Ohio's Part B State Systemic Improvement Plan
Phase III Year 4 Report

OFFICE FOR EXCEPTIONAL CHILDREN

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Ohio's Part B State Systemic Improvement Plan Phase III, Year 4 Report

Executive Summary

Ohio's Part B State Systemic Improvement Plan (SSIP) report describes the results-driven accountability work done during 2018-2019 by Ohio Department of Education staff members, Ohio's 16 regional state support teams, local education agencies and stakeholders. This report details activities implemented since the submission of the April 2019 report and the submission of data by pilot schools during the 2018-2019 school year. It also offers an overview of the information already submitted in Ohio's previous reports. Ohio identified as its priority improving early literacy outcomes for all children, including those with disabilities.

- In Phase I (Ohio Department of Education, 2015), the Department and its stakeholders reviewed various data sources and found a significant gap between performance targets and performance on state reading and math assessments for all Ohio students, including those with disabilities. This information, Ohio's use of state early literacy policies and initiatives such as the Third Grade Reading Guarantee and the knowledge that early literacy predicts future academic success, led Ohio to identify early literacy as the basis for its state-identified measurable results (SIMR). These are:
    - SIMR 1: The percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test.
    - SIMR 2: The percentage of all kindergarten-grade 3 students who are on track for reading proficiency, as measured by state-approved diagnostic reading assessments.
- Ohio's Phase II report (Ohio Department of Education, 2016) offered a detailed overview of how the state focused on building teachers' capacities to provide high-quality, evidence-based early literacy instruction and intervention, using, and sometimes modifying, state infrastructure; supporting local school districts as they implement evidence-based practices; and evaluating implementation activities. The Phase II report discussed five components of the Early Literacy Pilot: Leadership, Multi-Tiered System of Supports, Teacher Capacity, Family Engagement and Community Collaboration — and the importance of the connections between them. The report also presented a Theory of Action and comprehensive logic model developed by the Department and its stakeholders. Ohio designed the logic model to define, guide and evaluate the key components of this plan. The Department continually reviews and, when necessary, updates the logic model to reflect work completed and modifications made based on evaluation data. The Department updated the original Theory of Action to emphasize leadership as the primary driver for improving literacy.
- In Phase III, Year 1 (Ohio Department of Education, 2017), Ohio reported its focus on pilot implementation, including many local and regional professional learning opportunities, changes to the state and regional infrastructures, and the creation of a real-time data system for use at the local, regional and state levels. The report also included a detailed description of the evaluation plan, including the data sources; how Ohio collected and analyzed data; and how the state reported this information to the many stakeholders who were critical to the plan's success. Finally, the report included a description of the many kinds of technical support and guidance the Department received during 2016-2017.
- In Phase III, Year 2 (Ohio Department of Education, 2018b), Ohio reported continued professional learning opportunities at the state, regional, district and school levels, changes to state and regional infrastructures to increase alignment across state initiatives and data from the first year of the pilot with Cohort 1 buildings. The first year of implementation saw a slight decrease in both state-identified measurable results but an increase in educator knowledge of literacy instructional practices and improvement in measures of a language and literacy Multi-Tiered System of Supports. The

Department also saw improvement for kindergarten and grade 1 students on curriculum-based measures. The report concluded with descriptions of technical assistance the Department sought, barriers to implementation and plans for future implementation.

- In Phase III, Year 3 (Ohio Department of Education, 2019), Ohio reported continued professional learning opportunities, changes to state and regional infrastructure to ensure continued support of pilot districts and data from the second year of pilot implementation with Cohort 1 and the first year of implementation for Cohort 2. There were increases in both state-identified measurable results for Cohort 1 from baseline to year 2, increases in teacher knowledge as a result of the professional learning series for both cohorts, and increases in measures of phonemic awareness for students in kindergarten for both cohorts and grade 1 for Cohort 1. The Phase III, Year 3 report also addressed barriers to implementation and plans for accessing technical assistance going forward.

Ohio is using its existing Ohio Improvement Process to implement evidence-based early literacy instruction. This includes adding to or redesigning early literacy goals, strategies, adult implementation indicators and student outcomes in district improvement plans. Leveraging the Ohio Improvement Process and revised *Ohio's Plan to Raise Literacy Achievement* to implement evidence-based early literacy instruction allows districts to use existing systems structures, such as district leadership teams, building leadership teams, teacher-based teams and the five-step process to plan, implement and evaluate evidence-based practices. Districts also can receive support to help them implement the Ohio Improvement Process via state support team and educational service center specialists. State support team and educational service center staff were trained to facilitate the *Reading Tiered Fidelity Inventory*, which measures a school's language and literacy Multi-Tiered System of Supports. This training increased each state support team's capacity to help districts assess their infrastructure supports for implementing evidence-based literacy instruction and embed literacy as a goal in all district improvement plans.

Staff members from several Department offices make up the State Systemic Improvement Plan core team, including the following:

- Office for Exceptional Children and Office of Early Learning and School Readiness in the Center for Student Supports;
- Office of Improvement and Innovation in the Center for Continuous Improvement; and
- Office of Approaches to Teaching and Professional Learning in the Center for Teaching, Leading and Learning.

The core team also includes district leaders, an external evaluation team and staff from Ohio's Statewide Family Engagement Center. Each team member helps identify changes and additions to Ohio's current educational infrastructure that will, in turn, help local school districts more thoroughly implement pilot activities.

The reauthorization of the Elementary and Secondary Education Act — the Every Student Succeeds Act (ESSA; P.L. 114-95) — emphasizes using evidence-based practices. The Department is committed to supporting implementation of these practices through Ohio's educational institutions. Under the State Systemic Improvement Plan: Early Literacy Pilot, Ohio improved its infrastructure to better support implementation of evidence-based language and literacy practices. Infrastructure improvements in 2019 included filling the assistant director of literacy position in the Department's Literacy Unit and adding a literacy specialist to the Office for Exceptional Children. In 2020, the Department added two more literacy specialists to the Literacy Unit, one focusing on birth to age 5 and the other focusing on literacy in grades 9 to 12. The Literacy Unit is led by the director of the Office of Approaches to Teaching and Professional Learning, who coordinates collaborative efforts among Department offices and external stakeholders as they design, develop and implement language and literacy supports for Ohio learners from birth through grade 12. The Department continued to work with a project manager who guided coordination, planning, organization, facilitation, research, communication and stakeholder engagement efforts. The project manager guided the team in setting and adhering to planning and implementation timelines. These infrastructure enhancements

allowed the Department to support Ohio's Early Literacy Pilot in 15 districts and across its internal offices. For the Department to meet the needs of all Ohio's districts, schools and early childhood providers, it must continue to build infrastructure that supports literacy improvement throughout the state. This includes enhancing state, regional and local supports for literacy improvement.

The Early Literacy Pilot relies heavily on the state's 17 regional early literacy specialists who support implementation in both cohorts of districts. These specialists support 15 districts with three types of coaching. They provide systems coaching to building leadership teams, principals and district coaches as they develop a Multi-Tiered System of Supports to implement evidence-based literacy strategies. They deliver instructional coaching to classroom teachers, intervention specialists and small groups of educators to support classroom implementation based on student data. They continue to support implementation and sustainability through regional literacy specialists peer coaching of each other and for internal district coaches.

In 2018-2019, all kindergarten through grade 3 educators in Cohort 2 attended professional learning sessions on evidence-based language and literacy practices, delivered through the *Language Essentials for Teachers of Reading and Spelling* series, completing training in units 5 through 8. Regional early literacy specialists and district literacy coaches facilitated the *Reading Tiered Fidelity Inventory* (Tiers 1, 2 and 3 for both cohorts) and supported teachers' use of curriculum-based measures to inform their instruction and interventions while measuring student growth over time.

Improving early language and literacy instruction and outcomes across the state requires planning for and implementing many well-defined system and instructional-level activities that have the potential to improve all students' reading achievement. This Phase III, Year 4 report offers details on an extensive list of activities implemented during the past year. Highlights for the 2018-2019 school year include:

- Ensuring all efforts align to Ohio's strategic plan for education, *Each Child, Our Future,* and *Ohio's Plan to Raise Literacy Achievement*;
- Providing professional learning to regional early literacy specialists on 16 regional state support teams. These specialists serve as literacy expert consultants and coaches for participating districts while building the capacity of internal district coaches to sustain and scale-up evidence-based practices;
- Offering in-person *Language Essentials for Teachers of Reading and Spelling* professional learning sessions for kindergarten through grade 3 educators in Cohort 2 and new educators in Cohort 1;
- Conducting training for regional early literacy specialists and literacy coaches to use the *Language Essentials for Teachers of Reading and Spelling Application of Concepts* tools;
- Designing, creating and implementing the Jim Knight Instructional Coaching professional learning as both an implementation support and clearly defined coaching activity (Knight, 2017);
- Partnering and investing effort across Department offices to ensure high-quality professional learning to support those implementing language and literacy professional learning and coaching across all classrooms, grade-levels, buildings, districts, regions and the state;
- Collaborating with Ohio's Statewide Family Engagement Center to design and implement research-based family and community engagement professional learning with designated regional family engagement leads;
- Working closely with OCALI (formerly the Ohio Center for Autism and Low Incidence) and the Outreach Center for Deafness and Blindness to ensure all learners are represented in the work. Specialists from each center work together to provide professional learning, technical assistance and coaching for the regional early literacy specialists. Both specialists are members of the two cohorts, taking part in meetings and professional learning with the regional early literacy specialists;
- Continuing collaboration with Jen Averitt at J. Averitt Consulting to update and implement a data dashboard. The dashboard allows state, regional and local staff members to upload data and access reports;

- Continuing collaboration with external evaluators at the University of Cincinnati Evaluation Services Center to implement a high-quality evaluation plan, including multiple methods for data collection, analysis and reporting to the state and its stakeholders;
- Continuing to develop the online early literacy toolkit for scaling up evidence-based practices with additional districts based on implementation science;
- Aligning the current State Personnel Development Grant award to language and literacy, grounded in the Early Literacy Pilot work; and
- Identifying and implementing ways to partner with and communicate these efforts to stakeholders throughout the state.

Ohio can determine the effectiveness of its infrastructure changes and the evidence-based early language and literacy practices only through high-quality formative and summative evaluation. In November 2016, the Department contracted with the University of Cincinnati Evaluation Services Center to be the external evaluator for the State Systemic Improvement Plan. In October 2017, the Department contracted with an additional external evaluator, Dr. Julie Morrison, from the University of Cincinnati. Dr. Morrison analyzes the family and community engagement data collected by pilot schools that is funded through the State Personnel Development Grant. The Department has been working closely with the evaluators to determine what, when and how data are collected, analyzed, reported and used for evaluating processes and results, as well as for making mid-course modifications. The plan addresses professional learning, language and literacy coaching, student outcomes and family and community engagement. The evaluation plan uses both quantitative and qualitative methods and provides several sources of data from which to make decisions. The complete evaluation plan is described in detail in the Data on Implementation and Outcomes section of this report.

