The Kentucky Department of Education

State Systemic Improvement Plan (SSIP)

Phase III:5

April 1, 2021

Executive Summary

The Kentucky Department of Education (KDE) as part of the Annual Performance Plan, submits an update to the U.S. Department of Education's Office of Special Education Programs (OSEP) on the State Systemic Improvement Plan (SSIP) designed to improve educational outcomes for students with disabilities (SWDs). Included within Phase III, Year 4 is a brief description of each phase.

A. Summary of Phase III, Year 5 (Phase III:5)

Throughout each phase of the State Systemic Improvement Plan (SSIP), the Theory of Action has remained a central focus to meet the State Identified Measurable Result (SiMR) for the Kentucky Department of Education (KDE). The Theory of Action was updated during Phase III:4 to include the additional evidence-based practices (EBPs) of Positive Behavioral Interventions and Supports (PBIS).

If the KDE uses implementation science principles for effectuating systems change within Regional Special Education Cooperatives; and,

During Phase III:5, the KDE, with support from the State Implementation and Scaling-up of Evidence-based Practices (SISEP) center, continued to train and coach the Transformation Zone (TZ) KDE Regional Special Education Cooperatives to build the capacity of districts. The third regional cohort engaged in installation stage activities in two mutually selected districts. Due to the COVID-19 pandemic, there was a need to pivot toward providing support through virtual means. Quarterly, All TZ regional meetings were essential to sustain the infrastructure and the system of support established throughout previous phases.

If that systems change provides the KDE Regional Special Education Cooperatives with the capability to increase the capacity of districts to implement, scale-up, and sustain evidence-based practices; and,

Due to the COVID-19 pandemic, regional support to districts shifted dramatically. Building teacher competency on EBPs in mathematics became the primary focus. This allowed teachers to immediately apply the EBPs in the virtual instructional setting. The KDE Regional Special Education Cooperatives delivered a variety of virtual math trainings and developed a webcast on Leveraging Math Tasks to Impact Learning as part of the KDE virtual instruction web series. As a result of shifting support to meet the needs of districts during the pandemic, scale-up within new and current TZ regions, districts, and schools was impacted. Each regional TZ cohort has maintained contact with districts so intensive support could resume once buildings return to the traditional instructional setting.

If the KDE and the Regional Special Education Cooperatives engage stakeholders in vetting, selecting, and disseminating usable and measurable methods of implementing evidence-based instructional practices; and,

The Instructional Practices and Academic Content (IPAC) team, made up of stakeholders from across the state, was formed in Phase II (p. 11) to develop a selection process for Usable Innovations. In Phase III:3 (p. 9), the team was repurposed to develop the Kentucky Mathematics Innovation Tool (KMIT). As a result of the COVID-19 pandemic, the IPAC team began limited usability testing with the KMIT in virtual classrooms during Phase III:5. Additionally, the team created resources based on the National Council of Teachers of Mathematics (NCTM) Eight Mathematics Teaching Practices to support students with disabilities in virtual and traditional learning environments to support the SiMR.

If Kentucky districts provide professional learning, technical assistance and support to elementary and middle school teachers around implementing, scaling, and sustaining Positive Behavioral Interventions and Support (PBIS) and evidence-based practices in math, with an emphasis on reduction of novice performance;

Implementation and scaling efforts within the TZ regions, districts, and schools shifted to building and sustaining teacher competency in EBPs in mathematics during Phase III:5. This focus allowed for increased support in virtual instructional settings to meet the needs of TZ districts and schools. Additionally, efforts were also made to engage and build the capacity of districts in PBIS. By leveraging support from the State Personnel Development Grant (SPDG), mutually selected districts developed District Implementation Teams (DITs), engaged in action planning, and conducted a data collection inventory focused on PBIS. These capacity building activities will lay the foundation for developing a system of support for teachers to impact the SiMR.

Then the percentage of students with disabilities performing at or above proficient in middle school math, specifically at the 8th grade level, will increase

During Phase III:5, the full Theory of Action remains in place. The impact on the statewide SiMR targets is unknown for the current Federal Fiscal Year (FFY) because no state summative exam was given as a result of the pandemic.

State Identified Measurable Result (SiMR):

"To increase the percentage of students with disabilities performing at or above proficient in middle school math, specifically at the 8th grade level, with emphasis on reducing novice performance, by providing professional learning, technical assistance and support to elementary and middle school teachers around implementing, scaling and sustaining Positive Behavioral Interventions and Supports (PBIS) and evidence-based practices in math."

B. Progress in Implementing the SSIP

The Kentucky Department of Education (KDE) develops milestones for each phase of the State Systemic Improvement Plan (SSIP) to drive change and support the goals of the State Identified Measurable Result (SiMR). Stakeholders are petitioned for feedback and informed of new developments. Each milestone has been completed or is on track to meet the designated completion date. However, there are updates on the date of completion and tools as a result of the pandemic. Listed below are the updated milestones, with changes indicated in purple:

Milestones for SiMR

Scale-up to Additional Regions, Districts, and Schools

Transformation Zone (TZ) Cohort 1 Regions (n = 2)
- **Spring 2020 (Spring 2021)**—Installation of training and coaching with the third cohort of districts
- **Fall 2020**—Supports shifted to focus on implementation drivers to build teacher competency as a result of the pandemic
    - Districts use the District Capacity Assessment (DCA) to measure the system of support
- **Fall 2020 (Spring 2021)**—Engage in Initial Implementation of first and second cohort of districts
    - One district mutually postponed participation in the TZ due to the COVID-19 pandemic

TZ Cohort 2 Regions (n = 3)
- **Spring 2020 (Spring 2021)**—Selection of innovation with first cohort districts
- **Spring 2020 (Spring 2021)**—Installation of training and coaching for first cohort of districts
    - Scaled-up to three new schools
- **Fall 2020**—Supports shifted to focus on implementation drivers to build teacher competency as a result of the pandemic
    - Districts use the DCA to measure the system of support

TZ Cohort 3 Regions (n = 1)
- **Summer 2020**—Two districts mutually selected to participate as a TZ
    - Districts use the DCA to measure the system of support
- **Fall 2020 (Spring 2021)**—Installation of training and coaching for first cohort of districts
- **Fall 2020**—Supports shifted to focus on implementation drivers to build teacher competency as a result of the pandemic

Infrastructure Development

- **Winter 2020 (Spring 2021)**—Gather a stakeholder team to develop a Practice Profile for Positive Behavioral Interventions and Supports (PBIS)
- **Summer 2020 (Spring 2021)**—The District Data Integration Team activities and members were repurposed as members of the State Design Team (SDT). The SDT will conduct a data inventory to identify data collection gaps for PBIS.
- **Summer 2020 (Winter 2021)**—Determine with the State Management Team (SMT) which members should be added to the SDT as a result of adding PBIS into the SiMR
- **Summer 2020 (Winter 2021)**—Reconvene the SDT
  - Annual review of Project Measures, timelines, and milestones (Summer 2021)
  - Conduct data inventory to determine which data collection tools can be repurposed from mathematics (Summer 2021)
  - Creation or adoption of Kentucky PBIS Practice Profile (Spring 2021)
- **Fall 2020**—Instructional Practices and Academic Content (IPAC) team reinstated to focus on instructional supports for teachers on the Eight Mathematics Teaching Practices in virtual, hybrid, and in-person settings

Communication

- **Spring 2020 (Spring 2021)**—The SMT will usability test and refine communication plan

State Personnel Development Grant (SPDG)

- **Summer 2020**—Leverage SPDG projects (Linked P-12 PBIS) to support the SSIP
  - Systems State Leadership Team (SSLT) convened to align SSIP and SPDG support
  - The KDE State Transformation Specialist (STS) and SMT members will support the effective implementation of PBIS
  - The SDT will provide feedback on the SSIP and SPDG processes and how they can begin to merge (Spring 2021)
- **Summer 2020**—Hosted a SPDG Summit (2-day virtual event) to support districts on PBIS and data entry
- **Summer 2020**—Mutually selected Early Childhood Regional Training Centers (RTCs) and districts
- **Fall 2020**—Engaged in installation activities with RTCs and districts on PBIS

Decision Support Data Systems

- **Fall 2020 (Fall 2021)**—Use learnings from mathematics Data Dashboard to develop a behavior dashboard
- **Fall 2020**—Developed automated Data Dashboard and released to regions, districts, and schools

- **Winter 2020**—Usability tested Kentucky Mathematics Innovation Tool (KMIT) in virtual setting

Future milestones are available on page 41.

<u>Future Evaluation Activities</u>

For consistency of year-to-year analysis, the evaluation plan for mathematics was not changed during Phase III:5. The KDE will continue to build the capacity of regions, districts, and schools on use of the Data Dashboard. Tools will be developed, with input from the SDT, to support districts with determining need and fit for PBIS or evidence-based practices (EBPs) in mathematics to impact the SiMR.

Implementation Progress

<u>State Infrastructure Changes</u>

State Management Team (SMT)

The SMT consists of executive leaders within the KDE that can remove implementation barriers to support regions, districts, and schools within the TZ. With the addition of PBIS in the SiMR as an EBP, the SMT added a representative from the Office of Continuous Support and Improvement (OCIS) to promote alignment within the KDE. The SMT also reviewed SDT membership to determine representatives for PBIS within the state.

Based on the results of the State Capacity Assessment (SCA), the SMT will continue to focus on communication planning for the upcoming year. This was initially delayed due to the SMT focusing on providing communication and guidance to districts during the COVID-19 pandemic.

State Design Team (SDT)

The SDT is a representative group of stakeholders from across that state that was initially formed during Phase I of the SSIP (Phase II, p. 5). The team's focus is to provide input on aligning the system of support to meet the goals of the SiMR. With the addition of PBIS as an EBP in the SiMR, new representatives were added to the team. The SDT engages in monthly meetings focused on:
- establishing a common philosophy of PBIS in Kentucky through the co-creation or adoption of a PBIS Practice Profile;
- exploring cross-agency alignment for PBIS and mathematics support for districts; and
- identifying implementation benchmarks for PBIS to evaluate progress towards the SiMR.

The work of the SDT was delayed due to shifting priorities to meet the needs of districts during the COVID-19 pandemic. The team will continue to work towards these deliverables through 2021.

Systems State Leadership Team (SSLT)

During Phase III:5 the SSLT was formed to support alignment of the SSIP and SPDG. Members include representatives from the University of Kentucky's Human Development Institute (UK-HDI), Kentucky-Academics and Behavioral Response to Intervention (KY-ABRI), and the KDE. The goal of the SSLT is to develop systems of support to improve educational outcomes for students with disabilities through the use of implementation science with a focus on PBIS and mathematics. During the COVID-19 pandemic, the SSLT worked to solve implementation barriers and develop a communication plan to support districts.

Usability Testing Teams

During Phase III:4 (p. 14), teams with representative stakeholders from across the TZ were formed to conduct usability testing on the Data Analysis and Coaching Practice Profiles. These teams paused usability testing with districts temporarily during the COVID-19 pandemic due to lack of in-person access to schools. Instead, the teams wrote an introduction and purpose for each Practice Profile to clarify the intended use of the tools. They also began vetting materials to support consistent training of the Practice Profiles across the TZ. These updates will be added to the process once usability testing can resume in districts.

Instructional Practices and Academic Content (IPAC) Team

Due to the COVID-19 pandemic, feedback from TZ districts and schools within the linked teaming structure indicated a need to provide support to teachers on implementing EBPs in mathematics virtually. As a result, the IPAC team was repurposed to address this area of focus.

To further align with the work of the SPDG by bridging preschool and kindergarten, members from the RTCs were added to the team. Tools that provide strategies for the implementation of the Eight Mathematics Teaching Practices from the National Council of Teachers of Mathematics (NCTM) were developed to support students with disabilities. The resources include an overview of each teaching practice, processes for implementation, and reflection questions.

Additionally, members from the IPAC team developed a webcast as part of the Office of Special Education and Early Learning (OSEEL) web series for teachers on Leveraging Math Tasks to Impact Learning during in-person or virtual instruction to support students with disabilities.

Based on the development of the tools and webcast, the IPAC team also adapted the KMIT training to meet the needs of districts during virtual instruction.

Transformation Zone Changes

The educational structure within Kentucky was disrupted due to the COVID-19 pandemic and the instructional setting was shifted from in-person to virtual. As a result, districts had to act quickly to adapt to a new virtual instructional delivery method.

