The State Systemic Improvement Plan (SSIP) Evaluation Logic Model

The Kentucky SSIP leverages the efforts of a diverse group of organizational partners and stakeholders, a collection of evidence-based practices (EBPs) and a variety of technological and fiscal resources to support growth in the domains of Enabling Context, Effective Practice, and Effective Implementation as outlined in the Active Implementation Frameworks (AIFs).

Enabling Context

- It uses linked-teaming and Transformation Zones (TZ) to further develop and improve a vertically-aligned infrastructure for sustainable implementation at state, regional and local levels of the education system.
- The SSIP develops an infrastructure of training and coaching for teachers within the TZ in the use of evidence-based mathematics instructional practices.

Effective Practice

- The SSIP leverages its implementation teams and training and coaching infrastructures to provide training and coaching to elementary and middle school teachers within the TZ.
- TZ teams use EBP fidelity monitoring and student benchmark scores to monitor the fidelity of teachers' instruction of the EBP as well as the early indicators of student performance.

Effective Implementation

- Kentucky Department of Education (KDE) and TZ sites engage in analysis of data gathered through capacity assessment cycles, implementation fidelity data, school next step plans, training data and outcome data to continue to refine processes.
- The SSIP scales up its activities across the state by expanding to TZs and by increasing the implementation capacity.

These activities are expected to lead to the increased use of implementation science throughout the state's education system and improved mathematics instruction in grades 4-8, resulting in a decreased percentage of eighth-grade students with disabilities scoring novice and an increased percentage scoring proficient on the Kentucky Summative Assessment (KSA) statewide assessment.

The SSIP leverages the efforts of a diverse group of organizational partners and stakeholders, a collection of evidence-based practices and a variety of technological and fiscal resources. Human resources are combined with evidence-based instructional strategies for teaching mathematics, research-based coaching practices and evidence-based teaching and training practices, along with technological and fiscal resources provided by the various organizational partners.

Condensed Kentucky SSIP Logic Model (Available in Appendix A)

				Primary
Inputs	Activities	Outputs	Outcomes	Outcomes
Organizational Partners Technology Fiscal and Other Resources Stakeholders	Infrastructure development, maintenance at state, region, district and school level Coaching infrastructure development Training infrastructure development Implementation data infrastructure maintenance Linked communication within Transformation Zones (TZs) Continuous improvement cycles	Implementation teams (state, region, district, school) formed/sustained Consistent introductory training plan and onboarding process for new district teams Coaching system present to support teachers District fidelity-observer teams created and certified/sustained Data are available for teams at each level Communication protocol mutually agreed upon by implementation teams Annual action plans developed based on capacity assessment results	Increase district implementation science experience Enhanced support for teachers in EBP instruction Increased linked communication within each TZ Implementation teams increase or maintain high levels of capacity to implement EBPs	Targeted student population in 8th grade mathematics has: Increase % proficiency on Kentucky Summative Assessment (KSA) Decrease % novice on KSA
	Effective Practices: Math instruction guided by math practice profile and usable innovations (e.g., evidence-based practices (EBPs)) Ongoing EBP fidelity monitoring Ongoing student benchmark monitoring Effective Implementation: Active implementation frameworks used to implement innovations TZ Expansion	Usable, effective innovations selected Tz teachers trained in usable innovation (EBPs) Fidelity data are systematically collected School/district implementation teams review student benchmarking data thrice annually Capacity assessments completed annually for all teams (school, district, region, state) Exploration efforts conducted in non-TZ districts	Teachers are prepared to instruct math EBPs (usable innovations) Teachers increase or maintain high fidelity of EBP instruction Student benchmark scores improve New TZ regions, districts and schools selected	

The SSIP utilizes inputs (stakeholders and resources) to enact three categories of activities informed by the AIFs. First, it fosters an Enabling Context through linked teaming and TZs to further develop and improve a vertically aligned infrastructure for implementation at state, regional and local levels of the education system. A strategically small number of districts are grouped into a TZ to focus a broad level of support into a narrow geographic region to accelerate the process of change in that region. An implementation team is developed at the state level and is trained in implementation science. This team is then linked to implementation teams at the regional, district and school levels, to provide training and support in the content and use of implementation science at each level. Over time, additional TZs are created to scale up the SSIP EBPs and lessons learned statewide.