Ohio has been collecting evaluation data since the onset of the Early Literacy Pilot. These data are an integral part of the practice-to-policy feedback loops built into this work, informing timely adjustments as implementation unfolds. Data highlights from the third year of pilot implementation include:

- A 12.9 percent increase in the first state-identified measurable result (SIMR 1), the percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test, for Cohort 1 from baseline to year three. Cohort 2 has remained relatively consistent, decreasing 1.7 percent from baseline to year two of implementation;
- A statewide decrease in the second state-identified measurable result (SIMR 2), the percentage of all kindergarten through grade 3 students who are on track for reading proficiency, as measured by state-approved reading assessments;
- K-3 educators in Cohort 2 increased their knowledge by 14 percent from pre-test to post-test for *Language Essentials for Teachers of Reading and Spelling* units 5-8, a statistically significant change;
- The state saw increases in educator knowledge across grade levels and specializations, for example, Title I specialists and intervention specialists, for both cohorts;
- *Reading Tiered Fidelity Inventory* scores increased significantly across Cohort 1 schools for the full assessment of Tier 1 and the *Implementation*, *Resources* and *Evaluation* subscales. Overall Tier 1 scores for Cohort 2 schools also increased significantly. Their scores also increased for the *Implementation* and *Resources* subscales;
- More than 3,000 instructional coaching sessions took place with preschool through grade 3 educators across all pilot buildings. The most frequent instructional coaching session topics included beginning phonics and spelling instruction, use of assessments and oral language development;
- District literacy coaches and regional early literacy specialists conducted more than 1,400 systems coaching sessions with coaches, administrators and teachers across all pilot buildings. The most frequent systems coaching topics included data collection, interpreting and problem-solving, and school-wide reading models or plans;
- Across Cohort 1 schools, curriculum-based language and literacy measures showed:
  - Increases in Phoneme Segmentation Fluency and Nonsense Word Fluency for kindergarten students;

- o An increase in *Oral Reading Fluency* for first and second grade students;
- o No change in *Nonsense Word Fluency* for first grade students;
- o No change in *Oral Reading Fluency* for second grade students; and
- o An overall decrease in *Oral Reading Fluency* and *Comprehension* for third grade students.
- Across Cohort 2 schools, curriculum-based language and literacy measures showed:
  - o An increase in *Phoneme Segmentation Fluency* for kindergarten students;
  - o No change in *Nonsense Word Fluency* for kindergarten students;
  - o An increase in *Nonsense Word Fluency* for first grade students;
  - o No change in *Oral Reading Fluency* for first grade students;
  - o A slight increase in *Oral Reading Fluency* for second grade students; and
  - o An overall decrease in *Oral Reading Fluency* and *Comprehension* for third grade students.

The Data on Implementation and Outcomes section of this report contains detailed descriptions of more complete data analyses. Ohio will continue to execute the evaluation plan using data to make decisions about sustaining and scaling up this comprehensive early language and literacy pilot.

The Department will continue to describe Ohio's progress toward meeting short-, medium- and long-term early literacy outcomes in future State Systemic Improvement Plan reports. The logic model outlines these outcomes as well as modifications, based on the evaluation data, Ohio made to infrastructure and evidence-based practices. The report also will describe efforts to scale up components of this initiative with additional districts, while planning for sustainability in pilot districts (Ohio Department of Education, 2017).

Introduction

Over the past four years, the Ohio Department of Education and various stakeholders have been developing, implementing and evaluating a State Systemic Improvement Plan. As part of Phase I (Ohio Department of Education, 2015), Department staff and stakeholders reviewed several years of data for children ages 3 to 21 who have disabilities. The state-level data revealed a gap between targets and performance that was largest for state reading assessments. Citing research and additional data sources, such as Ohio's current legislated priorities and input from stakeholders about existing infrastructure, Department staff and stakeholders chose to take advantage of existing resources for improving early literacy outcomes for all children in preschool through grade 3, including students with disabilities.

The intent of this results-driven accountability initiative is to measure progress in early literacy outcomes in districts selected for strategic assistance. Designated performance measures for the State Systemic Improvement Plan are the "state-identified measurable results (SIMR)." These two measurable results reflect an agency-wide focus on early language and literacy development and are based on subsets of measures developed for Ohio's Every Student Succeeds Act State Plan:

- State-identified measurable result 1 (SIMR 1): The percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test; and
- State-identified measurable result 2 (SIMR 2): The percentage of all kindergarten through third grade students who are on track for reading proficiency, as measured by state-approved diagnostic reading assessments.

Early Literacy Pilot Participation

Ohio's Early Literacy Pilot is being implemented over five years among two cohorts of teachers representing 15 districts and 24 schools. Table 1 shows the number of students and educators served in the pilot.

Table 1. Number of preschool through grade 3 students and educators served in Ohio's Early Literacy Pilot in 2018-2019

Participant Group	Cohort 1	Cohort 2	Total
Preschool – Grade 3 educators	307	277	584
Preschool – Grade 3 students	4,568	3,515	8,083

Approximately 16.5 percent of Ohio's K-3 students are identified as students with disabilities, slightly more than the national average of 13 percent. Within the pilot, 17 percent of Cohort 1 K-3 students and 19 percent of Cohort 2 K-3 students are identified as having a disability. Ohio's goals in addressing Tier 1 instruction for all educators are to more readily diagnose why students are struggling with reading, be able to provide evidence-based reading instruction and intervention and lower the number of students being identified as having a disability.

Measurable Improvements in the State-Identified Measurable Results in Relation to Targets

Ohio's core team, along with stakeholders, selected targets for each state-identified measurable result (SIMR) designed to gauge progress for Cohort 1 schools. In this and subsequent reports, the Department also will describe the progress of Cohort 2 schools using the same targets. It is important to note that analyses are not comparing the same students across years. For example, third grade students in 2015-2016 are not the same students in 2016-2017 or 2017-2018. Going forward, the Department will work closely

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with the external evaluator to track students in the pilot from kindergarten through third grade.

The Department recognizes the state-approved reading diagnostic used to assess whether students are on track for reading proficiency varies from district to district. It also notes that SIMR 1 includes the results for students who take alternate assessments, and SIMR 2 does not include any student placed on an alternate assessment because such students are excused from the reading diagnostic.

State-identified Measurable Result 1

State-identified measurable result 1 (SIMR 1): The percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test.

Figure 1 details the targets for SIMR 1, along with baseline and student results. The baseline for Cohort 1 schools reflects data from the 2015-2016 school year, and the baseline for Cohort 2 schools reflects data from the 2016-2017 school year. Over three years of implementation, Cohort 1 schools increased by 12.9 percent the percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test. Cohort 1 schools saw an initial decrease, however, between baseline and their first year of implementation (0.4 percent). Cohort 2 schools showed a similar pattern, with a small decrease between baseline and their first year of implementation (2.3 percent) but an increase by 0.6 percent from the first year of implementation to the second. The state also saw an increase of 10.1 percent in the percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test since the pilot started, with a 4.5 percent increase since the last school year. The 33 percent target for 2018-2019 will be extended through the 2019-2020 school year.

Figure 1. Baseline, targets and results for SIMR 1, the percentage of students with disabilities scoring proficient or above on Ohio's third grade English language arts achievement test

Third Grade Reading Proficiency
Students with Disabilities
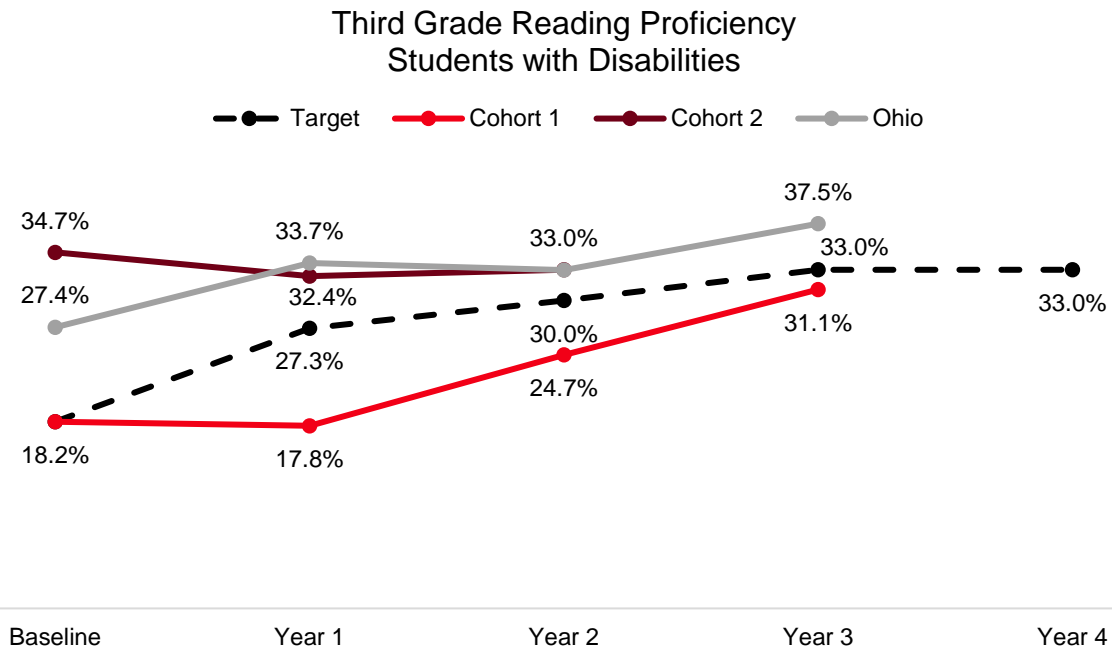
State-identified Measurable Result 2

State-identified measurable result 2 (SIMR 2): The percentage of all kindergarten through third grade students who are on track for reading proficiency, as measured by state-approved diagnostic reading assessments.

Ohio's education system should interpret results for SIMR 2 with caution. There may be inconsistencies in

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reading diagnostic assessments across time as schools select different assessments each year. Additionally, each district using a reading diagnostic can select its own benchmark to measure "on track," if that benchmark is above the vendor-recommended cutoff. The state does not track the benchmarks or reading diagnostic selected by districts each year. It is possible that either the benchmark, assessment or both have changed in each district since the start of the pilot.

Figure 2 shows targets for SIMR 2, along with baseline and student results. As with SIMR 1, the baseline for Cohort 1 schools reflects data from the 2015-2016 school year, and the baseline for Cohort 2 schools reflects data from the 2016-2017 school year. Over three years of implementation, Cohort 1 schools increased the percentage of students on track for reading proficiency by 0.1 percent. Cohort 1 schools saw an initial decrease between baseline and their first year of implementation (1.4 percent). Cohort 1 schools then saw an increase of 4.6 percent from their first year of implementation to their second, followed by a decrease of 3.1 percent in year three. Cohort 2 schools showed an increase from baseline to their first year of implementation (3.0 percent), then a decrease of 6.0 percent in year two. Again, Ohio must interpret these differences with caution, understanding they may not be due to pilot implementation because the state also saw a significant decrease (12.9 percent) in the percentage of students on track for reading proficiency since the start of the pilot. The 75 percent target for 2018-2019 will be extended through the 2019-2020 school year.