In response to the pandemic, the KDE Regional Special Education Cooperatives provided virtual training and coaching opportunities for TZ districts, as well as districts throughout Kentucky. The STS, with support from the State Implementation and Scaling-up of Evidence-based Practices (SISEP) center continued to build the capacity of regions on the Active Implementation Frameworks. However, TZ district support shifted from infrastructure and team development to strengthening the competency drivers. Application of EBPs in mathematics to virtual instruction became the primary focus.

The KDE and the Regional Special Education Cooperatives recognized the immediate needs of districts and acted to collaboratively provide support. Together the KDE, regional cooperatives, and RTCs hosted weekly webcasts providing training on virtual instructional methods and strategies. The topics were selected based on feedback from Directors of Special Education and Preschool Coordinators across Kentucky.

Continued Focus on Scale-up and the Implementation Drivers

With each component of the Theory of Action in place, the KDE has continued to focus on sustainability within the TZs. Due to the pandemic, scale-up progress slowed and support shifted to developing the competency drivers on mathematics instructional practices. As described in previous SSIP phases, each level of the system (state, region, district, school) continues to be in various stages of putting the Implementation Drivers in place (see Figure 1).

Figure 1. Implementation Drivers
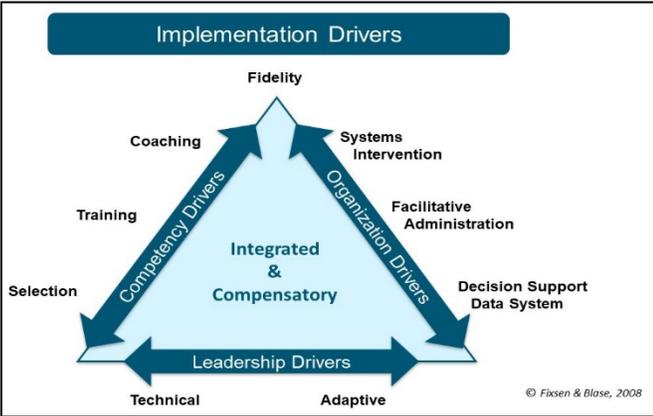
Cohort 1 Regions

The KDE Regional Special Education Cooperatives continued to meet with the TZ districts to support sustainability of current implementation systems. At the onset of the pandemic, the focus shifted to building teacher competency in mathematics and providing support for virtual and blended instruction. Regional teams focused on an internal coaching service delivery plan, with input from districts, to continuously improve differentiated support in mathematics. Through this communication, asynchronous and synchronous mathematics training was made available to build teacher competency in EBPs. Professional learning communities were leveraged to provide follow-up support.

As districts and schools return to in-person instruction, TZ districts will continue to install the entire system of support again through the use of the Active Implementation Frameworks.

Cohort 2 Regions

Throughout Phase III:5, the second cohort of regions continued to support installation and initial implementation activities. In-person training and coaching for District and Building Implementation teams was adapted to virtual. One district, despite the pandemic, scaled-up to four schools. District and building teams are meeting monthly to lift up implementation barriers to the region and state and use the DCA to measure the system of support.

The regional cooperatives have also provided training to districts and schools on the KMIT. The tool was usability tested during virtual instruction in a limited number of schools. The data gathered was used to inform virtual training and coaching sessions to support teachers.

Cohort 3 Regions

During Phase III:5, a third cohort region was mutually selected to participate in the TZ. The region developed district selection criteria and began planning for exploration. Two districts mutually selected to participate. Both districts were engaging in installation activities focused on developing readiness and competency on the Active Implementation Frameworks based on their DCA results and action plan. The region also hosted virtual math trainings to build teacher capacity in math instructional practices.

Training

Regions, districts, and schools have continued to receive asynchronous and synchronous training on Active Implementation. However, due to the pandemic, training activities were adjusted to a virtual setting and some timelines were delayed.

Also, feedback from stakeholders within the TZ indicated a need to focus more on supporting teachers with training on math EBPs due to the shift from in-person to virtual instruction. The regional cooperatives provided virtual math training for teachers throughout Phase III:5. Training

was also conducted for districts in Initial Implementation on the KMIT.

Based on feedback from the TZ, the SSLT partnered with the Kentucky Center for Mathematics (KCM) to provide training and coaching support for educators across the state through the SPDG. The KCM is developing online modules focused on instructional practices within the Math Practice Profile. This will develop readiness across the state on math EBPs to support the SiMR.

Additionally, to build capacity in PBIS in preschool, the SSLT in collaboration with the National Center for Pyramid Model Innovations provides training to teachers across Kentucky to bridge PBIS support for students in preschool and kindergarten.

Coaching

Coaching data to inform the system of support was limited for districts and schools due to the COVID-19 pandemic. As a result, the yearly coaching surveys were adapted. The traditional surveys were shifted to regions participating in one-hour focus groups facilitated by UK-HDI.

Efforts have been made this year to continue building coaching capacity in PBIS to meet the goals of the SiMR. The RTCs participate in monthly training and coaching sessions on the Pyramid Model through the SPDG. District and Building teams are receiving coaching to build readiness and capacity to support the effective implementation of PBIS in preschool to support the SiMR.

Fidelity

In previous phases of the SSIP, the KMIT was developed to collect fidelity data to inform follow-up support for teachers on the EBPs in the Practice Profile (Phase III:3, p. 9). Due to the shift to virtual instruction, training and coaching of the KMIT was delayed in many districts. This ultimately impacted district collection of KMIT data.

Following a similar development process as the Math Practice Profile and KMIT, the SDT conducted an initiative inventory for PBIS. This information was used to begin planning the co-creation of a PBIS common philosophy and Practice Profile.

Communication

During Phase III:5, communication shifted to providing support to districts and schools on virtual instruction due to the COVID-19 pandemic. Strengthening communication with the regional cooperatives was vital to maintaining focus on the goals of the SiMR. Monthly meetings with individual TZ regions centered on educator practice. Quarterly All TZ regional meetings were held virtually to share implementation trials and learnings. Additionally, updates on the SSIP and the need to improve alignment with the SPDG were shared regularly at monthly regional cooperative and RTC director meetings. A SPDG virtual Summit was also hosted by the KDE during the summer of 2020 for regions and districts within the state. This summit provided an

opportunity to build Active Implementation and PBIS readiness for districts outside of the TZ.

As a vital stakeholder group, the State Advisory Panel for Exceptional Children (SAPEC) was provided an update on progress in the TZ. The panel expressed interest in scaling efforts and requested ongoing updates regarding the SSIP.

Kentucky White Paper

During Phase III:5, a second White Paper was published in partnership with the SISEP center. This resource provides a how-to-guide on the co-creation process of Kentucky's mathematics usable innovation. The White Paper was shared with regions and districts and is listed as a resource on the Usable Innovation section of the SSIP KDE webpage.

SISEP Active States Forum and Community of Practice

During Phase III:5, the KDE and regional education cooperatives participated in the SISEP Active States Forum. The STS also was an active participant in the SISEP-community of practice. Both events provided opportunities to gather trials and learnings from other states on the implications of the pandemic on implementation activities.

Carnegie Symposium for Continuous Improvement

As in previous phases of the SSIP (Phase III:4, p. 15), the KDE presented at the Carnegie Summit for Continuous Improvement in April 2020. The presentation was done in collaboration with the Wisconsin Department of Education and the SISEP center. Both states shared implementation stories focused on the linked teaming structure and building capacity at the state level. The audience included stakeholders from State Education Agencies (SEAs), regions, districts, and schools from across the United States. Participants noted the effectiveness of the linked teaming structure.

State Design Team (SDT)

As described in Phase III:4 (p. 16), the SDT made up of a diverse group of stakeholders from across the state was scheduled to reconvene in summer of 2020. Due to impacts from the pandemic, this was postponed until winter 2021. Because data indicated a need to add PBIS as EBPs to meet the goals of the SiMR, new members were invited to join the SDT. The focus of the team became aligning PBIS and mathematics to improve educational outcomes for students with disabilities.

Data Sharing System

During usability testing of the SSIP Data Dashboard, the KDE received feedback from districts that having data in real-time would support effective implementation (Phase III:4, p. 18). The

District Data Integration Team reconvened and developed an action plan for converting to an automated dashboard. The new dashboard was released during the fall of 2020. All data, including student benchmark, capacity, training system, coaching system, and fidelity now update automatically to facilitate analysis to improve the system of support.

Plans were also developed with the SDT to replicate data collection within the dashboard for PBIS. This will allow implementation teams to generate comprehensive reports for analysis.

Universal Supports during COVID-19

To address the extensive needs of all districts throughout the commonwealth at the onset of the pandemic, the KDE partnered with the Regional Special Education Cooperatives and the Early Childhood Regional Training Centers to provide universal support via online webcasts. Feedback on topics for the webinars were sought from the Director of Special Education (DoSE) Advisory Group. The webcasts were recorded live events and stakeholders can access the [Regional Special Education Cooperative webcast series](#) and [Early Childhood Regional Training Center webcast series](#) via the KDE website.

Stakeholder Engagement

Below is a table describing the KDE's ongoing communication with stakeholders. The table includes the event title, stakeholder group, method of communication, frequency, information shared, and feedback received.

Table 1. Stakeholder Communication in Phase III:5

Stakeholder Communication in Phase III:5					
Event/ Meeting Title	**Stakeholders**	**Method of Communication**	**When/ How Often?**	**Information Shared**	**Feedback Received**
Carnegie Summit	Education organizations from across the United States	Virtual	April 2020	Overview of Kentucky's linked teaming structure and the importance of strong leadership to improve educational outcomes for students with disabilities	No feedback received
District Data Integration Team	KDE Data Managers, KDE Technology Staff, STS	Virtual	April-August 2020	Creation of automated Data Dashboard to meet the needs reported from stakeholders throughout the linked teaming structure	Grateful to have the automated system in place. The graphs are clearer and cleaner to read

Stakeholder Communication in Phase III:5					
Event/ Meeting Title	**Stakeholders**	**Method of Communication**	**When/ How Often?**	**Information Shared**	**Feedback Received**
All TZ regional cooperative Meeting	TZ regional cooperatives	Virtual	May 2020 (Quarterly)	Implementation trials and learnings shared to engage in a networked improvement community	Allows for platform to network and learn from other regions
2020 SISEP Active States Forum	STS and implementation team members from SISEP Active States	Virtual (conference)	June 2020 (Annually)	STS and regional cooperatives presented on turning challenges into opportunities during COVID-19.	Ideas for collecting fidelity data and supporting implementation during virtual instruction
SPDG Summit	District and school staff from across the state	Virtual	June 2020 (Annually)	Overview of PBIS, high leverage practices, and Active Implementation, exploration opportunity for districts to engage in SPDG	The training provided on collecting and reporting preschool behavior incident data will support the implementation of PBIS

Stakeholder Communication in Phase III:5					
Event/ Meeting Title	Stakeholders	Method of Communication	When/ How Often?	Information Shared	Feedback Received
Systems (State) Leadership Team	Representatives from KY-ABRI, UK-HDI, KDE	Virtual	Monthly (as needed)	Inventory of district support system for PBIS and communication processes	Continuously improve communication through the district inventory spreadsheet
SISEP Active States Community of Practice	STS and implementation team members from SISEP Active States	Virtual	November 2020 (Quarterly)	Shared how TZ work has shifted due to the COVID-19 pandemic	Great to see the state and regions working together to support districts during the pandemic
Release of second SSIP White Paper	Regions and districts	Virtual	December 2020	A how-to-guide on the co-creation process of Kentucky's mathematics usable innovation	No feedback received

Stakeholder Communication in Phase III:5					
Event/ Meeting Title	**Stakeholders**	**Method of Communication**	**When/ How Often?**	**Information Shared**	**Feedback Received**
KMIT training	TZ district and school staff (TZ Regional Implementation Teams (RITs) facilitated)	Virtual	As needed	How to use the KMIT to improve the system of support for teachers. Practiced obtaining inter-observer agreement (IOA)	Consideration should be given to various instructional settings (i.e. in-person, virtual, and hybrid model)
State Advisory Panel for Exceptional Children (SAPEC)	Parents and educators of students with disabilities	Virtual	December 2020 (Quarterly—SSIP Update annually)	Update on current implementation progress of the SSIP and current supports during COVID-19 Meeting recording	Interested in updates in the future as the work continues and scales
Regional Implementation Team meetings	TZ regional staff	Virtual	Monthly with each TZ region	Sharing of implementation celebrations and barriers Provide training and coaching on Active Implementation	Establish implementation plan for PBIS supports