Within its support of an Enabling Context, the SSIP develops an infrastructure of training and coaching for teachers within the TZs in the use of evidence-based mathematics instructional practices.

At the same time, districts receive guidance on developing a coaching plan to support teachers in the implementation of the training content. Infrastructure has been developed to collect and share data related to TZ teams' implementation processes that can be used to lead data-informed action planning as well as ongoing monitoring of EBP fidelity data. TZ-approved tools are used to measure EBP fidelity. District observer teams are trained and certified to use the fidelity tools to observe and score teachers' fidelity of implementation of the EBPs. It is expected that the rigorous application of this training and coaching strategy will increase and maintain the capacity of trainers and coaches to support teachers in the learning and use of

implementation science and the SSIP EBPs and will increase the quality of implementation data to assist further development and improvement.

Each TZ team completes annual capacity assessments to drive a continuous improvement process with action plans informed by capacity assessment results. The data infrastructure developed for the KY SSIP allows teams to access capacity assessment data, fidelity data, and student benchmark data as part of ongoing quality improvement processes and action planning. In addition, KDE analyzes these data to continue to refine its processes and report to the Office of Special Education Programs.

In the short run, it is expected that these linked teams within the TZs will increase districts' implementation science experience, enhance support for teachers in the instruction of EBPs, increase linked communication within each TZ, and increase or maintain high levels of capacity for TZs to implement EBPs.

The second domain of activities, Effective Practice, includes the selection of EBPs and the SSIP's leveraging of its implementation teams and training and coaching infrastructures to provide training and coaching to teachers within the TZ Schools on selected EBPs.

Teachers are trained in both the SSIP EBP and the connection between implementation science and successful professional development. Training data are analyzed by implementation teams across levels to shape coaching for teachers and remove barriers to implementation as they are identified. In addition, as part of the continuous improvement cycles described within Enabling Context, TZs are expected to regularly collect and monitor EBP fidelity data and student benchmarking data. In the short run, it is expected the use of these strategies will better prepare teachers to implement the SSIP EBPs and will lead to increased fidelity of use of the EBPs in TZ classrooms. It is thus anticipated that student benchmark scores would improve accordingly.

Finally, as part of the Effective Implementation domain of the AIFs, the SSIP will scale up its activities across the state by expanding to additional TZs and by increasing implementation capacity. Teams at each level of the system will use implementation data to make informed decisions to remove barriers to ensure effective implementation.

In the short run, systems are created: continuously improving multi-level implementation teams to build the capacity to implement SSIP EBPs statewide, professional development systems to provide training and coaching to educators in the use of SSIP EBPs and monitoring and data collection systems to create feedback loops for improving implementation of SSIP EBPs. In the longer run, the systems are expected to lead to the increased use of implementation science throughout the state's education system and improved mathematics instruction. This will result in a decreased percentage of eighth-grade students scoring novice and an increased percentage scoring proficient on the KSA state assessment.

Evaluation Questions and Project Measures

This section outlines the processes and methods the KDE will use to examine the extent to which the activities are implemented in accordance with the SSIP Theory of Action and the subsequent effects of the activities on outcomes for Kentucky students. The evaluation questions focus on the degree to which the project uses evidence-based professional development practices to support the attainment of the State Identified Measurable Result (SiMR). It also concentrates on the measure of how well the implementation team/teacher participants in SSIP professional development demonstrate improvement in implementation of SSIP-supported EBPs over time.

SSIP Evaluation Questions

- To what extent did the implementation of training, coaching and capacity building supports expand the regional and district infrastructure capacity to implement usable SSIP EBPs?
- 2. What was the impact of the implementation of the training, coaching, and capacity building supports on teacher's ability to implement usable SSIP EBPs with high fidelity and thereby influence the outcomes of students with disabilities?

The SSIP's project measures were designed to help assess the quality and impact of implementation as well as the progress made on the implementation plan.

Each project measure specifies the timeline for achieving the change and a quantifiable growth measure in behavior or knowledge of a specific target audience. The following shows the types of changes expected to be observed by various stakeholders involved in the delivery of SSIP activities. The timelines of change and percent of change for each measure has been determined in collaboration with State Implementation Team (SIT) members.

The project performance measures will be used as a part of the continuous program improvement process. This will help program staff and stakeholders to identify and provide specific support that will help achieve the SiMR.