Figure 2. Target, baseline and results for SIMR 2, the percentage of all kindergarten through third grade students on track for reading proficiency

K-3 Students On Track for Reading Proficiency
All Students
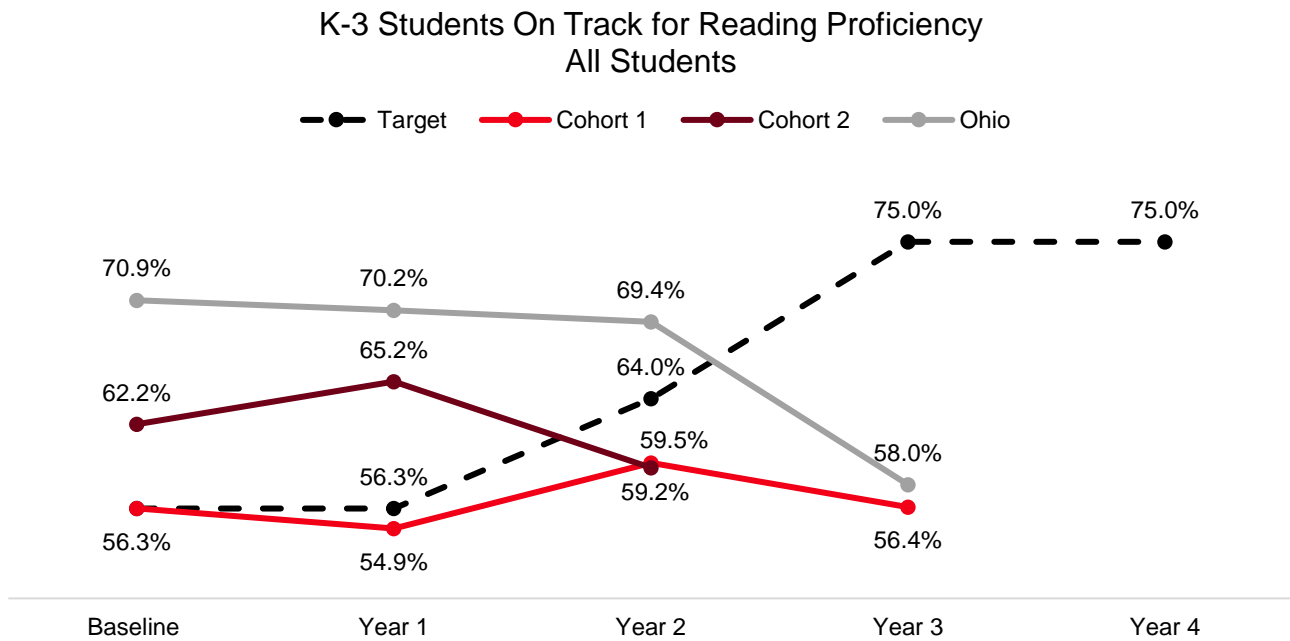
Though SIMR 2 includes all students, the Department also analyzed these data by student subgroup. Figures 3 and 4 display the percentage of all students with disabilities in kindergarten through third grade and their peers who are on track for reading proficiency in Cohort 1 and Cohort 2, respectively. Both cohorts demonstrated a decrease in the percentage of students with disabilities on track for reading proficiency, which is consistent with the statewide pattern. Cohort 1 assessed 402 students with disabilities, and Cohort 2 assessed 445 students with disabilities in 2018-2019.

Figure 3. Percentage of all kindergarten through grade 3 students in Cohort 1 who are on track for reading proficiency by student subgroup

Students on Track for Reading Proficiency
Cohort 1
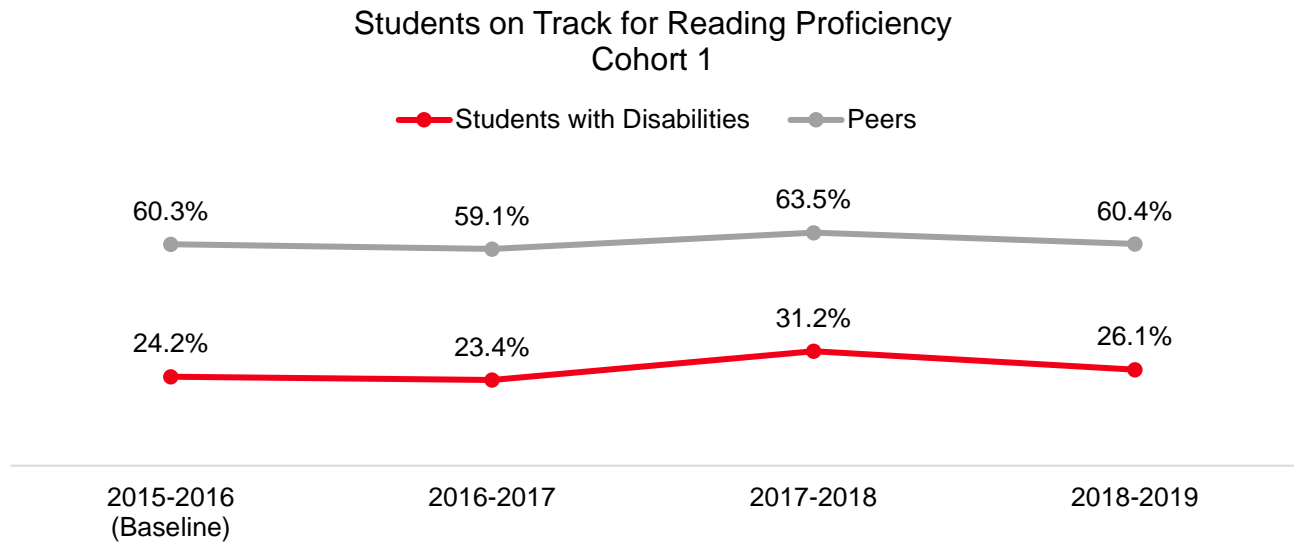
Figure 4. Percentage of all kindergarten through grade 3 students in Cohort 2 who are on track for reading proficiency by student subgroup

Students on Track for Reading Proficiency
Cohort 2
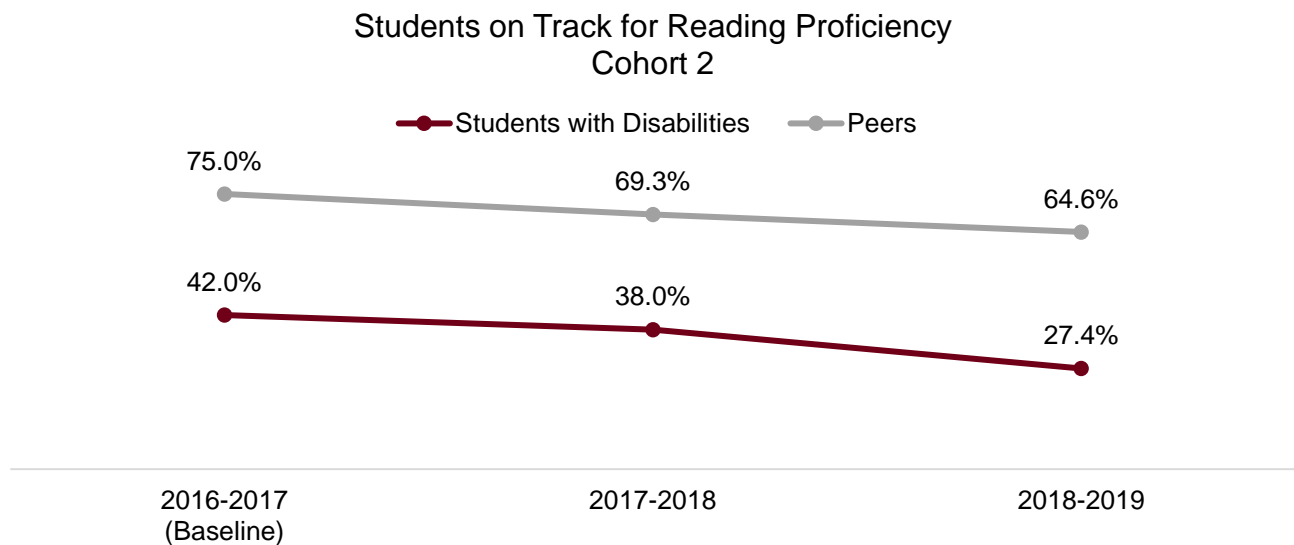
The rest of this Phase III report describes the activities completed during the past year and progress on the improvements intended by Ohio's Early Literacy Pilot. Some activities include making changes to systems and infrastructure development, planning and implementing selected, evidence-based practices in local school districts and conducting a comprehensive evaluation plan. These activities will guide current and future systemic improvement efforts targeted at early literacy. Ohio's core team continues to lead the development of every component of the State Systemic Improvement Plan, with ongoing support and guidance from stakeholders and technical assistance providers. Staff members from the Department's Office for Exceptional Children and offices of Early Learning and School Readiness, Improvement and Innovation, and Approaches to Teaching and Professional Learning form the core team. This team partners with the external evaluation team at the University of Cincinnati Evaluation Services Center to develop data collection procedures, ensure data quality and plan strategies for data analysis. This report describes procedures for

using evaluation data to make decisions, as well as making all modifications to the plan. The report also covers technical assistance and other supports the Department accessed during the last year as well as plans to sustain and scale this initiative over time.

Alignment to Existing State Initiatives

Each Child, Our Future (Ohio Department of Education, 2018) operates on three core principles: equity, partnerships and quality schools; four learning domains: foundational knowledge and skills, well-rounded content, leadership and reasoning, and social-emotional learning; and 10 priority strategies:

1) Increase the supply of highly effective teachers and leaders;
2) Support principals to become highly effective;
3) Improve teacher support and instruction;
4) Identify clear standards that reflect all learning domains;
5) Implement assessments that gauge all learning domains;
6) Create an accountability system that honors all learning domains;
7) Meet the needs of the whole child;
8) Expand quality early learning;
9) Develop literacy skills across all ages, grades and subjects; and
10) Transform high school and provide more paths to graduation.

Ohio's Early Literacy Pilot directly aligns with strategies 1, 2, 3, 8 and 9 and includes all three principles of equity, partnerships and quality schools.

Ohio's Plan to Raise Literacy Achievement

The Department aims to provide all learners with effective, evidence-based instruction to acquire language and literacy knowledge, skills and strategies so they can enjoy full lives of learning and success. Ohio maintains aligned policies and practices to ensure all students acquire these critical literacy skills. The goal is to align all school improvement efforts in one comprehensive plan that includes language and literacy development goals. Clear alignment of state, regional and local efforts to other improvement activities is critical, and the Early Literacy Pilot is the foundation for literacy improvement activities at all levels. Ohio's aligned policies and practices include a variety of funding sources, legislation and other policy drivers.

The Department uses existing structures to refine Ohio's Early Literacy Pilot continuously. They include Ohio's Learning Standards for English Language Arts, the extended standards for students with significant cognitive disabilities, a standards-based system of assessments, data collection systems, accountability systems and report cards, the Ohio Improvement Process, quality preschools, the Third Grade Reading Guarantee, the Dyslexia Pilot Project and a strong system of regional supports. *[Ohio's Plan to Raise Literacy Achievement](#)* includes goals that span birth-grade 12. The Department continues pilot activities for the kindergarten through grade 5, as well as build the focus for each level from birth to age 5 and adolescent.