Stakeholder Communication in Phase III:5					
Event/ Meeting Title	**Stakeholders**	**Method of Communication**	**When/ How Often?**	**Information Shared**	**Feedback Received**
Usability Testing Teams	TZ regional staff	Virtual	Monthly (as needed)	Design and complete Plan-Do-Study-Act (PDSA) cycles on the Data Analysis Practice Profile and coaching tools	Establish foundational understanding of function and use of the Coaching Practice Profile. Need to establish a common language for types of data in the Data Practice Profile PDSA Cycle training of the Data Practice Profile is needed for TZ Regions
IPAC Team	TZ regional staff, KDE math standards staff, RTCs	Virtual meetings	Monthly (As needed)	Design resources aligned to the Kentucky Math Practice Profile for in-person, virtual and blended instructional settings	Update the KMIT trainings to include virtual and blended instructional settings

Stakeholder Communication in Phase III:5					
Event/ Meeting Title	Stakeholders	Method of Communication	When/ How Often?	Information Shared	Feedback Received
KDE Regional Special Education Cooperative Directors Network Meeting	Regional Special Education Cooperative Directors	Virtual	Monthly	Shared SSIP updates and SSIP/SPDG graphic to show alignment	There is a need for a PBIS implementation plan
Early Childhood Regional Training Center Directors Meetings	RTC Directors	In-person/Virtual	Monthly	Use of the Active Implementation Frameworks and system of support for preschool PBIS through the Pyramid Model	The Active Implementation Stages contextualized for preschool PBIS through the Pyramid Model was helpful

Outcomes Accomplished

A Gantt chart has been maintained since Phase II (see Appendix A) to help ensure that short and long-term goals of the coherent improvement strategies are achieved as intended. The Gantt chart provides stakeholders with an overview of coherent improvement strategies. This year's chart was amended to include Coaching and Data Practice Profile activities. The State Leadership Team revises the Gantt chart annually. A timeline of mathematics activities (Appendix B) is also shared with TZs regularly concerning data collection procedures.

C. Data on Implementation and Outcomes

The evaluation measures for the State Systemic Improvement Plan (SSIP) focus on the system of support for teachers to effectively implement evidence-based practices (EBPs) to improve educational outcomes for students with disabilities in mathematics. To build this infrastructure, Transformation Zone (TZ) region and district teams continue to use implementation science research to engage schools in supporting teachers.

The Kentucky Department of Education (KDE) and its stakeholders have monitored and measured outcomes to assess the effectiveness of the implementation plan as Phase III:5 milestones were reached (Phase III:4, p. 23). Despite the COVID-19 pandemic, stakeholder engagement plans remained mostly unchanged (Phase III:4, p. 23). However, the scheduled milestones, activities, and data on implementation and outcomes were affected. These changes are discussed further in the reporting of project measures to follow.

Key Measures with Data Sources and Baseline Data

The SSIP project measures (Phase III:4, p. 23) remain unchanged and the Phase III:5 evaluation data does not support the changing of the SSIP itself.

Progress of Installation Stage Activities

During Phase III:5, scale-up in TZ Cohort 3 included two local education agencies. These two District Implementation Teams (DITs) completed an initial capacity assessment and action plan prior to school buildings entering Initial Implementation (see Table 2).

Table 2. Linked teaming occurs in correct installation progression.

Project Measure I.1	Target Metric	%	Actual Ratio	%	Status
100% of implementation teams complete initial capacity assessment and the initial capacity readiness action plan before their buildings enter into Initial Implementation phase.	3/3 Teams	100	2/2 Teams	100	Met

Project Measures I.2-I.5 are in place to monitor that essential installation stage activities are completed within an appropriate timeline and ensure that SSIP standards are fully adopted during the selection of the Usable Innovation (UI). These steps were paused within the two newest TZ districts because of the pandemic and are not reportable this year.

Progress of Training Activities

The Active Implementation Frameworks (AIFs) are embedded in ongoing training/technical assistance (Phase III:2, p. 11) throughout the Exploration and Installation phases. Evaluators analyzed the overall effectiveness of training by calculating a team's rate of agreement through averaging each team member's responses to five knowledge-based post-training four-point Likert survey items. One district had trainees complete post-Active Implementation (AI) training surveys this year after each of its five trainings (see Table 3); they had a composite average above 3.72 ("strongly agree" on a four-point Likert scale; prior year was 3.54).

Table 3. Training sessions impact team knowledge of AIFs

Project Measure T.1	Target Metric	%	Actual Ratio	%	Status
Each year, 100% of implementation teams demonstrate that training sessions had a moderate to large impact on their knowledge of Active Implementation Frameworks.	5/5 Teams	100	1/1 Team	100	Met

Tables 4-5 present longitudinal post-training survey results for the past three years. While the participants completing the surveys have changed each year, the data comparison is useful for ensuring that training fidelity is maintained over time. The survey knowledge items maintained an agreement level above 99%.

Table 4. Percentage of training participants who agreed or strongly agreed with knowledge-based survey items

Post Training Survey Items (% Agree or Strongly Agree)	Phase III:3 (n=49)	Phase III:4 (n=127)	Phase III:5 (n=30)
The event achieved the session goals and objectives.	100.0%	100.0%	100.0%
The event/content is highly relevant to my work.	100.0%	99.2%	100.0%
The event/content and materials are useful to my work.	100.0%	99.2%	100.0%
The event/content helped further my understanding of Active Implementation.	100.0%	99.2%	100.0%

There was an increase in the percentage of trainees selecting "moderate" or "expert" for the third year in a row for the overall current knowledge item.

Table 5. Percentage of training participants who selected moderate or expert as their current knowledge on survey

Post Training Survey Items (% Moderate or Expert)	Phase III:3 (n=49)	Phase III:4 (n=120)	Phase III:5 (n=30)
How would you rate your current knowledge level regarding the specific terms, frameworks, resources, and materials discussed at these meetings?	67.3%	70.1%	93.3%

Project Measure T.2 (Phase III:4, p. 28) is unchanged this year.

Project Measure T.3 (Table 6) focuses on training teachers on the core components of the Math Practice Profile (Phase III, p. 14). Districts and regions participated in the creation of the Math Training Components Survey and the matching data submission protocols during the previous years (Phase III:2, p. 13). There were two Math Training Components Worksheets submitted by a trainer as an element of the pre-training preparation activities; the worksheet was made voluntary as districts were overwhelmed by pandemic related activities. There were two training dates during Phase III:5, with each date serving the same school. Evaluators treated each school at each training date as a session of school-based teacher training. Overall, there were 2 units of school-based teacher training represented within the submitted data.

Table 6. Teachers receive training that has high fidelity to the Math Practice Profile

Project Measures T.3	Target Metric	%	Actual Ratio	%	Status
80% of all SSIP EBP training sessions for teachers are trained with high fidelity to the core components of the Math Practice Profile	8/10 School based Training Sessions	80	2/2 School based Training Sessions	100	Met

Each training included all three adult learning strategies and all eight of the National Council of Teachers of Mathematics (NCTM) Eight Mathematics Teaching Practices. Each of the EBP training dates included 4 activities using on average 2.6 of the NCTM Mathematics Teaching Practices.

Along with the district that completed the Math Training Components Worksheet this year, an additional district had a school also choose to collect and submit post-training surveys for inclusion on the SSIP Data Dashboard. The Mathematics Training Efficacy survey contains eight four-point Likert scale items and an opportunity to share general comments; it was also made voluntary this year because of the pandemic. Results of the survey showed 24 of the 24 teachers (100%) agreed or strongly agreed with the item, "The event/content helped further my understanding of mathematical practices" (see project measure T.4).

Table 7. Teachers reported that training had a positive impact on their knowledge of their mathematics EBP

Project Measure T.4	Target Metric	%	Actual Ratio	%	Status
Each year, 70% of TZ teachers report the training and support they received had a moderate to large impact on their <u>knowledge</u> of the SSIP EBP (an average of 3 and above on a 4- point Likert scale).	70/100 Teachers	70	24/24 Teachers	100	Met

The EBP post-training survey also included the items, "The event/content will help me be more efficient at meeting the mathematical needs of students" and "The event/content will help me be more effective at meeting the mathematical needs of students." All teachers had a composite average of agree or better for these skill prompts (see Table 8).

Table 8. Teachers reported that training had a positive impact on their skills regarding their mathematics EBP

Project Measure T.5	Target Metric	%	Actual Ratio	%	Status
Each year, 70% of TZ teachers report the training and support they received had a moderate to large impact on their <u>skills</u> to use the SSIP EBP in their instruction (an average of 3 and above on a 4-point Likert scale).	70/100 Teachers	70	24/24 Teachers	100	Met

In addition, the surveyed teachers were of strongest agreement that the training was of high quality (average of 3.9 on four-point Likert scale) and lowest agreement about their current knowledge level of the mathematical practices (average of 3.4).

Figure 2. Mathematics training outcomes

Phase III:5 - Mathematics Training Efficacy Data

Question	School C (n=5)	School B (n=11)	School A (n=8)
How would you rate your current knowledge level regarding the mathematical practices?	3.6	3.5	3.0
The event/content will help me be more effective at meeting the mathematical needs of students.	3.8	3.6	4.0
The event/content will help me be more efficient at meeting the mathematical needs of students.	3.8	3.6	4.0
The event/content helped further my understanding of mathematical practices.	3.8	3.6	4.0
The event/content is of high quality.	3.8	3.8	4.0
The event/content and materials are useful to my work.	3.8	3.6	4.0
The event/content is highly relevant to my work.	3.8	3.6	4.0
The event achieved the session goals and objectives.	3.8	3.5	4.0

Progress of Coaching Activities

Project Measure C.1-C.5 are in place to ensure that districts have a proper infrastructure for coaching service delivery. These measures were paused in Phase III:5 due to the pandemic. Traditionally, an online survey is administered to all TZ Regional Implementation Team (RIT) coaching participants focusing on the State Transformation Specialists' (STS) use of a wide range of listening and questioning skills, observation and guided reflection, feedback, and modeling. Evaluators this year, facilitated six concurrent one-hour focus groups centering on how the pandemic had affected the implementation of evidence-based practices and the infrastructure to support mathematics within the TZ regions and districts. All groups answered an item written specifically for this project measure, "How has the STS, KDE, and the ALL-TZ group supported

your work this year (past 12 months)?"

While the pandemic has affected priorities, the STS has remained available to the regions. The STS had regular meetings with the RITs and members shared they felt comfortable asking questions. They said the STS was always available to help through email as well. Several regions noted the STS being responsive and timely in their support. Regions felt the door was always open, and the STS was easy to contact when they had questions. One region also pointed out that "our representative for SISEP (State Implementation and Scaling-up of Evidence-based Practices center) is really good as well. [They have] a wonderful knack of guiding discussion…to determine where we currently are, where we need to be, and where we want to be."

The KDE also supported workgroups, including TZ RIT members, in usability testing the Data and Coaching Practice Profiles. Improvement cycles continued throughout the pandemic. KDE's commitment to the dashboard also showed positive results over time based on RIT feedback.

The focus group identified a collaborative spirit among all the regional cooperatives involved in the TZ. Additionally, the group indicated learning from one another, sharing resources, and combining elementary and middle school educators was helpful.

Ultimately, the type of support and understanding from the KDE "has been very important and significant to our feelings and opinions towards the department and the work." Flexible support and patience during the pandemic also had a positive effect on TZ district's feelings and opinions towards the state and regional levels of the linked-teaming infrastructure. The SSIP Evaluation Team, through its analysis of all focus group transcripts, concluded that all RITs felt the State provided high quality support to increase their implementation capacity. The target was met for the project measure.

Table 9. RIT members report high quality support received by the State Education Agency (SEA)

Project Measure C.6	Target Metric	%	Actual Ratio	%	Status
Each year, 80% of Kentucky (Regional) Special Education Cooperative Implementation Team members report that the KDE Implementation Team provided high quality supports to increase their implementation capacity.	8/10 RIT Members	80	6/6 RIT Focus Groups	100	Met

Project Measures C.7 is also traditionally an online survey. TZ district members, complete the survey about each region's coaching activities. Based on the feedback of stakeholders, it was determined that the survey was not reflective of the current system of support due to COVID-19.

