SISEP
State Implementation and Scaling-up of Evidence-based Practices

March
2019
SISEP eNote

Implementation Science and Improvement Science

Implementation Science, Improvement Science, Deliverology, Universal Thinking, Oh MY!

State and local education agencies draw upon different methods and processes for achieving systemic improvement. We often hear questions such as: How are implementation and improvement sciences different? Do we want to use one versus the other? How do the sciences work together?

Common Tenets

Let's take a closer look at the common tenets of implementation and improvement sciences – and how they work together to support systemic improvement.

Use teaming structures

Network Improvement Communities[2] and Linked Implementation Teams[1] use data to identify needs, develop theories of action, and follow iterative cycles of improvement that prioritize implementers' voices in planning and problem solving.

Use a variety of data

Both sciences use data related to process, fidelity, context, organizational factors, and stakeholder input to drive problem solving and decision making.

Focus on systems

Both approaches are system focused. Improvement science focuses on factors outside individuals while implementation science focuses on roles, structures, and functions that support capacity to use a practice with fidelity.

Use Improvement Cycles

Repeated Plan-Do-Study-Act (PDSA) cycles answer questions (*What are we trying to accomplish? How will we know that a change is an improvement? What change can we make that will result in improvement?*) to learn and improve practices and systems as a result of change.

Start small across varied contexts

Both sciences propose starting small with learning from PDSA cycles before scaling using either a Transformation Zone[1] or Improvement Project[2] methodology to develop capacity, refine the practice, and build readiness before scaling.

Focus on practitioner level needs

Both sciences emphasize use of a systemic selection process. Improvement science identifies high leverage problems and related solutions. Similarly, implementation science examines fit and need of systems, practices, and users.

[1]Implementation Science, [2]Improvement Science

Implementation & Improvement Science Working Together

For an example of how these two sciences can work together, listen to the story of the Kentucky State Department of Education. They, along with SISEP, were recently awarded a Spotlight award from the Carnegie Foundation for the Advancement of Teaching.

Watch a Video of the Kentucky Story

To Learn More

- AI Hub Module 5: Improvement Cycles
- AI Hub Lesson 6: The PDSA Cycle
- Implementation & Improvement Sciences Infographic

Other Resources

- WestEd's National Center for Systemic Improvement (NCSI)
- Carnegie Foundation for the Advancement of Teaching

SISEP
State Implementation and Scaling-up of Evidence-based Practices

IDEAs that Work
U.S. Office of Special Education Programs

FIND OUT MORE