Regional Supports

Educational service centers and state support teams are examples of Ohio's strong regional support systems. Ohio's state support teams provide targeted support for evidence-based practices that improve outcomes for the state's students with disabilities. Included in these are professional learning opportunities targeted not only at increasing the achievement of students with disabilities but also at promoting strong core instruction so fewer students are identified for special education. Collaborating with the Department, 17 regional early literacy specialists and two Ohio literacy leads from regional state support team offices have helped develop professional learning opportunities, resources and support systems that promote evidence-based language and literacy practices and interventions. Many nonpilot districts and early child care programs, as well as pilot districts have benefited from these resources.

Regional Professional Learning Series for Improving Literacy Development

The Department also has invested in the professional learning of state support team and educational service center staff. This has helped increase literacy capacity throughout Ohio's education system, including among administrators, teachers, intervention specialists, speech and language pathologists, and families. Department staff members, working with national experts, developed a library of research-based professional learning webinars, recorded presentations, PowerPoints and resources as part of Ohio's Literacy Academy, held annually since January 2018. These resources build on the online literacy toolkits to support implementation of evidence-based language and literacy practices.

Third Grade Reading Legislation

Ohio's Third Grade Reading Guarantee Manual and Reading Improvement and Monitoring Plan guidance include clear connections to evidence-based language and literacy practices so districts can better support their language and literacy learning systems, instruction and intervention. Resources on the Department's website and in the toolkits take evidence-based early language and literacy instruction well beyond the Early Literacy Pilot schools, disseminating the information to stakeholders such as families, school personnel, community businesses and other state agencies. The Department also established Ohio's Evidence-Based Clearinghouse, which includes evidence-based strategies aligned with the Every Student Succeeds Act definitions of Strong, Moderate, Promising and Demonstrating. The clearinghouse provides support for districts as they identify evidence-based strategies that align to their students' needs.

Under Ohio Revised Code 3302.13, traditional districts and community (charter) schools are required to submit Reading Achievement Plans if they meet the following criteria on their past two consecutive district or school report cards under section 3302.03 of the Revised Code: (1) The district or school received a grade of "D" or "F" on the kindergarten through third grade literacy progress measure under division (C)(3)(e) of section 3302.03 of the Revised Code; and (2) Less than 60 percent of the district's students who took the third grade English language arts assessment prescribed under section 3301.0710 of the Revised Code during the most recent fall and spring administrations attained at least a proficient score on that assessment. In 2018-2019, 96 traditional districts and community schools met this requirement. The Department worked with state support teams to help districts develop reading achievement plans by offering professional learning. This range of learning opportunities included conducting deep data analysis, goal setting, and identifying and monitoring evidence-based strategies to improve outcomes for all students.

Federal Grant Awards

Ohio received its third State Personnel Development Grant in August 2017. With each new round of grant funding, the Department builds on the prior professional learning programming. It does so to establish a comprehensive, evidence-based system of professional learning that is sustainable statewide and benefits all learners. The Department developed the Ohio Improvement Process through previous grant funding. The Department also worked to improve educational leadership; remove silos separating general education and special education; improve communication between districts and teacher-based teams, building-level teams and leaders; build a systems coaching model; and extend data usage to inform decision-making. Ohio's current State Personnel Development Grant merges recent research on language and literacy core instruction and interventions, advancing understanding of implementation research to further develop educators' competencies and a systemic approach to building capacity.

In October 2017, Ohio received a $35 million Striving Readers Comprehensive Literacy grant from the U.S. Department of Education. This grant work focuses on increasing literacy achievement for Ohio's most vulnerable students, including those living in poverty, those with disabilities, English learners and those at risk of having reading difficulties. Activities that make an impact on teacher and student outcomes have transferred from the pilot to larger-scale efforts.

In October 2019, Ohio received a $42 million Comprehensive Literacy State Development Grant from the U.S. Department of Education to build on its work to improve the language and literacy development of

children birth-grade 12. This grant provides funding to establish model literacy sites in preschools and elementary, middle and high schools across Ohio. The model sites will implement practices consistent with *Ohio's Plan to Raise Literacy Achievement*. The grant also will support professional learning and coaching. The partnership between the Department and model sites will allow early childhood programs, districts and families to improve student literacy and increase educational options for students who traditionally have been underserved.

Ohio also received a $1.2 million Model Demonstration for Early Identification of Students with Dyslexia Grant from the U.S. Department of Education in October 2019. This grant will support pilot programs to improve outcomes for students with, or at risk for, dyslexia by building strong Multi-Tiered System of Supports so that educators can more effectively identify, intervene in, support and make progress on monitoring.

The Department will incorporate findings and lessons learned across these projects to build the most robust system of supports for all Ohio's learners who struggle with literacy development. State leaders will continue to ensure these efforts align with the priorities and objectives of E*ach Child, Our Future*, *Ohio's Plan to Raise Literacy Achievement* and other school improvement efforts. These efforts will continue to expand as the Department annually examines data and identifies targets for improvement.

State Systemic Improvement Plan Implementation Progress

Research-based Early Literacy Instruction

To improve early language and literacy outcomes for all students in preschool through grade 3, including students with disabilities, the Department created an Early Literacy Pilot Theory of Action and Logic Model (see Appendices A and B, respectively). In the Early Literacy Pilot, the Department identified evidence- and research-based practices to implement at the district level. Odom, Brantlinger, Gersten, Horner, Thompson and Harris (2005) define evidence-based practices as procedures based on rigorous, systematic scientific research that have shown evidence of effectiveness. Research-based practices are based on research but have not been empirically tested. The primary research-based professional learning series selected for Ohio's Early Literacy Pilot is the *Language Essentials for Teachers of Reading and Spelling.* This series is based on decades of research on how children learn to read, including the neurobiological basis of reading development. *Language Essentials for Teachers of Reading and Spelling* promotes evidence-based language and literacy instructional practices (Voyager Sopris Learning, Inc., 2016).

The second research-based activity is instructional and systems coaching for district and regional staff. Research supports literacy coaching as an effective way to improve teachers' instructional skills as well as student outcomes (Cantrell & Hughes, 2008; Carlisle & Berebitsky, 2011; Shidler, 2009). Early Literacy Pilot implementation activities rely heavily on the research-based practices of content-specific professional learning and language and literacy coaching to improve outcomes for all students. Feedback from 2016-2017 implementation activities showed that support for administrators has grown. As a result, the Department developed and implemented a framework for coaching systems to support implementation of evidence-based practices. The Department defines systems coaching as developing knowledge, skills and abilities in the systems to support high-quality use of language and literacy practices.

Ohio's focus on building teachers' capacities to provide high-quality, evidence-based, early language and literacy instruction and intervention required a detailed plan that outlined expectations and incorporated key components identified in the Phase I Theory of Action. In 2018, Ohio updated its Theory of Action to highlight leadership as a crucial starting point in school improvement efforts (see *Ohio's Plan to Raise Literacy Achievement*). This update was described in Ohio's Phase III, Year 3 report. A team of Department and state support team staff members, regional early literacy specialists and stakeholders led the development of this Theory of Action to support Ohio's implementation of evidence-based language and literacy practices.

Research on continuous improvement, Universal Design for Learning, implementation science and Multi-

Tiered System of Supports guided and influenced all elements of the action plan and will continue to support this work. The action plan defines the early language and literacy activities implemented as part of the State Systemic Improvement Plan. These activities are designed to promote gains in teacher knowledge of early language and literacy skills to implement evidence-based practices with all students in preschool through grade 3, showing accelerated improvement rates for students at greatest risk of reading difficulty.

Ongoing Support and Professional Learning

The 2018-2019 school year started with several professional learning activities aligned to the intended outcomes. Department staff and cross-agency partners delivered these to regional early literacy specialists, district coaches, teachers, intervention specialists, speech and language pathologists, and administrators from both cohorts. Many of this year's early literacy activities continued the focus on building knowledge of and implementing high-quality, evidence-based early language and literacy instructional strategies at the regional, district, school and classroom levels. These activities are described below.

Regional

- Regional support staff, including regional early literacy specialists, participate in the State Literacy Network, which provides access to all district and teacher-level professional learning supports and includes monthly literacy sessions to build the state's capacity to serve its districts. The Department developed a four-year Regional Professional Learning Series in Literacy, described in the 2019 report, which began with the State Literacy Network in September 2018. This series includes more than 100 regional staff from educational service centers and state support teams. These regional teams work with districts and schools promoting evidence-based literacy instruction and effective systems to support implementation. Year one of the professional learning, 2018-2019, focused on building a common disposition and understanding of what it will take to raise literacy achievement throughout the state. The goal of this professional learning series is to guide regional staff in explicitly connecting Department efforts to promote overall school improvement. These efforts include, but are not limited to, professional learning on Integrated Comprehensive Services, the Ohio Improvement Process and implementation science. Years two through four, 2019-2022, will focus on evidence-based language and literacy practices. Each evidence-based practice session will include resources for instructional support, system implementation, Multi-Tiered System of Supports and data-based decision-making, diverse learners, and home and community connections. This series is led by a team of Department literacy staff, Ohio literacy leads, regional early literacy specialists, adolescent literacy specialists and staff from OCALI and the Outreach Center for Deafness and Blindness;
- To develop a clear, consistent coaching model that will support language and literacy content, all members of the State Literacy Network and pilot district coaches took an e-course through Corwin on Jim Knight's instructional coaching framework (Knight, 2007). Regional early literacy specialists and pilot district coaches also completed a bridge-to-practice developed by a previously trained colleague and in-state experts from OCALI, using the Impact Cycle (Knight, 2018) and including at least one teacher of students with disabilities who have complex needs;
- New regional early literacy specialists are completing a series of online webinars addressing information and implementation of current programs. Since they began in late fall 2019, topics have included *Sit Together and Read*, *Reading Tiered Fidelity Inventory* and others. Through this process, hosted by Ohio's literacy leads, the Department is working to identify needs based on regional early literacy specialists' experiences and the needs of the regions they support.

District and school

- Regional early literacy specialists and district coaches support central office and school leaders through systems-level coaching. Systems-level coaching supports administrators and the district systems that promote and support evidence-based language and literacy practices;

- Administrators also have access to workshops with national literacy experts and webinar forums led by Department staff and administrators from pilot buildings. Administrator forum webinars, created collaboratively with participating administrators and Department staff, provide implementation updates, allow districts to share experiences and highlight resources to support implementation of evidence-based practices in classrooms. These forums offer participants opportunities to delve deeper into systems-level content, such as supporting partnerships between special and general educators. The Department records each forum to offer future access to participants and administrative teams not available for the live webinar.

Classroom

- Districts taking part in the Early Literacy Pilot engage in professional learning in multiple ways. Districts' content knowledge was built through *Language Essentials for Teachers of Reading and Spelling* professional learning series, which included online units supported by face-to-face sessions with national experts. Regional early literacy specialists provide extended support through coaching as described above. The professional learning included job-embedded actions in the form of bridge-to-practice activities to promote real-time application of evidence-based language and literacy practices. Teachers receive support from regional early literacy specialists, district coaches and building administrators in applying the concepts learned and practiced through the professional learning.