Project Measure C.8 is a biennial measure due to the data collection instrument being biennially collected by the State (Phase III:4, p. 36). The Impact Kentucky survey was collected at the end of Phase III:4 and reported during Phase III:5; this measure will always be reported at a one-year delay.

SSIP Evaluators analyzed data from the State's 2020 Impact Kentucky survey. This is a biennial statewide survey of school based licensed educators in Kentucky; 43,089 educators (85 percent) in the state responded. The SSIP Evaluators selected 12 items from the Impact Kentucky survey that had a strong relationship to the Implementation Drivers Framework. Each item was assessed using the proportion of teachers who selected the two most favorable Likert-items associated with each statement.

In 2020, five of the seventeen TZ schools had an overall composite average greater than the state's overall (59%). Evaluators deemed that the 60% threshold was the most appropriate match to "high quality supports to increase their implementation capacity" in the project measure until there are additional years of the Kentucky Impact survey beyond baseline. While this program measure was not met, the measurement tool may be a poor match to the project measure since all educators complete the survey, not just mathematics and special education teachers. The causal relationship between the implementation team activities and the survey's outcomes must be explored further.

Table 10. TZ schools provide high quality supports

Project Measure C.8	Target Metric	%	Actual Ratio	%	Status
Biennially, 80% of TZ buildings report that their District provided high quality supports to increase their implementation capacity.	8/10	80	5/17	29	Not Met

In Kentucky, districts have the option to use the Observation Tool for Instructional Supports and Systems (OTISS) or the Kentucky Mathematics Innovation Tool (KMIT) to measure fidelity of EBP implementation. With instruction in almost all TZ classrooms being delivered virtually due to the pandemic, the pre-existing observation infrastructure no longer applied. Of the two fidelity instruments, two districts chose to usability test the KMIT in a virtual classroom setting, while no districts did so with the OTISS. One of the two districts began initial usability testing but determined not to proceed. The other district had a more developed technology infrastructure in place for virtual observations and used the KMIT extensively to inform coaching of virtual mathematics teaching practices. This district did adapt their implementation practices of the KMIT because of the virtual environment. The adaptations were effective in their coaching practices but did limit its applicability as an overall monitor of implementation. The SSIP Evaluators established that 75% of items must be scored for the observation to be included in analysis for this project measure. Only one school had more than the 10 required observations for analysis this year; this school had 55 observations in Phase III:4 and 57 in Phase III:5. This school's cadre of teachers showed higher KMIT scores than their baseline (see Table 11).

Table 11. TZ teachers increased their level of EBP implementation

Project Measure C.9	Target Metric	%	Actual Ratio	%	Status
Each year, 80% of TZ School teacher implementation cadres increase their level of implementation and consistency of SSIP EBP instruction.	8/10 Teacher Cadres	80	1/1 Teacher Cadres	100	Met

Teachers at this school showed the most implementation growth in the domains of posing questions (.61) and supporting productive struggle (.21). While establishing goals remained this teacher cadre's lowest domain, it did have encouraging growth (.20).

Figure 3. KMIT scores from a TZ school

A Middle School's KMIT Scores

Categories (x-axis): Establish Goals, Implement Tasks, Use Representations, Facilitate Discourse, Pose Questions, Build Fluency, Support Productive Struggle, Elicit Student Thinking, Overall Score

Category	avg score phase III:4	avg score phase III:5
Establish Goals	0.3	0.5
Implement Tasks	1.1	1.2
Use Representations	1.1	1.2
Facilitate Discourse	1.0	1.1
Pose Questions	0.7	1.2
Build Fluency	1.1	1.1
Support Productive Struggle	0.9	1.1
Elicit Student Thinking	0.9	0.9
Overall Score	0.9	1.0

Progress of Implementation Fidelity Activities

Project Measure F.1 is in place to monitor that each year, implementation teams meet their data collection needs to ensure continuous improvement efforts are properly supported (Phase III, p. 23). The protocols for this project measure were established during Phase III:3 (p. 28). The target was set at 80% of the Implementation Plan tool items being fully in place by the third year of implementation. The tool comprises two sub scores; their implementation team's data collection protocols and data analysis practices that support the implementation teams they coach. Five regions and three districts were in at least their third year of implementation, one district did not complete a capacity assessment this year. Four of the five regions and one of two DITs met the 80% target (see Table 12). This n-size prohibits a representative look across the full TZ and only gives a small snapshot of what occurred in a select number of teams who were able to meet their planned activities during the COVID-19 pandemic.

Table 12. Implementation teams meet data collection protocols

Project Measure F.1	Target Metric	%	Actual Ratio	%	Status
Each year, 70% of TZ implementation teams meet data collection protocols with fidelity.	7/10 Teams	70	5/7 Teams	71	Met

All regional teams have shown growth overall in the area of measuring and monitoring progress within their respective RIT (see Figure 4). The newest region had the second highest baseline.

Figure 4. RITs meet data collection protocols (last four years)
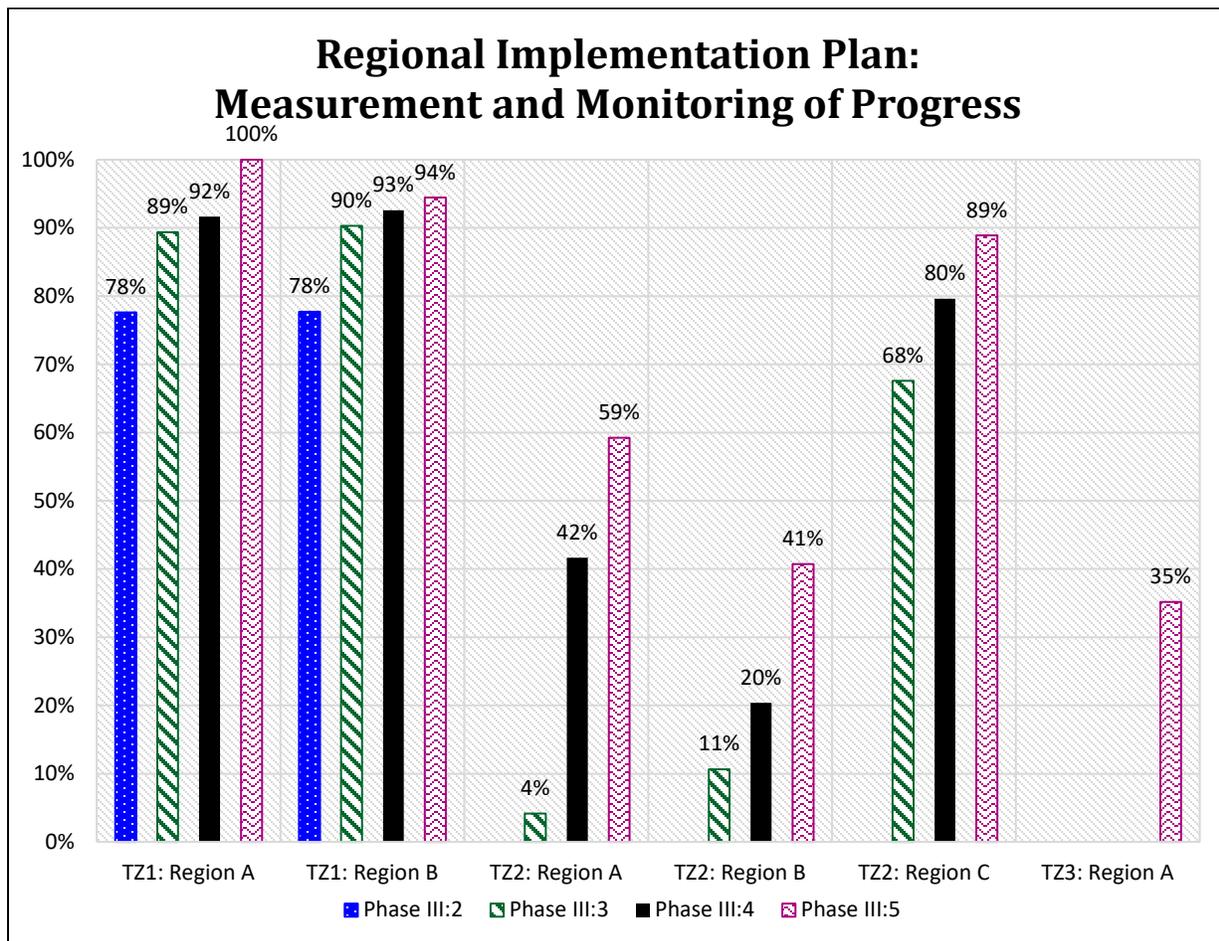
Both TZ Cohort 1 regions also maintained a 100% aggregate score in the area of measurement and monitoring progress as it pertained to supporting their DITs. Two of the three TZ Cohort 2 regions have also reached a 100% aggregate score (see Figure 5).

Figure 5. RITs meet data collection protocols to ensure district supports (last 5 years)

Regional Implementation Plan to Support Districts
Measurement and Monitoring of Progress

Legend: Phase III:1, Phase III:2, Phase III:3, Phase III:4, Phase III:5
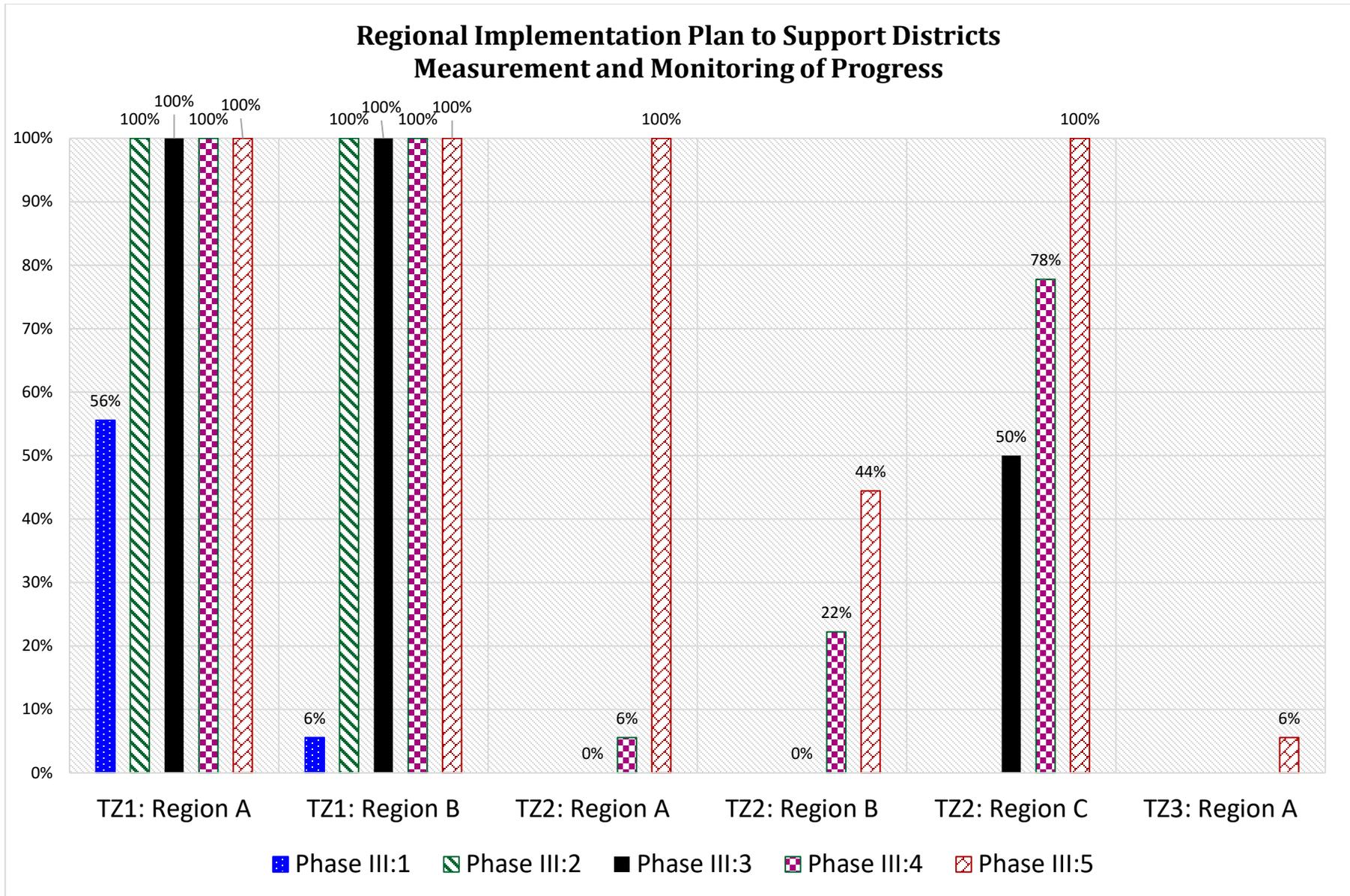
Only three districts were in their third year of implementation, two districts had capacity assessment data for analysis during Phase III:5. One of the two districts met the fidelity target this year (see Figure 6). All districts are presented in the following figure.