SSIP Project Measures

Enabling Context:

- 80% of Regional Implementation Teams (RITs) demonstrate adherence to a consistent training/onboarding process with district teams.
- 50% of District Implementation Teams (DITs) report having a coaching system present to support schools in the use of Usable Innovations.
- Each year, 100% of new district fidelity-measure observer teams undergo training that includes inter-observer agreement.
- 80% of RITs report having access to relevant SSIP data
- 80% of DITs report having access to relevant SSIP data
- 80% of schools report having access to relevant SSIP data

- 80% of Regional teams report using a communication protocol that is mutually agreed upon by RIT and DIT.
- 80% of RITs and DITs report creating an action plan each year that is based on capacity assessment findings.
- Among those with an action plan, 80% of RITs and DITs reported using the capacity assessment action plan to support decision-making.
- Each year, 80% of RIT members report the KDE Implementation Team provided high-quality support to increase the use of Implementation Science.
- Each year, 80% of DIT members report the RIT provided high-quality support to increase the use of Implementation Science.
- Each year, 80% of Building Implementation Team (BIT) members report the DIT provided high-quality support to increase the use of Implementation Science
- Each year, 80% of RIT members report the KDE Implementation Team provided high-quality support to improve the implementation of Math EBPs.
- Each year, 80% of DIT members report the RIT provided high-quality support to improve the implementation of Math EBPs.
- Each year, 80% of BIT members report the DIT provided high-quality support to improve the implementation of Math EBPs
- Each year, the SIT increases capacity to implement SSIP Usable EBPs (including AIFs) or maintain high levels (80% or higher in Total Domain)
- Each year, 80% of RITs increase capacity to implement SSIP Usable EBPs (including AIFs) or maintain high levels (80% or higher in Total Domain).
- Each year, 80% of DITs increase capacity to implement SSIP Usable EBPs (including AIFs) or maintain high levels (80% or higher in Total Domain)
- Each year, 80% of BITs increase capacity to implement SSIP Usable EBPs (including AIFs) or maintain high levels (80% or higher in Total Domain)

Effective Practice:

- 100% of districts secure training on Usable Innovation for all district/school personnel.
- 80% of cohorts update fidelity databases at least thrice annually
- Each year, 70% of TZ teachers report the training and support they received had a moderate to large impact on knowledge of the SSIP EBP (an average of 3 and above on a 4-point Likert scale).
- Each year, 70% of TZ teachers report the training and support they received had a moderate to large impact on skills to use the SSIP EBP in instruction (an average of 3 and above on a 4-point Likert scale).
- Each year, 80% of schools (or cohorts) increase, or maintain high levels of, fidelity of SSIP EBP instruction between annual baseline and year-end fidelity observations or maintain high levels.

Effective Implementation:

- Each year, 90% of implementation teams complete an annual capacity assessment
- Each year, 80% of RITs engage in exploration activities
- Each year, at least 1 new TZ sites (at school, district or region level) enters into a mutual selection agreement

Data Collection Timeline

The SIT will oversee the efforts to collect implementation data at regular intervals that applies to the SiMR and is valid and reliable. The SSIP will utilize its linked teaming infrastructure to provide tiered oversight and technical assistance to each of the implementation teams at every tier of the TZ multi-team linked infrastructure with assistance and support provided by the evaluator. The evaluator has built and will maintain data dashboards—including data related to fidelity monitoring, capacity building/assessing, student benchmark reporting, and other data deemed necessary—accessible to each tier of the TZ implementation teams to foster data-informed, locally relevant quality improvement processes. An annual timeline of the collection of primary data sources is provided in the following table.

Data Collection Timing and Participants

Annual Timing

Project Measure	Sept-Oct	Dec-Jan	April-May	As needed
EBP Fidelity	X	X	Х	
Capacity assessment	X	X	Х	
Linked Teaming Survey*			Х	
SEA Check ins				X
Teacher Training (EBPs, AIFs)				X

^{*}In 2023, this occurred in Sept/Oct. In future years, this will be in April-May

TZ Level Participants

Project Measure	School	District	Region	
EBP Fidelity	X			
Capacity assessment	X	X	X	
Linked Teaming Survey*	X	X	X	
SEA Check ins		Х	Х	
Teacher Training (EBPs, AIFs)	X	X	X	

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