The Department's investment in professional learning will continue with the expansion, development and implementation of statewide language and literacy professional learning plans for educators teaching children from birth through age 5, as well as middle and high school students. These plans will align to Ohio's strategic plan, *Each Child, Our Future*, and added to *Ohio's Plan to Raise Literacy Achievement* as the Department finalizes them (Ohio Department of Education, 2018; Ohio Department of Education, 2020).

Data on Implementation and Outcomes

Department staff, state support team directors, external consultants and stakeholders from various state organizations and agencies led Ohio's evaluation planning efforts. The plan developed by this team measures both the process and impact of implementing evidence-based instructional practices to support gains in early language and literacy skills for preschool through grade 3 students. The Department used the tools described below to help develop data, infrastructure and evaluation systems.

Planned Analyses

The evaluation plan is of mixed methods design (Creswell, Klassen, Plano Clark, & Smith, 2011), using both qualitative and quantitative data with ongoing feedback for program improvement. The external evaluation team at the University of Cincinnati Evaluation Services Center analyzes the qualitative data following several major steps. Team members read the data to get a sense of the whole, use open coding to determine what the data mean and develop themes from the codes to identify larger patterns (Creswell, 2012). The team analyzes quantitative data using statistical packages to calculate descriptive and inferential statistics, and it reports all findings in aggregate and disaggregated forms based on the Department's feedback. The evaluation team pulls much of the data from the data dashboard, described below, created specifically for Ohio's Early Literacy Pilot. Evaluation staff members have data policies and procedures in place, including a code book and procedures for secure storage and data accessibility to ensure the data are managed effectively. The Department is working closely with Voyager Sopris Learning, J. Averitt Consulting and the University of Cincinnati evaluation team to use the data to inform policy recommendations and monitor how data are protected, shared, analyzed and reported.

Data Dashboard

The Department contracted with an external partner to create a data dashboard to document and evaluate

the Early Literacy Pilot implementation. Jennifer Averitt, developer and data manager for J. Averitt Consulting, worked with the Department to develop a dashboard to meet the needs of data collection for all measurable pilot activities. The dashboard contains building-, teacher- and child-level data, including curriculum-based measure data, *Reading Tiered Fidelity Inventory* and professional learning data, a professional activities calendar, coaching logs and professional learning attendance records. Regional early literacy specialists, Department staff, district coaches and the external evaluation staff all receive training on the data dashboard's content and use.

Building staff in all pilot districts upload student-level, curriculum-based measure data. Regional early literacy specialists and district coaches upload *Reading Tiered Fidelity Inventory* data. Both regional early literacy specialists and district literacy coaches upload data regarding coaching intensity (number and length of each coaching session) and topic of focus. The Department continues to work with Jennifer Averitt to ensure users can download data reports that meet their needs. The dashboard gives users access to a recorded orientation webinar and reference guide developed by the Department. Modifications to the data dashboard will continue throughout the pilot to best suit the needs of the districts, regions, state and external evaluators.

Data Sources, Data Collection and Associated Timelines

Ohio has contracted with an external evaluator to conduct the evaluation based on the concept of system dynamics (Raimondo, Vaessen & Bamberger, 2016). The evaluator will document, describe and explore the system of supports for language and literacy professional learning through the system dynamics lens during the five-year evaluation. The evaluation plan addresses each strand of the Theory of Action: leadership, Multi-Tiered System of Supports, educator capacity, family partnerships and community collaboration. The evaluation plan focuses on professional learning, language and literacy coaching, student and teacher outcomes, and literacy-based family and community engagement.

Ohio is collecting data on teacher knowledge, classroom practices, student outcomes, administrative supports, regional early literacy specialist supports, coaching, professional learning, and family and community engagement. See Appendix C for the associated theory of action strand, timeline and data collection method for each data source.

- Ohio uses *Language Essentials for Teachers of Reading and Spelling* data to measure teacher knowledge. Voyager Sopris Learning gathers this data through its online learning platform and shares it with the Department and the external evaluators;
- Ohio uses *Reading Tiered Fidelity Inventory* data to help school leadership teams assess and improve the effectiveness of their Multi-Tiered System of Supports for language and literacy. Regional early literacy specialists and districts coaches oversee data collection and upload it to the data dashboard;
- Ohio uses coaching data to measure the intensity and impact of coaching. Regional early literacy specialists and district coaches record this data in the data dashboard;
- Curriculum-based measures, such as AIMSweb or Acadience (formerly DIBELS Next), are used to measure student outcomes. Districts collect curriculum-based measurement data and load it into the data dashboard;
- State assessment data include the Kindergarten Readiness Assessment, Reading Diagnostic and Ohio's third grade English language arts assessment, which schools report to the Department through the Education Management Information System. As part of the data-sharing agreement, the Department provides these data for participating schools to the external evaluators.

Memoranda of understanding governing data sharing are in place and signed by the appropriate parties. External evaluators collect no individually identifiable information. The University of Cincinnati's Institutional Review Board reviewed and approved all data measures, collection procedures and analysis methods. The Department and external evaluators monitor all data for reliability, validity and quality. It has built checks for quality and reliability into the evaluation plan. The Department and external evaluators will be cautious when

interpreting results until they have standardized data collection processes and gathered more evaluation data. The Department and its evaluators are knowledgeable about methods for improving data quality and will implement these processes when necessary.

Anticipated Timeline for Learning, Implementation and Change

The Department staggered the implementation of professional learning content between Cohort 1 and Cohort 2 to allow for continuous improvement and to support long-term sustainability and scalability. For these reasons, changes in outcomes may not be apparent immediately after exposure to professional learning content. Tables 2 and 3 outline the pilot implementation schedule, including when teachers learn content, when they can implement their learning in the classroom and when they may expect effects for students (Dariotis, Duan, Holton, Bailey, Toraman, Smith, Morrison, & Telfer, 2018).

Language Essentials for Teachers of Reading and Spelling K-3 units 1 to 4 include content aimed primarily at students in kindergarten and grade 1. Cohort 1 K-3 teachers learned content for units 1 to 4 in 2016-2017. During 2017-2018, the pilot expected that Cohort 1 K-3 teachers would implement what they learned in units 1 to 4. Observable changes in student language and literacy are not expected among Cohort 1 kindergarten and grade 1 students until 2018-2019 at the earliest. We may see these changes to a greater extent in 2019-2020 and beyond. This pattern in observable student changes is expected to be similar for Cohort 2. Cohort 2 K-3 teachers learned content for units 1 to 4 in 2017-2018 and began to implement these practices in 2018-2019; observable changes in student language and literacy in kindergarten and grade 1 students may be seen beginning in 2019-2020 through 2020-2021 (Dariotis et al., 2018).

Language Essentials for Teachers of Reading and Spelling K-3 units 5 to 8 include content aimed primarily at students in grades 2 and 3. Cohort 1 K-3 teachers learned content for units 5 to 8 in 2017-2018. During 2018-2019, Cohort 1 K-3 teachers implemented what they learned. Changes in student language and literacy are not expected among Cohort 1 grades 2 and 3 students until 2019-2020 at the earliest and to a greater extent in 2020-2021. This pattern in observable student changes is expected to be similar for Cohort 2. Cohort 2 K-3 teachers learned content for units 5 to 8 in 2018-2019, will implement these practices in 2019-2020, and changes in student language and literacy in grades 2 and 3 students may be evident in 2020-2021 (Dariotis et al., 2018).

Preschool teachers in both cohorts learned *Language Essentials for Teachers of Reading and Spelling* content for the early childhood units 1 to 4 in 2017-2018 and began to implement these practices in 2018-2019. We expect to observe changes in preschool students' language and literacy beginning in 2019-2020 and beyond (Dariotis et al., 2018).

In summary, the Department expects there will be a one-year lag between teachers learning unit content and classroom implementation of that content, followed by another yearlong lag between implementation and observable student-level changes. Thus, the Department anticipates a two-year lag between teachers learning content and observing changes in student language and literacy outcomes. Observers should review results with this lag in mind (Dariotis et al., 2018).

Table 2. Anticipated timeline for learning, implementation and change for Cohort 1

Teacher Grade Level	2016-2017 Project Year 1	2017-2018 Project Year 2	2018-2019 Project Year 3	2019-2020 Project Year 4	2020-2021 Project Year 5
K-3 teachers	Learn units 1-4	Implement units 1-4	Change expected for students in grades K-1	Change expected for students in grades K-1	Change expected for students in grades K-1

Teacher Grade Level	2016-2017 Project Year 1	2017-2018 Project Year 2	2018-2019 Project Year 3	2019-2020 Project Year 4	2020-2021 Project Year 5
K-3 teachers	No implementation of units 5-8	Learn units 5-8	Implement units 5-8	Change expected for students in grades 2-3	Change expected for students in grades 2-3
Preschool teachers	No implementation	Learn early childhood unit	Implement early childhood unit	Change expected for preschool students	Change expected for preschool students

Table 3. Anticipated timeline for learning, implementation and change for Cohort 2

Teacher Grade Level	2016-2017 Project Year 1	2017-2018 Project Year 2	2018-2019 Project Year 3	2019-2020 Project Year 4	2020-2021 Project Year 5
K-3 teachers	No implementation	Learn units 1-4	Implement units 1-4	Change expected for students in grades K-1	Change expected for students in grades K-1
K-3 Teachers	No implementation	No implementation of units 5-8	Learn units 5-8	Implement units 5-8	Change expected for students in grades 2-3
Preschool teachers	No implementation	Learn early childhood Unit	Learn early childhood Unit	Implement early childhood unit	Change expected for preschool students

Language Essentials for Teachers of Reading and Spelling

Kindergarten through Grade 3 Educators

In 2018-2019, Cohort 2 educators received in-person professional learning on research-based language and literacy practices through *Language Essentials for Teachers of Reading and Spelling*. Voyager Sopris Learning's national trainers and regional early literacy specialists conducted the hands-on, face-to-face professional learning sessions for kindergarten through grade 3 educators over three days during the 2018-2019 school year. Educators also took part in online units created by Voyager Sopris Learning. Professional learning for kindergarten through grade 3 educators included eight units separated into two sets of four (units 1-4 and 5-8). Each unit contained between six and eight sessions. The units are *The Challenge of Learning to Read*; *The Speech Sounds of English*; *Teaching Beginning Phonics, Word Recognition, and Spelling*; *Advanced Decoding, Spelling, and Word Recognition*; *The Mighty Word—Oral Language and Vocabulary*; *Digging for Meaning—Understanding Reading Comprehension*; *Text-Driven Comprehension Instruction*; and *The Reading-Writing Connection*. Each unit also contains a summary of the information presented. Voyager Sopris has woven checks for understanding quizzes and bridge-to-practice activities throughout the online learning platform. Participants must pass quizzes at the end of each unit; while the bridge-to-practice provides an opportunity for participants to complete case studies of up to three students and build portfolios of progress for each. Participants take pre-tests before beginning the online modules and take the same tests after completing unit four. They take another pre-test before unit five and a post-test following unit eight.