Figure 6. DITs meet data collection protocols (last five years)

District Implementation Plan:
Measurement and Monitoring of Progress
(% of the Implementation Plan fully in place)
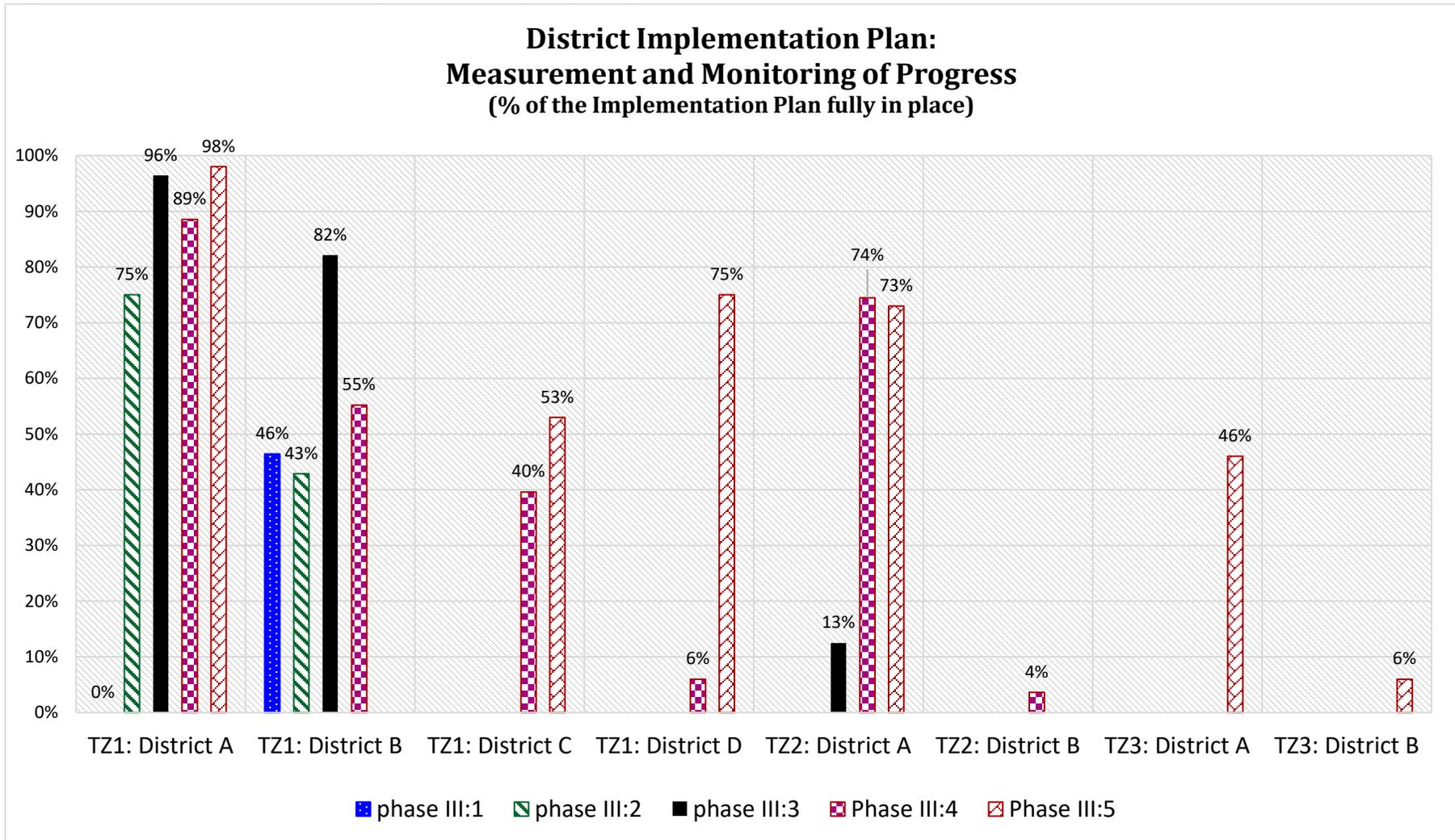
Both districts in this year's analysis have met fidelity in the measurement and monitoring progress as it pertains to supporting their schools over Phase III:5 (see Figure 7).

Figure 7. DITs meet data collection protocols to ensure school supports (last 5 years)
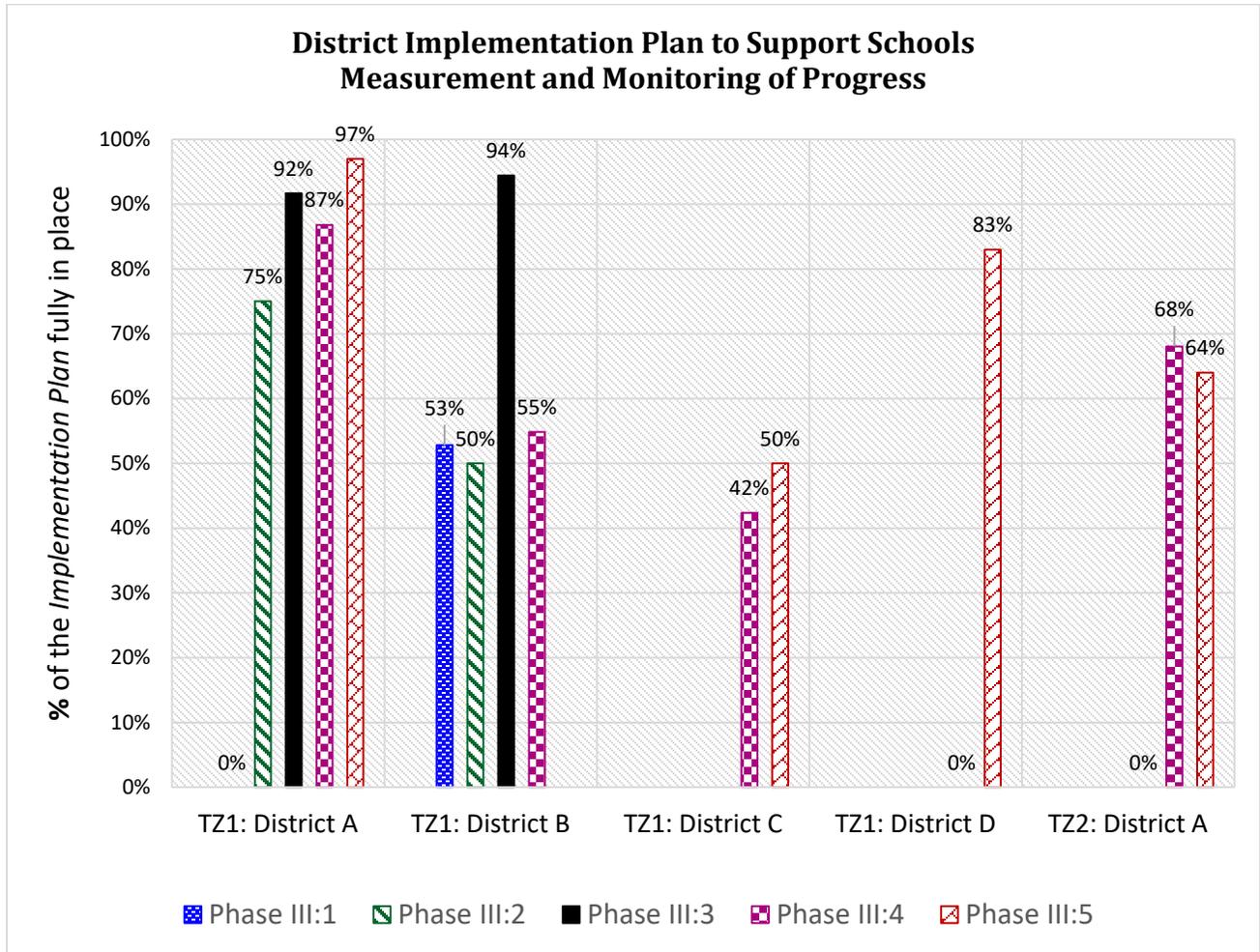
Twenty teams, representing both TZ Cohort 1, TZ Cohort 2, and TZ Cohort 3 were analyzed during Phase III:5 for implementation growth (Phase III:4, p. 40 for more information on Project Measure F.2). Of these, eighteen had increased their capacity score since their previous capacity assessment. One team maintained the same score and one team experienced a small decline.

Table 13. Implementation teams increase their capacity to implement SSIP Usable EBP

Project Measure F.2	Target Metric	%	Actual Ratio	%	Status
Each year, 80% of implementation teams (state, regional, district, and school) within the TZ(s) increase their capacity to implement SSIP Usable EBPs (including AIFs) and or maintain a capacity score above 80%.	8/10 Teams	80	18/20 Teams	90	Met

Individual analysis of implementation team capacity growth, as measured in the previous project measure, is a regular activity during implementation team action planning. The RITs and the state regularly analyze if capacity growth is observable throughout a TZ. This type of analysis is important for assessing the success of the linked-teaming infrastructure. As an example, the change in capacity across the linked-teaming infrastructure for the third region in TZ Cohort 2 is presented. Based on the last two Regional Capacity Assessments (RCAs), this region saw a change of eleven percentage points in the capacity to support effective implementation of an EBP in this region and their capacity is now well above the 80% benchmark set by SISEP. Based on the District Capacity Assessments (DCAs), the region's district also saw large positive change in capacity assessment scores (20%). Six of its seven schools in this district experienced increased capacity this year.

Figure 8. Implementation teams grow in their implementation capacity (TZ Cohort 2-Link Team C)

Capacity to Implement SSIP Usable EBPs (%)

	TZ2: Region C	TZ2: District A	TZ2: School A	TZ2: School B	TZ2: School C	TZ2: School D	TZ2: School E	TZ2: School F	TZ2: School G
Phase III:4	77	73	27	82	58	52	48	45	58
Phase III:5	88	93	77	73	62	62	93	95	93
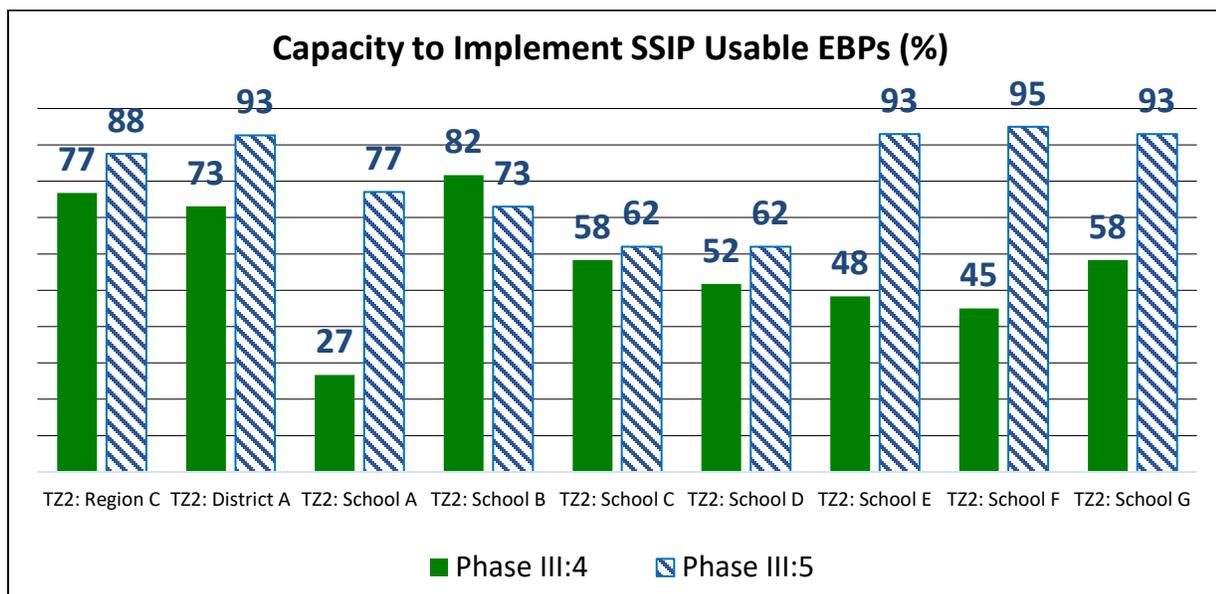
<u>Data Collection Procedures and Associated Timelines</u>

The majority of implementation teams requested that data collection processes be paused, and timelines be made flexible as priorities shifted due to the pandemic. However, a small number of districts and schools had the capacity to continue data submission.

