your system. A deeper look at these allows you to identify barriers and design new solutions. At the very deepest levels, you can see and begin to understand how mental models shape your system. The mental models level refers to the attitudes, beliefs, expectations, and values in a system. Mental models determine which structures in a system are held in place and which are allowed to change. Shifting mental models creates opportunities for transformation. To truly see your system, you need to look underneath the surface and understand what patterns, structures, and underlying beliefs permeate your leadership, context, culture, resources, and processes. This helps you understand what may be at the root of the problem that you’re trying to solve. Seeing your system in this way and understanding the underlying factors of system-related issues creates opportunities for change.

No one can change a system alone. This is really important to understand. Systems change is created through the cumulative action of many people at different levels of the system. We each need to focus clearly on how we can best impact change at our own particular place in the system. Everyone needs to understand their individual locus of control and take advantage of opportunities to improve, learn, and share learning. For teachers in a public school system, the place they have the most control is in their classroom. Teachers create conditions for learning for their students. And classrooms are also where teachers can learn about their teaching using the teacher inquiry cycle.

The teacher inquiry cycle enables teachers to understand and resolve problems in their classroom. And as this learning is shared with others, what happens in the classroom system impacts what happens at the grade level or department, which in turn influences what’s happening across their entire school. Learning organizations engaged in systems change also need to have certain concepts in place. The first is fail fast, and learn fast. That means building a community and a culture that’s open to risk-taking and to learning from mistakes and failures. The second concept is educators being empowered as change agents. This is essential for continuous improvement. People need to feel comfortable enough to volunteer ideas and to try things out. The third is a commitment to collaborative learning and sharing what you’re learning with others. This is necessary for continuous improvement to be impactful for an entire system. A teacher can support individual needs of students in their classroom, but collaboration helps to highlight common issues that may have systemic solutions.

Finally, learning how to get ideas to work across different contexts allows learning to be shared broadly. Only when that learning is shared and scaled will a system begin to shift. And while no
one person can change a system alone, each of us can impact systems change. For example, taking leadership to focus attention on what is important and seeking out multiple perspectives; understanding your context and taking the time to explore your system beyond your immediate environment; building a culture of collaboration and trust; focusing your time and resources on solving high-leverage problems; building processes and routines into your regular meeting structures that help you to continually reflect on improving your system. We would love to learn how you use this video and the professional learning modules. Please contact us at REL West at WestEd.org.

To access this video and related resources, visit the REL West website.