Cohort 2 completed units 1-4 during the 2017-2018 school year and units 5-8 during the 2018-2019 school year.

Language Essentials for Teachers of Reading and Spelling Professional Learning Data

Voyager Sopris Learning tracks teacher completion rates of those participating in the online modules, their knowledge measured by pre- and post-tests and their responses to checks for understanding. *Language Essentials for Teachers of Reading and Spelling* contains two pre-tests and post-tests, administered in the fall and spring for all content contained in the first four professional learning units for Year 1 and the last 4 units for Year 2. Evaluators analyzed pre- and post-test scores to determine whether participants' knowledge increased after taking part in each portion of the online professional learning.

Figure 5 displays the knowledge increase for kindergarten through grade 3 educators in Cohort 2, from pre- to post-test for the last four units of *Language Essentials for Teachers of Reading and Spelling*. Ninety-two percent of Cohort 2 educators completed both the pre- and post-tests for units 5-8 in the 2018-2019 school year. The Department saw an overall knowledge increase of 14 percent, with increases for 90 percent of participating educators. The Department saw positive changes among teachers of all grades and teaching specialties from pre- to post-test for units 5-8.

Figure 5. Percentage correct on Language Essentials for Teachers of Reading and Spelling units 5-8 pre- and post-tests for kindergarten through grade 3 educators in Cohort 2.

Units 5-8 Pre- and Post-Test
Average Percentage Correct
Cohort 2
(n = 197 teachers)

82%

68%

Pre-test
(Fall 2018)

Post-test
(Spring 2019)
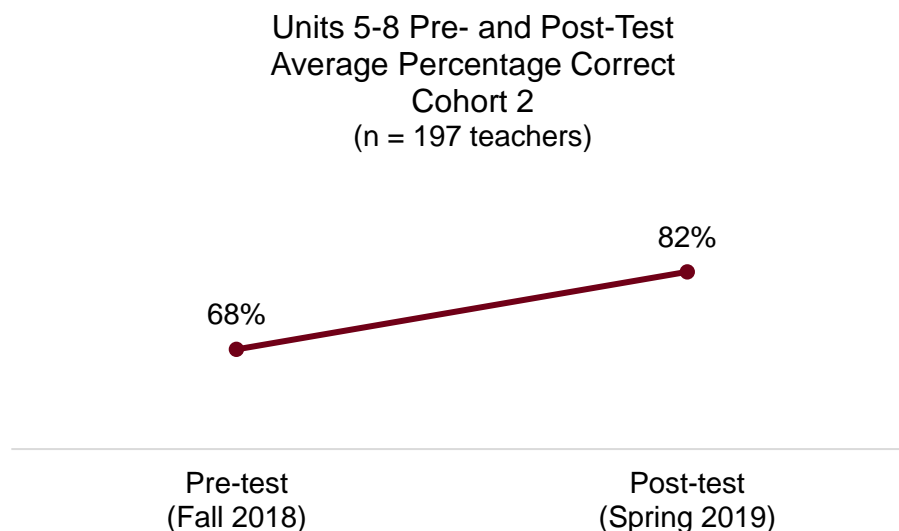
The Department saw an overall increase across both cohorts from pre- to post-test for each component of *Language Essentials for Teachers of Reading and Spelling,* units 1-4, units 5-8, and early childhood. Language and literacy knowledge increased across all schools among all educator subgroups in both cohorts.

While knowledge increase is a goal of the professional learning, pilot activities also are designed to assess whether educators are using the evidence-based instructional skills for language and literacy in their classrooms. The *Language Essentials for Teachers of Reading and Spelling Application of Concepts* tools, created by Louisa Moats, Ph.D., Lucy Hart Paulson, Ed.D., and Voyager Sopris Learning, will be used to collect classroom implementation data (Voyager Sopris Learning, 2018a & 2018b). The *Language Essentials for Teachers of Reading and Spelling Application of Concepts* tools contain items that reference language and literacy skills and strategies specific to the face-to-face and online professional learning tools. These tools have two purposes: (1) literacy coaches will use the tools as checklists to do instructional coaching with teachers; and (2) regional early literacy specialists will collect data on the implementation of newly acquired language and literacy knowledge. Regional early literacy specialists will collect the observation data on a

subset of teachers who scored 80 percent or higher on each *Language Essentials for Teachers of Reading and Spelling* post-test. For data collection, there will be two observations for each teacher. Coaches will integrate these into that teacher's ongoing coaching cycle. Voyager Sopris Learning has created a series of 10 webinars to train literacy coaches and regional early literacy specialists to use these tools. Cohort 1 began data collection January 2019, and Cohort 2 began fall 2019. The external evaluation team will analyze the data while triangulating them with other data sources.

Language Essentials for Teachers of Reading and Spelling Professional Learning Data Limitations

Currently, there are no obvious limitations with the pre- and post-test data gathered from the *Language Essentials for Teachers of Reading and Spelling* professional learning. The pre- and post-tests all are automated in the online units. The Department and regional early literacy specialists have discovered that some teachers are completing units and the corresponding checks for knowledge in pairs or teams, which may have affected post-test scores.

Reading Tiered Fidelity Inventory

Kim St. Martin, Ph.D., from Michigan's Integrated Behavior and Learning Support Initiative, trained the regional early literacy specialists to use Tiers 1, 2 and 3 of the *Reading Tiered Fidelity Inventory* with building leadership teams (St. Martin, Nantais, Harms, Huth, 2015). This assessment tool was developed in Michigan to support building leadership teams in assessing School-Wide Reading Model implementation. A School-Wide Reading Model includes multi-tiered structures encompassing evidence-based practices for improving reading outcomes for all students. Such a model also includes systems to address the continuum of reading needs across the student body as well as address data use and analysis. The *Reading Tiered Fidelity Inventory* is designed for use in a data-based decision-making process that also looks at student outcome data.

The *Reading Tiered Fidelity Inventory* guides building leadership teams as they examine building-level language and literacy Multi-Tiered System of Supports, including analyzing and using data for instructional planning. The inventory also examines Tier 2 and 3 instructional supports on top of Tier 1 core instructional practices. The *Reading Tiered Fidelity Inventory* helps schools gauge their School-Wide Reading Model features for all three tiers to prioritize or develop their Multi-Tiered System of Supports for language and literacy, initially focusing goals on the lowest scoring elements of Tier 1. The *Reading Tiered Fidelity Inventory* measures three tiers and 12 subscales; every item is scored as 0 (not in place), 1 (partially in place) or 2 (fully in place) and helps teams prioritize next steps to improving their Multi-Tiered System of Supports. The overall tier and each subscale can have a minimum score of 0 and a maximum score of two times the total number of relevant items. For example, Tier 1 has 27 items, so the total score will not exceed 54. Higher scores denote better implementation of a Multi-Tiered System of Supports. Average scores for each subscale and all of Tier 1 are reported here as percentages. Right now, the recommendation is a total and tier score of 80 percent to indicate implementation with fidelity (St. Martin et al., 2015). Data gathered from the Early Literacy Pilot will help in continuing measurement of standardization for this tool.

Across the first two years of implementation, each pilot school collected data on all three tiers of the *Reading Tiered Fidelity Inventory*. Regional early literacy coaches and district coaches collected baseline data on the *Reading Tiered Fidelity Inventory* for both cohorts and will do a full administration, including all tiers, in the spring of each subsequent project year. Regional early literacy specialists will continue to use these data to provide appropriate systems-level coaching.

The regional early literacy specialists and building leadership teams review these data at least once a year in the spring. Teams for each school also develop a School-Wide Reading Plan and Coaching Service Delivery Plan based on the *Reading Tiered Fidelity Inventory* results. The Coaching Service Delivery Plan specifies the concepts or skills district personnel need to use a program or innovation effectively and outlines essential steps coaches will take to develop teams of educators who accurately implement a program or innovation. The School-Wide Reading Plan defines criteria to prevent reading difficulties and ensure reading success. All

Reading Tiered Fidelity Inventory data are entered in the data dashboard, so local, regional, state and evaluation staff can use them. Coaching Service Delivery Plans are uploaded to the data dashboard for easy access by district coaches and regional early literacy specialists. These plans will guide the work at the local level.

Cohort 1 Reading Tiered Fidelity Inventory Data

By the end of 2018-2019, 10 of the 14 Cohort 1 schools had completed the *Reading Tiered Fidelity Inventory* Tier 1 over four time points. The overall score and all subscale scores showed increases from baseline (time 1) to time 4, which demonstrates improvement in the implementation process (see Figure 6). Both the *Teams* and *Resources* subscale scores reached the 80 percent benchmark target. The high baseline for *Teams* (72 percent) is attributed to the Ohio Improvement Process teams that already were in place as a foundation for pilot implementation. Increases were statistically significant ($p < 0.05$) for the overall score and for the *Implementation, Resources* and *Evaluation* subscale scores. The largest gain was in *Resources,* which more than doubled. Of the 10 schools, eight schools reached the 80 percent benchmark on the *Teams* subscale; two schools reached the benchmark on the *Implementation* subscale; eight schools reached the benchmark on the *Resources* subscale; and five schools reached the 80 percent benchmark on the *Evaluation* subscale (Dariotis, Duan, Smith, Holton, Mabisi, Bailey, & Telfer, 2019).

Figure 6. R-TFI Tier 1 overall and subscale scores for Cohort 1

Cohort 1
Reading Tiered Fidelity Inventory Tier 1
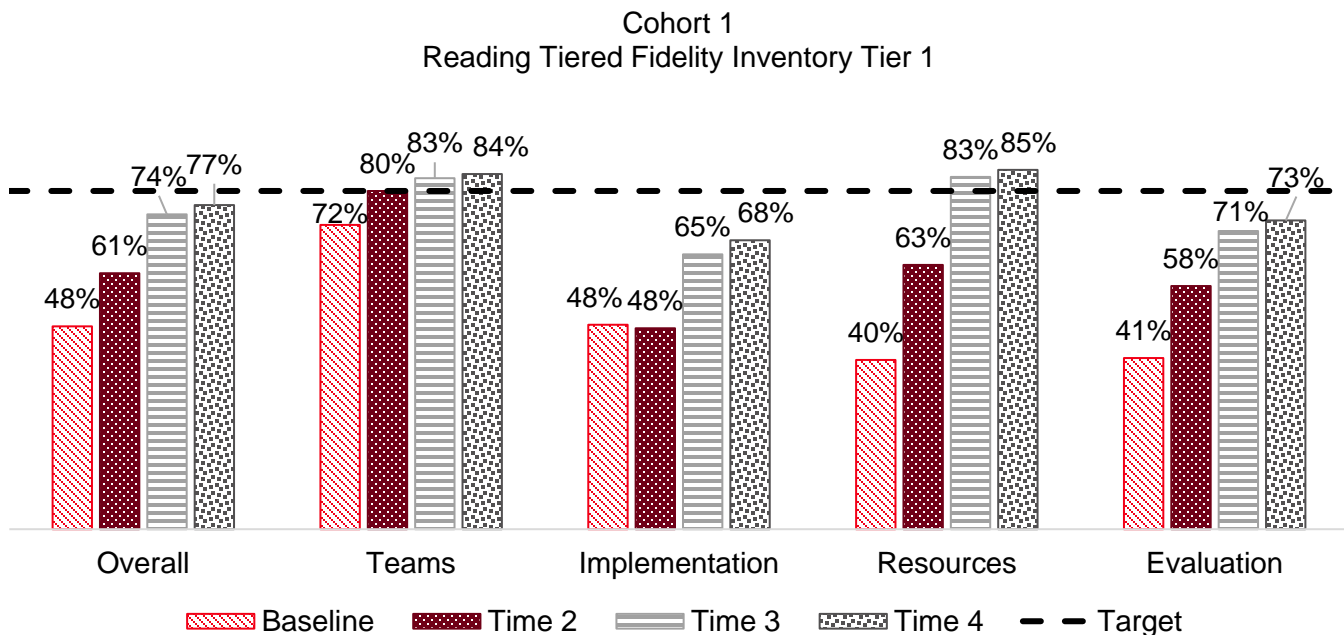
Cohort 2 Reading Tiered Fidelity Inventory Data