<u>How Data Analysis Influences Intended Improvements</u>

Capacity Measurement across the Infrastructure

State Capacity Measurement

Despite the pandemic, Kentucky has seen a rapid increase in capacity. The most recent State Capacity Assessment (SCA) was the first time that the State exceeded SISEP's 80% target, total score of 85%.

The new version of the SCA (v26.2) has different subscales than the previous versions, so growth within specific domains cannot be determined. The most recent SCA did show that infrastructure and resources (91.7%) was the State's strongest area of capacity. Leadership (77.8%) was the lowest domain, but still close to meeting the 80% target. The State Management Team (SMT) will usability test and refine the communication plan to continue progressing in the Leadership domain.

Figure 9. State implementation capacity for most recent SCA
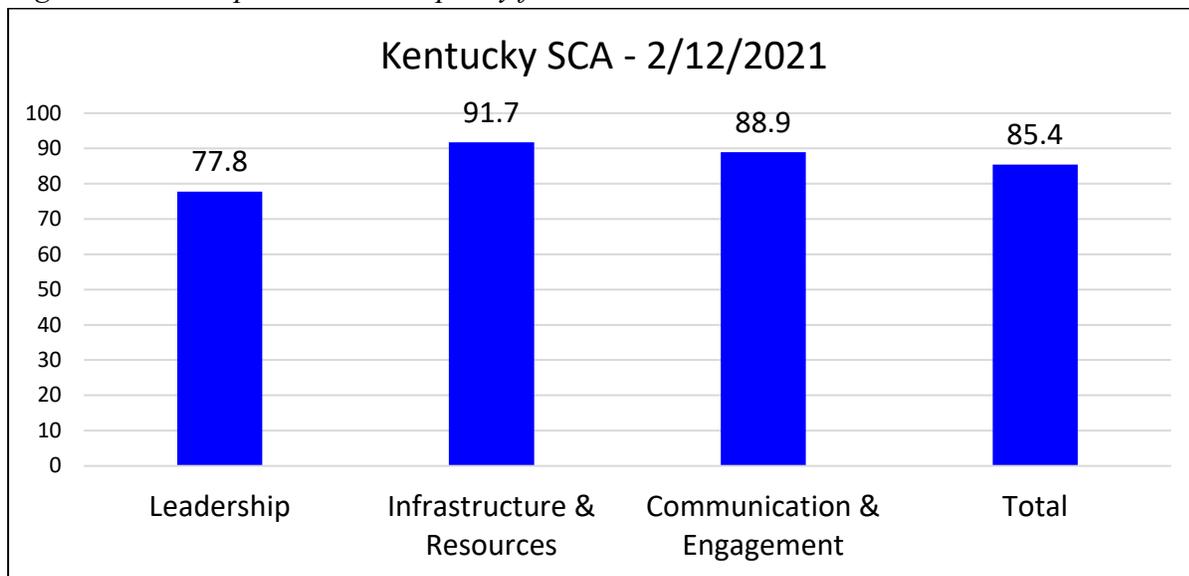
Regional Capacity Measurement

The RITs felt the pandemic has stretched them to learn new methods, but also increased their readiness to integrate implementation science among the other initiatives and priorities in their regional education cooperatives. Many RITs have on-boarded additional members, become more

flexible, and revised formalized plans and documents.

All six of the RITs had a Phase III:5 RCA, the growth seen in capacity was consistent for each region. The average RCA score for the RITs improved 11.3 percentage-points. All four subscales grew by 7 percentage-points or more, with Stage-based functioning (16.7%) and Organization (13.9%) seeing the highest positive change. Despite the pandemic, RITs were able to focus on strengthening their internal infrastructure by completing action plan activities.

Figure 10. Regional implementation teams' implementation capacity
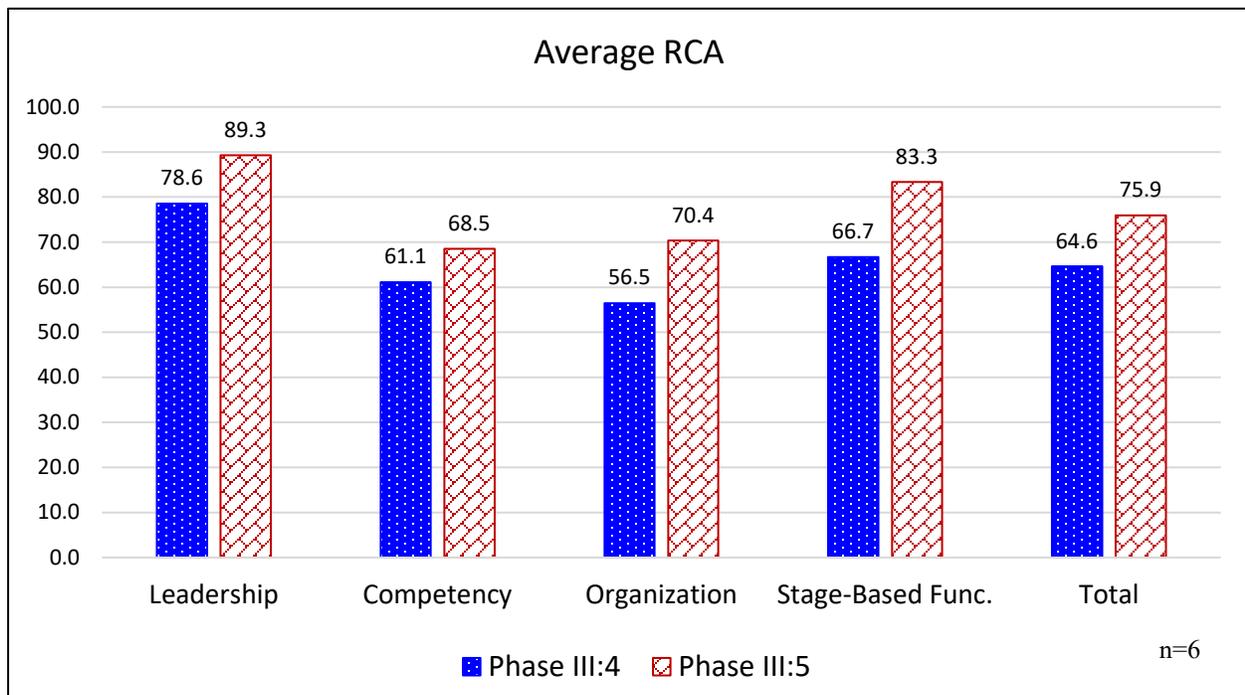
District Capacity Measurement

During Phase III:5, two districts entered the installation phase and ten were set to begin or continue the implementation phase. Most districts put the TZ work on hold so they could focus on other priorities during the pandemic, but some met planned milestones. Half of the districts collected a DCA during the pandemic. Two of these capacity assessments represented a baseline.

Figure 11. New district implementation teams' baseline implementation capacity

Phase III:5 Baseline DCAs
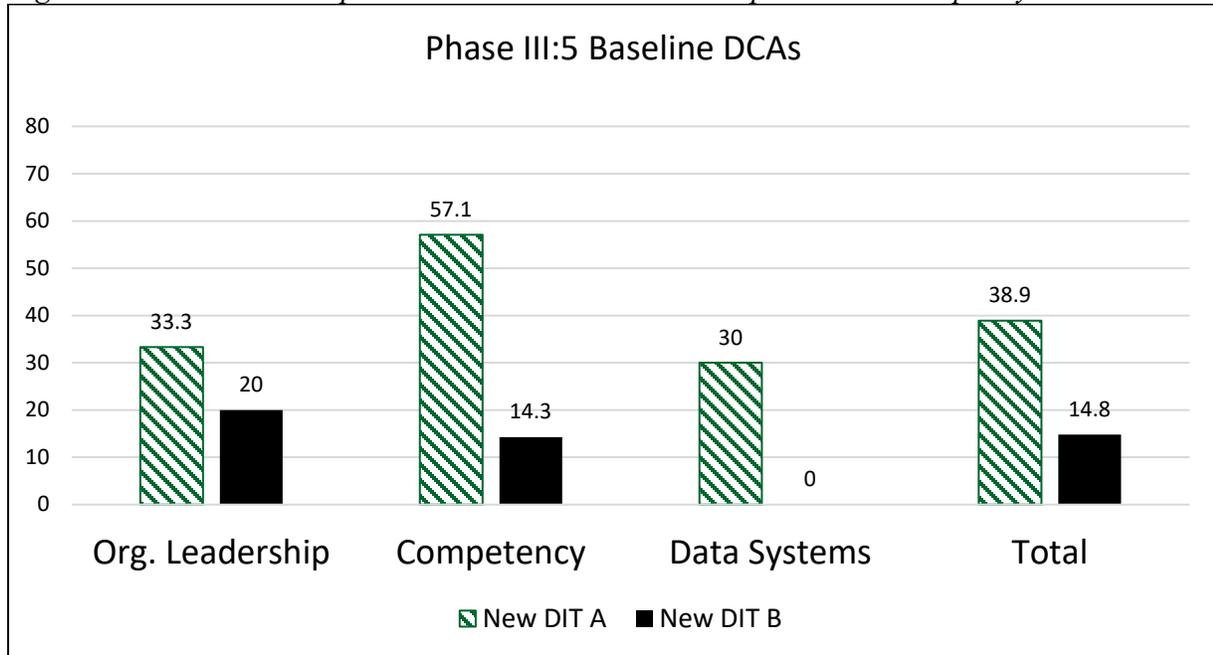
For the four continuing DITs with a Phase III:5 DCA, the growth in capacity was encouraging. The average DCA score improved 17.6 percentage-points. All three subscales grew by 14 percentage-points or more, with competency growing the most (20.3%). Feedback from RITs suggest this was evidence of districts shifting their focus to building teacher competency on effective practices as a result of the pandemic. While this growth is encouraging, this small n-size prohibits a representative look across all TZ districts. The data presented here is a small snapshot of what occurred in select teams who were able to meet planned activities during the COVID-19 pandemic.

Figure 12. District implementation teams' year-to-year implementation capacity

Average DCA

n=4

Legend: ▣ Phase III:4   ▨ Phase III:5

Category	Phase III:4	Phase III:5
Org. Leadership	60.6	75.0
Competency	45.8	66.1
Data Systems	51.3	70.0
Total	54.2	71.8
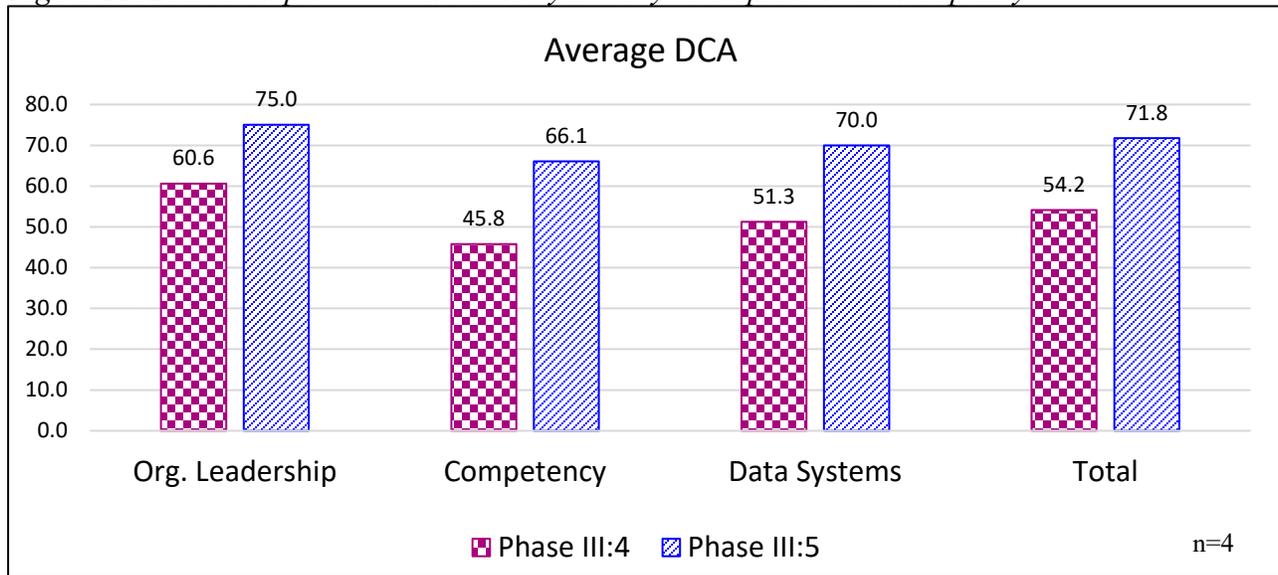
School Capacity Measurement

There were three schools that entered the installation phase during Phase III:5, eight remained in exploration due to the pandemic, and 18 schools were in the implementation phase prior to the pandemic. As districts and schools transitioned to virtual instruction, the focus shifted to teacher competency development in EBPs. These new priorities required a focus on new capacity/infrastructure building and made it difficult for most Building Implementation Teams (BITs) to meet consistently. Thirteen schools collected a Drivers best Practice Assessment (DBPA) during the pandemic. Three of these capacity assessments represented a baseline.

Figure 13. New school implementation teams' baseline implementation capacity
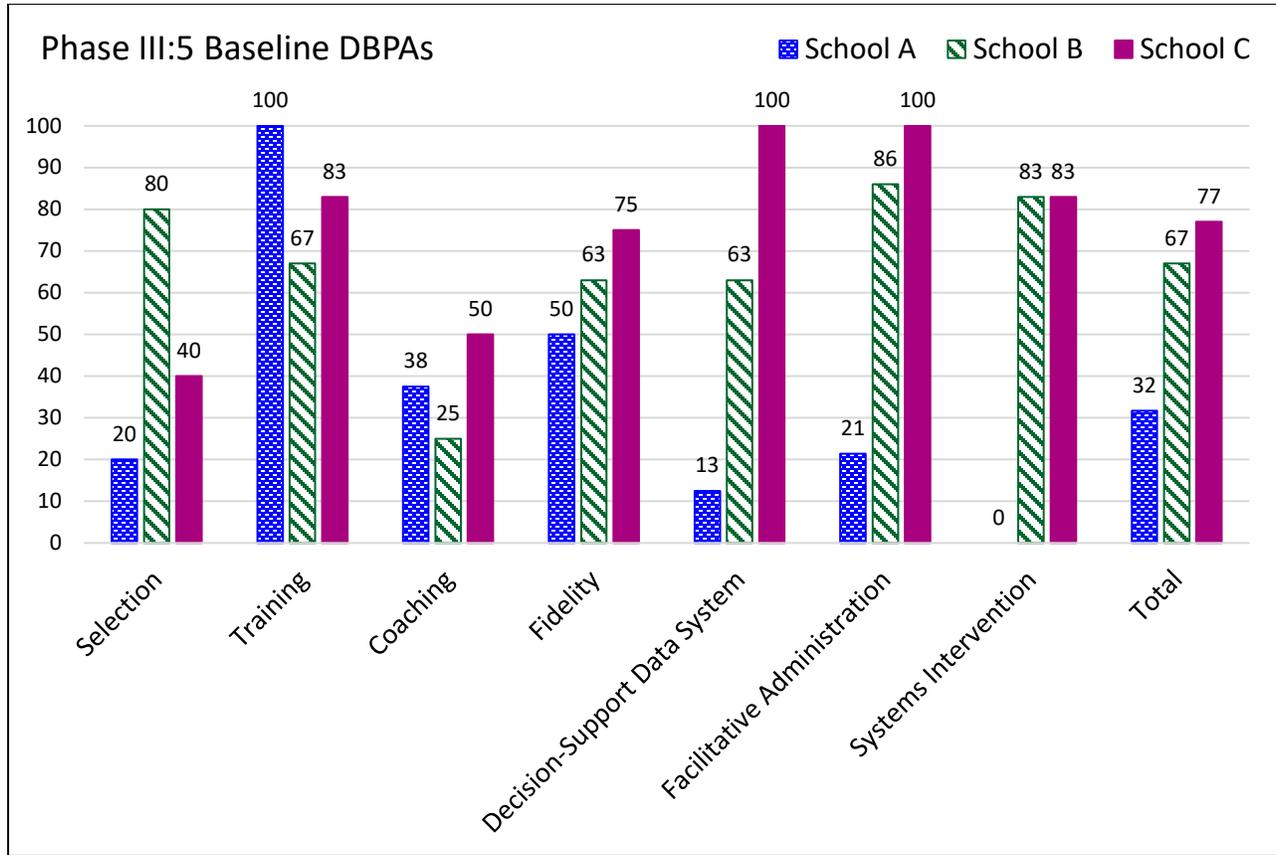
For the ten continuing BITs with a Phase III:5 DBPA, the growth in capacity was encouraging. The average DBPA score for the ten BITs improved 14.7 percentage-points. Five of the seven subscale domains grew by more than 13 percentage-points, with fidelity (29%) and Decision-Support Data System (26.3%) growing the most. These ten schools are within two TZ districts and cannot be presumed to be representative of the other seven schools that did not complete a capacity assessment this year. This data provides a small snapshot of what occurred in select teams who met planned activities despite the pandemic negatively affecting many of their original implementation plans.

Figure 14. School implementation teams' year-to-year implementation capacity
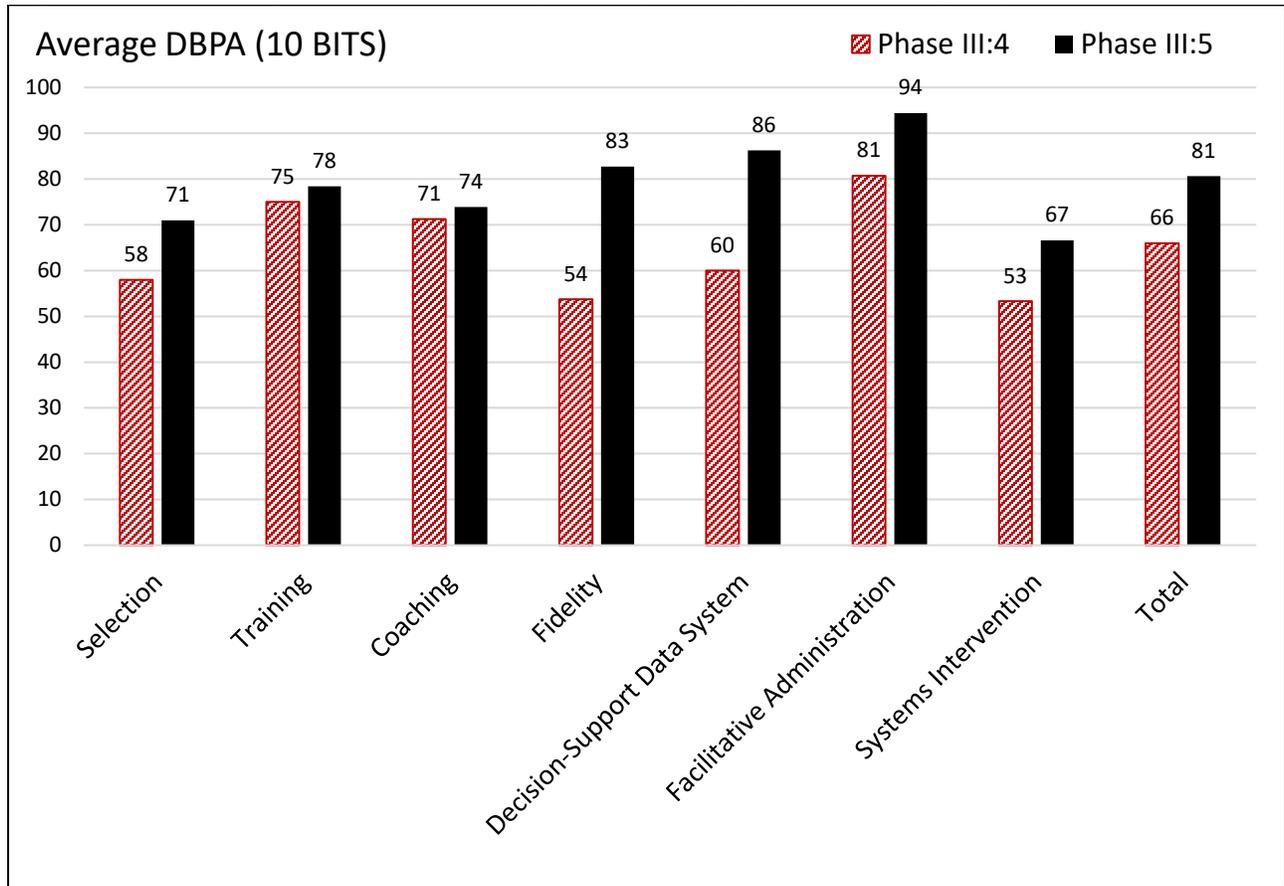
D. Data Quality Issues

Capacity Assessments

Consistent administration of capacity assessments within the State Implementation and Scaling-up of Evidence-based Practices (SISEP) recommended six-month window has been an ongoing barrier for many implementation teams. This was amplified further during Phase III:5 because of the pandemic. The majority of implementation teams completed a capacity assessment this year. However, some districts paused Transformation Zone (TZ) activities due the pandemic and did not complete one. All implementation teams are off their previous administration calendar. While the data has been positive, analysis across the linked teaming infrastructure has been less robust than in previous phases.

SSIP Data Dashboard

The State Systemic Improvement Plan (SSIP) Data Dashboard has been a central focus for implementation teams at every level of the system (Phase III:4, p. 51). It was a priority milestone this year to change the dashboard's platform so that all data uploading was automated to allow real-time analysis for implementation teams. The dashboard was successfully reconstructed in a

new platform in Phase III:5.

Small n-size

As referenced in [Phase III:4](#), (p.51), the smaller nature of TZ based work limits the n-size of surveys, capacity assessments, and fidelity measures. Generalizability of findings is inhibited by these small n-sizes. The pandemic's effect on TZ activities has made analysis of training fidelity, coaching activities, and evidence-based practices (EBP) fidelity inconclusive in most TZs and the state overall.

E. Progress Toward Achieving Intended Improvements

Based on stakeholder input and data analysis ([Phase III:4](#), p. 3), Positive Behavioral Interventions and Supports (PBIS) was added as additional evidence-based practices (EBPs) to the State Identified Measurable Result (SiMR). During Phase III:5, the Kentucky Department of Education (KDE) focused on sustaining the system of support established to meet the goals of the SiMR. However, at the onset of the pandemic, the Transformation Zone (TZ) regions focus shifted to building teacher competency and providing support in virtual instructional settings. The KDE leveraged the implementation knowledge gained in the TZs to align with the State Personnel Development Grant (SPDG). This provided a roadmap to utilize the infrastructure needed to engage in effective implementation of PBIS and EBPs in mathematics for students with disabilities.

Infrastructure

Teams

As described in [Phase III:4](#) (p. 52), teams use communication plans to lift up barriers to the appropriate level to be solved. These communication plans were vital as new barriers occurred due to the COVID-19 pandemic. The KDE used feedback through the linked teaming structure to inform support to regions, districts, and schools.