Nine of 10 Cohort 2 schools had Tier 1 data available for all three time points (fall 2017, spring 2018 and spring 2019). The overall score and all subscale scores showed increases from baseline to the second time point, which demonstrated improvement in the implementation process (see Figure 7). Evaluators observed statistically significant ($p < 0.05$) increases in the overall score and in both the *Implementation* and *Resources* subscale scores. Of the nine schools, five schools reached the 80 percent benchmark on the *Teams* subscale; two schools reached the benchmark on the *Implementation* subscale; seven schools reached the benchmark on the *Resources* subscale; and two schools reached the 80 percent benchmark on the *Evaluation* subscale (Dariotis et al., 2019).

Figure 7. R-TFI Tier 1 overall and subscale scores for Cohort 2

Cohort 2
Reading Tiered Fidelity Inventory Tier 1

Baseline · Time 2 · Time 3 · Target
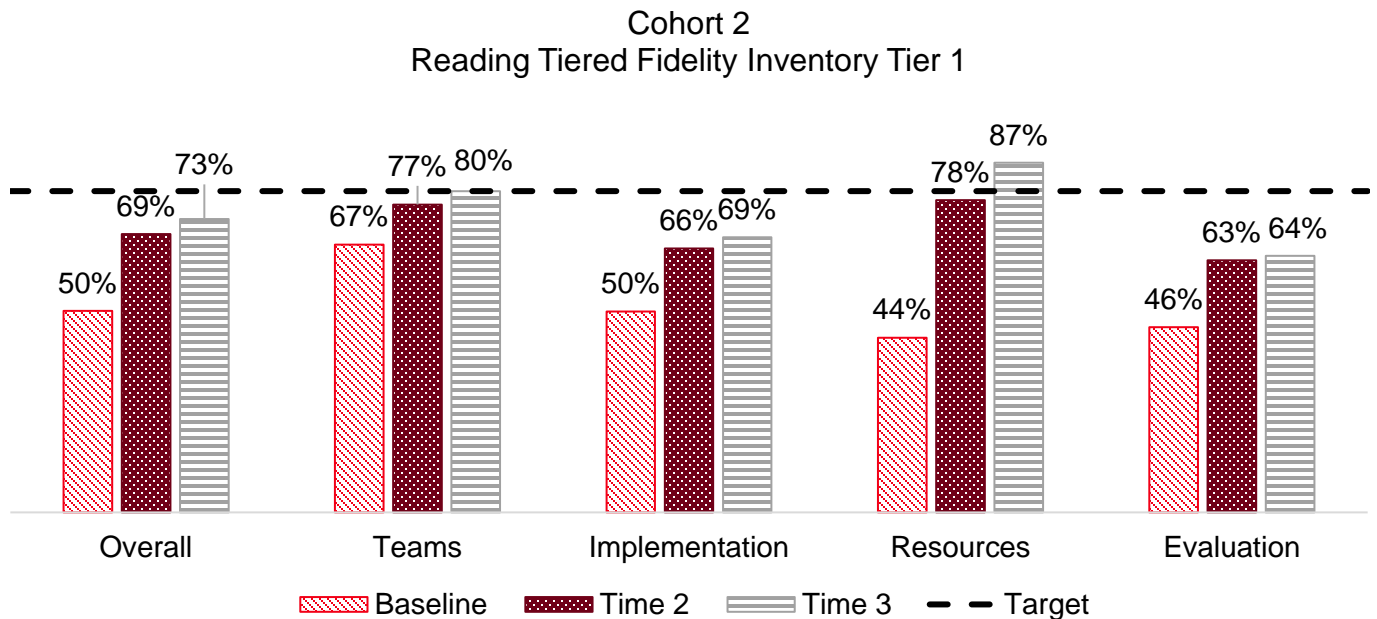
The *Reading Tiered Fidelity Inventory* findings demonstrate improvement and progress toward a Multi-Tiered System of Supports for school-wide language and literacy core instruction and reading intervention. For both cohorts, the *Reading Tiered Fidelity Inventory* Tier 1 overall score is approaching the 80 percent target. Tier 1 *Implementation* and *Evaluation* supports reflect the greatest areas of need. For both cohorts, the lowest-scoring items were on the *Evaluation* subscale, including monitoring the School-Wide Reading Plan. At least a third of schools in both cohorts do not have a monitoring plan in place. The Department and external evaluators have identified School-Wide Reading Plans as an area of focus for both cohorts moving forward. Beginning in fall 2019, the Department required all schools with School-wide Reading Plans to submit them to the data dashboard for Department review. Department staff reviewed these plans and gave districts feedback. As these supports are put in place over time, the overall score should increase and eventually exceed the 80 percent benchmark for Tier 1. For both cohorts, Tier 1 *Resources* was the highest-scoring subscale, with the *Teams* subscale a close second.

Reading Tiered Fidelity Inventory Data Limitations

While the Department expects increases in scores over time, there may be an initial dip because teams of educators began with the self-assessment before completing professional learning. Engaging in the professional learning has led educators to understand they are not implementing an evidence-based language and literacy Multi-Tiered System of Supports as well as they had initially thought, and they may have rated themselves lower in subsequent assessments. Also, while the *Reading Tiered Fidelity Inventory* provides data on implementation of a language and literacy Multi-Tiered System of Supports, it does not capture the discussions that occur among building leadership teams. Anecdotes from Ohio's regional early literacy specialists indicate educators are having deeper conversations that suggest they have a greater understanding of where they need to go in the future than may be reflected here. Additionally, the *Reading Tiered Fidelity Inventory* is a self-assessment and is still being standardized. The Department views Ohio's use of the *Reading Tiered Fidelity Inventory* as an opportunity to inform the standardization process. The Department works closely with the creator of the *Reading Tiered Fidelity Inventory* to address issues that arise from implementing this tool in the cohort districts.

Coaching

Coaching is an integral part of the overall Early Literacy Pilot. Instructional coaching promotes the implementation of the evidence-based practices learned in the *Language Essentials for Teachers of Reading and Spelling* modules. Regional early literacy specialists directly support district coaches and, in some cases, classroom teachers on effective implementation of *Language Essentials for Teachers of Reading and Spelling* content. District coaches, in turn, provide instructional coaching to classroom teachers and support staff. The pilot model expects district coaches to assume more responsibility for coaching as the pilot progresses. The Department continuously modifies support for implementing a coaching system based on the yearly coaching analysis and needs identified by regional early literacy specialists and district coaches.

Regional early literacy specialists support district coaches as they build capacity for implementing evidence-based language and literacy practices. Systems coaching engages the principals, district literacy coaches, classroom teachers and intervention specialists in critically examining systems in place to support effective practices. Systems coaching includes:

- Assessing the needs, fit and context of new innovations;
- Promoting buy-in and readiness for new innovations;
- Forming a district leadership team, building leadership team and/or teacher-based teams;
- Developing the district leadership team, building leadership team and/or teacher-based teams;
- Conducting a Multi-Tiered System of Supports needs assessment for literacy;
- Supporting fluency in a school-wide reading model, including:
  - Evidence-based practices and interventions;
  - Data interpretation;
  - School-wide reading assessment system;
  - School-wide reading schedule.

District literacy coaches are working closely with regional early literacy specialists to help building administrators and teacher-based teams increase their capacities to use the practices listed above. Ohio is modeling a gradual release of responsibility so that by year five, pilot districts will not rely on regional early literacy specialists as their in-house experts. Instead, district coaches and administrators will assume the role of experts. The Department is continuously developing coaching supports to meet specific district needs.

Coaching Data

Regional early literacy specialists and district coaches document both systems and instructional coaching activities in the coaching logs that are part of the data dashboard. The coaching logs track coaching implementation by examining the domains of coaching outlined by Powell and Diamond (2013). Domains include structure, process and content. Structure refers to the intensity of the coaching, which is the number of sessions, length of each session and duration from the start of the coaching session to the end of the coaching session. Process refers to actions that promote the use of evidence-based language and literacy instructional practices through coaching. Content refers to the individual, academic content focus for each educator to provide core instruction for all students, extend practices reflected in class schedules and offer individual instruction based on student needs. Coaching logs capture the structure and content of Ohio's coaching system in the Early Literacy Pilot.

Coaching Structure

Cohort 1 Coaching Structure

Regional early literacy specialists and district coaches in Cohort 1 submitted 1,770 coaching logs over the 2018-2019 school year. Of these, 1,098 were instructional coaching sessions and 672 were systems coaching sessions. Eighty-nine percent of K-3 teachers in Cohort 1 engaged in at least one coaching session of either type, while 60 percent of preschool teachers engaged in coaching (Dariotis et al., 2019).

Cohort 1 Instructional Coaching Participation

- Seventy-seven percent of K-3 teachers engaged in instructional coaching.
- Fifty-eight percent of preschool teachers engaged in instructional coaching.
- On average, each K-3 teacher engaged in 6.8 instructional coaching sessions for a total of 4.9 hours.
- On average, each preschool teacher engaged in 4.2 instructional coaching sessions for a total of 3.3 hours.

Cohort 1 Systems Coaching Participation

- Seventy-eight percent of K-3 teachers engaged in systems coaching.
- Forty-eight percent of preschool teachers engaged in systems coaching.
- On average, each K-3 teacher engaged in 7.2 systems coaching sessions for a total of 8.3 hours.
- On average, each preschool teacher engaged in 2.9 systems coaching sessions for a total of 3.0 hours.

Cohort 2 Coaching Structure

Regional early literacy specialists and district coaches in Cohort 2 submitted 2,655 coaching logs over the 2018-2019 school year. Of these, 1,907 were instructional coaching sessions and 748 were systems coaching sessions. Ninety-two percent of K-3 teachers in Cohort 2 engaged in at least one coaching session of either type, while 42 percent of preschool teachers engaged in coaching (Dariotis et al., 2019).

Cohort 2 Instructional Coaching Participation

- Eighty-eight percent of K-3 teachers engaged in instructional coaching.
- Thirty-six percent of preschool teachers engaged in instructional coaching.
- On average, each K-3 teacher engaged in 15.3 instructional coaching sessions for a total of 9.5 hours.
- On average, each preschool teacher engaged in 16.5 instructional coaching sessions for a total of 12.2 hours.