Kentucky Center for Mathematics (KCM)

The KDE partnered with the Kentucky Center for Mathematics (KCM) through the SPDG to develop training and coaching assistance for educators who support students with disabilities. The KCM began the creation of online modules using the Math Practice Profile utilized within the TZs. The modules will provide the support needed on the Math Practice Profile as a universal resource for educators across the state.

PBIS Implementation Plan

Based on the trials and learnings of the State Systemic Improvement Plan (SSIP) TZ work in mathematics and feedback from stakeholders, the need to create an implementation plan for PBIS was recognized. Members of the State Design Team (SDT) reviewed the SSIP implementation plan

for math EBPs to adapt to PBIS.

State Personnel and Development Grant (SPDG)

During Phase III:5, the KDE hosted a virtual summit for districts to explore participation in the SPDG. This provided the opportunity to build readiness within the state on the use of implementation science and PBIS. Additionally, the KDE established the Kentucky Preschool and Kindergarten PBIS Training Academy in partnership with the National Center for Pyramid Model Innovations to provide training and coaching to teachers throughout the state designed to bridge preschool and kindergarten PBIS. Both the SPDG summit and training academy supported effective PBIS implementation allowing Kentucky to take additional steps to meet the goals of the SiMR.

Fidelity

As in previous phases, project measures linked to training fidelity, EBP fidelity and infrastructure development fidelity were monitored (see section *C. Data on Implementation and Outcomes*).

Progress toward Achieving the SiMR

Due to the COVID-19 pandemic, progress towards the SiMR was impacted. However, the KDE remains committed to all necessary steps of the project design, but original timelines may be slowed due to the lasting effect of the pandemic on Implementation Team capacity across the linked-teaming infrastructure. The KDE continues to use the tiered model of support as the means for implementing systems change (Phase III:3, p. 42).

The U.S. Department of Education (USED) officials announced last March that students impacted by school closures due to the COVID-19 pandemic could bypass standardized testing for the 2019-2020 school year. The KDE applied for a waiver and it was approved by the USED. Therefore, no eighth-grade mathematics test was administered last spring. Baseline data for the 2018-19 year and the 2019-20 target can be found in Table 14.

Table 14. Updated SiMR Target: KY 8th grade mathematics proficiency for students with IEPs

Students with Disabilities with IEP (not including alternate)		2018-19 Baseline	2019-20
8th math	Target	14.5	18.4
	Actual	14.5	-

F. Plan for Next Year

The Kentucky Department of Education (KDE) will continue to support implementation teams as they resume implementation activities. Efforts to support Positive Behavioral Interventions and Supports (PBIS) implementation to impact the State Identified Measurable Result (SiMR) are also ongoing and will progress through Phase III:6. All planned activities will continue to support effective mathematics instruction to improve educational outcomes for students with disabilities (SWDs). As in previous years (Phase III:4, p. 61), a timeline of milestones is provided.

Infrastructure Development

- **Spring 2021—**Feedback from State Design Team (SDT) on PBIS Implementation plan
- **Summer 2021—**SDT will continue to meet to:
  - Develop or adopt a Practice Profile for PBIS
  - Provide feedback on the data inventory and behavior dashboard
  - Develop a plan to align and leverage resources from across the state in PBIS
- **Summer 2021**—District Data Integration Team will conduct a data inventory to:
  - Identify data collection tools that align to PBIS from the mathematics Data Dashboard
  - Identify data collection gaps
  - Use learnings from mathematics Data Dashboard to develop a behavior dashboard
- **Summer 2021**—Kentucky Center for Mathematics (KCM) online math module cohorts to support the goals of the SiMR beyond the Transformation Zone (TZ)
- **Fall 2021** - Seek feedback from the SDT on the data inventory and behavior dashboard
- **Winter 2021**— District Data Integration Team will update the Data Dashboard to include behavior

Communication

- **Summer 2021**— State Personnel Development Grant (SPDG) Summit
  - Large scale exploration with districts in the Linked P-12 PBIS Initiative
  - Training on PBIS, Active Implementation, and data analysis
- **Summer 2021**—The State Management Team (SMT) will revise the communication plan to reflect the alignment of mathematics and PBIS
  - Internal stakeholders from across the agency will be identified to support communication
  - External stakeholders will be identified to support communication

Transformation Zone (TZ)

- **Summer 2021**—Mutually select additional regions and districts to participate as a TZ
  - Use selection criteria to select TZ implementation team members
  - Install teams

- **Fall 2021**—Engage in installation activities with regions and districts
- **Winter 2021**—Engage in Initial Implementation with regions and districts

Future Evaluation Activities

The KDE intends to continue to scale and refine support for TZ members in mathematics and scale support to PBIS. The State Systemic Improvement Plan (SSIP) Data Dashboard will continue to serve as a continuous improvement tool for implementation teams within the Linked Teaming infrastructure.

Anticipated Barriers and Steps for Improvement

Anticipated barriers for the SiMR include leveraging statewide resources for math and scaling PBIS through the linked teaming structure. Below are the steps for addressing these challenges:

- Measuring student achievement toward the SiMR
  - District's use of benchmark tests varied throughout the TZ due to the pandemic. It is unknown how benchmark test collection and data sharing might change next year.
  - The 8th Grade Mathematics KPREP test will be administered differently this spring than in previous years according to the 2020-2021 Assessment Guidance Document.
    - The number of students participating in state-wide testing may be impacted by the pandemic.
    - Develop plan to support DITs on entering benchmark data in the SSIP Data Dashboard for data-based decision making to address possible state-wide assessment gaps in student outcomes.
- Leveraging resources and Linked Teaming Structure aligning math and PBIS scaling efforts
  - SDT meeting to align infrastructure to align system of support to PBIS
    - Co-creation or adoption of a PBIS Practice Profile for Kentucky
  - Development of PBIS Implementation Plan
    - Scaling of current TZ math districts to PBIS
  - Development of data analysis tool to determine area of focus for district
    - Training materials for the use of the data analysis tool
  - Development of universal supports to address impacts due to COVID-19

Need for Additional Support and Technical Assistance

The KDE will continue its partnership with the State Implementation and Scaling-up of Evidence-based Practices (SISEP) center and the IDEA Data Center (IDC). In addition, the KDE participates in the cross-state collaborative with the National Center for Systemic Improvement (NCSI) on Results-Based Accountability. Each technical assistance center will support the KDE to align the

systems and structures to improve educational outcomes for students with disabilities to meet the goals of the SiMR.

Phase III:5 Appendices

Appendix A: Gantt Chart for Mathematics Activities

KY SSIP GANTT Chart

Task/Activity	Phase I	Phase II	Phase III Year 1	Phase III Year 2	Phase III Year 3	Phase III Year 4	Phase III Year 5
IPAC team Installed	▮						
Complete inventory of math EBPs currently used in KY schools	▮						
IPAC team chooses EBP short list	▮						
IPAC team analyzes EBP short list using SISEP Hexagon Tool	▮						
IPAC Team members increase capacity to provide technical assistance and coaching on the selection of EBPs (beyond scope of SSIP) to schools, districts, and/or regions	▮	▮▮▮					
IPAC team chooses 3 Evidence-based Practices and modifies as needed to include a clear description, clear essential functions, operational definitions, and practical performance assessment (Usable	▮						
SSIP Menu of EBPs developed		▮					
Math Practice Profile Written so that SSIP EBP Menu items are teachable, learnable, and doable.		▮					
SSIP Coaching Team installed.		▮					
SSIP Training Team installed.		▮					
Training Team members increase capacity to provide technical assistance and coaching on training practices and systems (beyond scope of SSIP) to schools, districts, and/or regions		▮▮▮					
SSIP Guidance developed by Coaching Team to guide high quality TZ coaching.		▮					
Coaching Practice Profile developed by Coaching Team to guide TZ coaching fidelity		▮					
Coaching Team members increase capacity to provide technical assistance and coaching on coaching practices and systems (beyond scope od SSIP) to schools, districts, and/or regions		▮▮	▮				
Training Service Delivery Plan developed by Training Team to guide high quality TZ trainings.		▮					
District(s)' OTISS Team members gain knowledge and skills to observe and score teacher fidelity of EBP		▮	▮				
Training Framework(s) developed by Training Team		▮					
Data Team members increase knowledge and skills on AIFs			▮				
SSIP Data Team installed and reconfigured to meet TZ barriers.			▮				
Data collection guidlines written by the Data Team that ensure that implementation data is high quality			▮				
Data Team members increase knowledge and skills to use Universal Screener student outcome data.			▮	▮			
OTISS data collected for all treatment teachers begins (baseline data)				▮			
The quality of implementation data is increased/maintained through monitoring data collection protocol adherence by the Data Team				▮▮	▮▮	▮	*affected by pandemic
Math Practice Profile Reviewed for Revision				▮			
SSIP Coaching Practice Profiles Revised Reviewed for Revision							▮
SSIP Data Dashboard Built (for all TZs across the linked teaming structure)				▮			
SSIP Data Dasboard maintained with up to date data				▮▮▮	▮▮	▮	▮
Data Practice Profile developed by Data Team to guide TZ data fidelity				▮			▮
Kentucky Mathematics Implementation Tool (KMIT) developed through fidelity team					▮		
KMIT Usability Testing						▮	
KMIT field testing						▮	*affected by pandemic
Systems State Leadership Team installed: to develop systems of support to improve educational outcomes for students with disabilities through the use of implementation science with a focus on PBIS and							▮
IPAC repurposed to address COVID instructional barriers							▮
SSIP partners with stakeholders (RTCs and CoOps etc.) to create universal pandemic supports							▮

Timeline months: o n d j f m a m j j a s o n d j f m | a m j j a s o n d j f m | a m j j a s o n d j | f m a m j j a s o n d j | f m a m j j a s o n d j | f m a m j j a s o n d j | f m a m j j a s o n d j

Appendix B: Timeline of Mathematics Activities

	2013	2014	2015	2016	2017	2018	2019	2020	2021
Window	A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M J J A S O N D	J F M A M
FFY	2012	2013	2014	2015	2016	2017		2019	2020
SIMR	Benchmark								
OSEP Reporting		phase I	phase II	Phase III Eval Rpt 1	Phase III Eval Rpt 2	Phase III Eval Rpt 3	Phase III Eval Rpt 4	Phase III Eval Rpt 5	
Implementation		exploration year	TZ One implementation year One	TZ One implementation year Two / TZ Two exploration year	TZ One implementation year Three / TZ Two implementation year One / TZ Two exploration year / TZ Three exploration year One	TZ1 One implementation. Yr 4 / TZ2 implem. Yr 2 / TZ3 implem. Yr 1 / TZ Two implem. Yr 1 / TZ Three exploration Year	TZ One implem. Yr 5 / TZ2 implem. Yr 3 / TZ3 implem. Yr 2 / TZ4 implem. Yr 1 / TZ Two implem. Yr 2 / TZ Three implem. Yr 1	TZ One implem. Yr 6 / TZ2 implem. Yr 3 / TZ3 implem. Yr 2 / TZ4 implem. Yr 1 / TZ Two implem. Yr 3 / TZ Three implem. Yr 2	
State Capacity Assessment		Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual
Regional Capacity Assessment		Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual
District Capacity Assessment		Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual
School Capacity Assessment			Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual / Bi-annual	Bi-annual
Teacher Fidelity Collection (OTISS)				3 per Semester / 3 per Semester	3 per Semester / 3 per Semester	3 per Semester / 3 per Semester	3 per Semester / 3 per Semester	3 per Semester / 3 per Semester	3 per Semester
Universal Screener(s)				Fall / Winter / Spring	Fall / Winter / Spring	Fall / Winter / Spring	Fall / Winter / Spring	Fall / Winter / Spring	
SSIP EBP Training		Teacher Training	Teacher Training	Teacher Training	Teacher Training	Teacher Training	Teacher Training	Teacher Training	
Distal Data Collection			KPREP	KPREP	KPREP	KPREP	KPREP	KPREP	
Coaching Fidelity Collection				Fall / Winter / Spring	Fall / Winter / Spring	Fall / Winter / Spring	Fall / Winter / Spring	Fall / Winter / Spring	
Annual Participant Knowledge and Skill Survey				Survey	Survey	Survey	Survey	Survey*	

Legend:
- Completed
- In progress (completed by some)
- Canceled due to delay in this Implementation Stage
- Made optional upon request [COVID}
- Canceled due to COVID

* RIT Focus Groups Conducted