Cohort 2 Systems Coaching Participation

- Eighty-seven percent of K-3 teachers engaged in systems coaching.
- Twenty-five percent of preschool teachers engaged in systems coaching.
- On average, each K-3 teacher engaged in 9.3 systems coaching sessions for a total of 7.8 hours.
- On average, each preschool teacher engaged in 3.2 systems coaching sessions for a total of 4.1 hours.

Coaching Content

Coaches selected one literacy topic for each instructional coaching session and participants could select only one topic per instructional coaching session, while systems coaching logs allowed for multiple selections. There were 12 topic options for instructional coaching of preschool teachers and 11 topic options for instructional coaching of K-3 teachers. "Teaching beginning decoding and spelling" and "use of assessment for planning instruction" were the top instructional coaching topics for K-3 educators in both cohorts. Only one preschool topic, "strategies that facilitate oral language development," appeared in the most frequently coached topics for both cohorts (Dariotis et al., 2019). The most frequent instructional coaching topics for K-3 and preschool teachers are displayed in figures 8 and 9, respectively.

Figure 8. Most frequent instructional coaching topics for teachers of kindergarten through grade 3

Most Frequent K-3 Instructional Coaching Topics

Cohort 1 (n=999 sessions)
- Teaching beginning decoding and spelling — 27%
- Use of assesment for planning and instruction — 19%
- Phonological awareness (speech sounds) — 11%

Cohort 2 (n=1,695 sessions)
- Use of assesment for planning and instruction — 25%
- Teaching beginning decoding and spelling — 15%
- Developing vocabulary and oral language — 13%
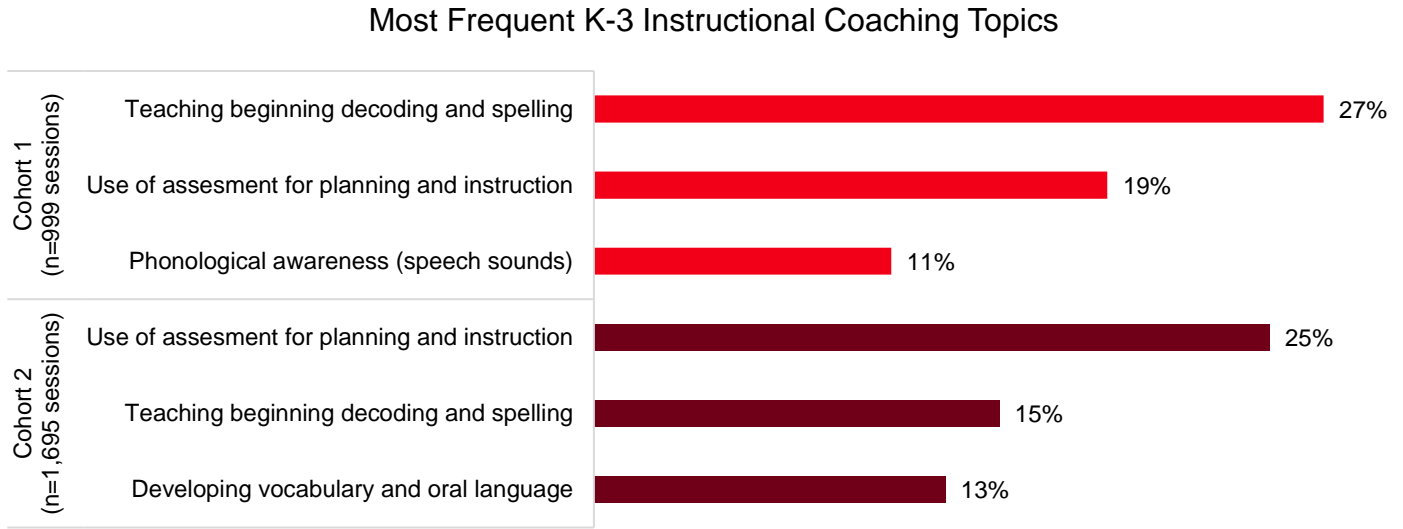
Figure 9. Most frequent instructional coaching topics for preschool teachers

Most Frequent Preschool Coaching Topics

Cohort 1 (n=164 sessions)
- Written language and connections: Concepts of print — 20%
- Phonological awareness (segmenting) — 14%
- Strategies that facilitate oral language development — 12%

Cohort 2 (n=226 sessions)
- Literacy environmental supports — 14%
- Strategies that facilitate oral language development — 14%
- Promoting oral language development — 12%

Systems coaching topics were divided between leadership, with nine options, and teacher-based teams, with three options. The leadership topics, "data collection, interpretation and problem-solving" and "school-wide reading plans" appeared in the top three topics for systems coaching for both cohorts. Both cohorts had the same three most frequent topics for teacher-based teams, including 'data collection, interpretation and problem solving," "supporting teacher-based teams" and "grade level reading schedule and instructional plans" (Dariotis et al., 2019). Most frequent systems coaching topics for leadership and teacher-based teams are displayed in figures 10 and 11, respectively.

Ohio | **Department** of **Education**

Figure 10. Most frequent topics for systems coaching sessions focused on leadership

Most Frequent Leadership Coaching Topics

Cohort 1 (n=580 sessions)
- Data collection, interpretation and problem solving — 55%
- Communication protocols (feedback loops) — 23%
- School-wide reading model/plan — 22%

Cohort 2 (n=606 sessions)
- Data collection, interpretation and problem solving — 31%
- School-wide reading model/plan — 15%
- Service delivery plan — 15%
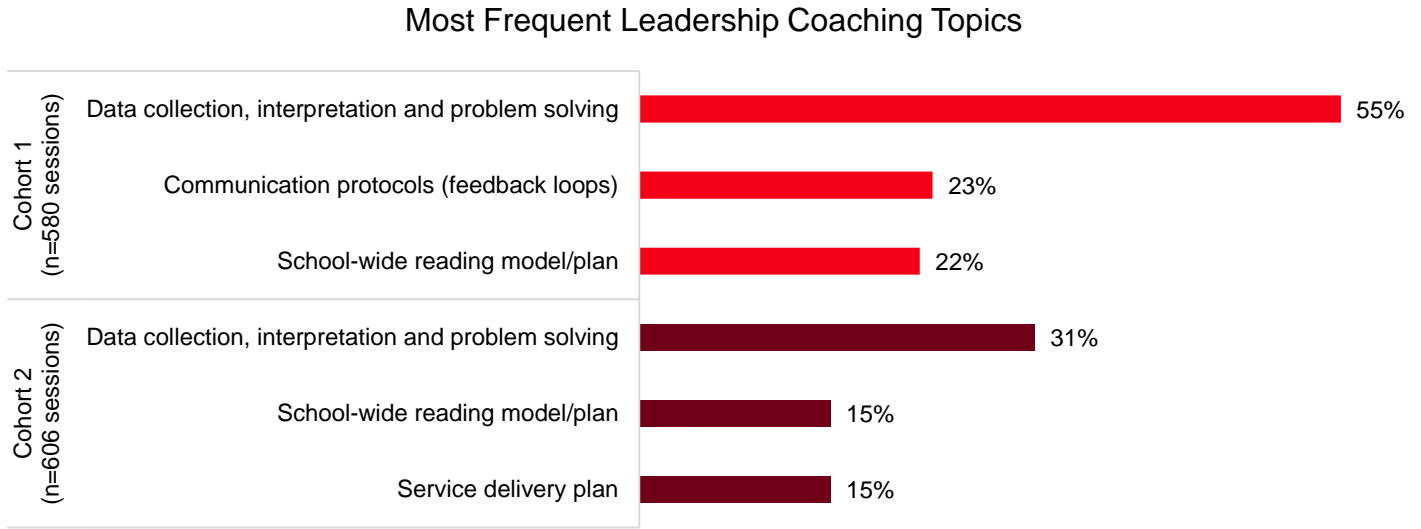
Figure 11. Most frequent topics for systems coaching sessions focused on teacher-based teams

Teacher-Based Team Coaching Topics

Cohort 1 (n=406 sessions)
- Data collection, interpretation and problem solving — 64%
- Supporting teacher-based teams — 59%
- Grade level reading schedule and instructional plans — 31%

Cohort 2 (n=617 sessions)
- Supporting teacher-based teams — 45%
- Data collection, interpretation and problem solving — 32%
- Grade level reading schedule and instructional plans — 22%

The total number of instructional and systems coaching sessions delivered by regional early literacy specialists and district coaches in 2018-2019 was 1,770 for Cohort 1 (compared to 2,219 in 2017-2018) and 2,655 for Cohort 2 (compared to 1,643 in 2017-2018). The Department and external evaluators expected this, since Cohort 1 completed the professional learning series in 2017-2018, and coaching this year has focused on retaining knowledge and refining practices. Cohort 2 completed the professional learning series in 2018-2019. During that year, several coaching sessions occurred along with the professional learning.

Coaching Data Limitations

Coaching implementation varies across schools in several ways, including the responsibilities and availability of district coaches, time spent with each pilot building, use of systemic coaching schedules and which teachers are targeted for coaching (Dariotis et al., 2018). Likewise, feedback loops revealed that regional early literacy specialists and district coaches were not logging their coaching sessions in the same way across all sessions. These differences introduced additional sources of variation, complicating analyses. The

Department is working to reconcile these differences for future consistency by articulating clear definitions for instructional and systems coaching. There is limited empirical data related to coaching. Therefore, Ohio's process is evolving as the Department learns more about the coaching process from regional early literacy specialists and district coaches. As the Department has continued to develop and refine Ohio's coaching model, the coaching logs are more accurately capturing the process. While adaptations to the tools increase usability, comparability across years may be limited (Dariotis et al., 2018).

Curriculum-based Measurement

As part of the district literacy agreement, districts taking part in this work are obligated to collect student-level data using a curriculum-based measurement. These tools support teachers' progress monitoring and use of appropriate interventions for each child's needs. In Ohio, pilot partner schools agreed to use either Acadience (formerly DIBELS Next) or AIMSweb. Both tools are standardized and available online. Regional early literacy specialists took part in professional learning opportunities on the specific tools in project years 1 and 2. Each district was responsible for training its teachers on the curriculum-based measurement. The Department has encouraged pilot participants to monitor the fidelity of implementation of their chosen assessments.

Standardized curriculum-based measurements take the form of benchmarking assessments to determine the basic early literacy skills of kindergarten through grade 3 students, including phonemic awareness, oral reading fluency and comprehension (Dariotis et al., 2018). Appropriately, not all types of measurements were available for every school because schools served students in different grades and administered benchmarking assessments differently depending on grade level. Some schools did not administer certain measurements as some are for specific grade levels only (Good, Simmons, & Kame'enui, 2010; Pearson, 2012; University of Oregon, 2017). Analyses took place for schools that provided complete curriculum-based measurement data: 14 Cohort 1 schools (3,983 students) and nine Cohort 2 schools (3,029 students). One school in Cohort 2 serves only preschool students and does not collect curriculum-based measurement data. Among the 14 schools in Cohort 1, 11 used Acadience and three used AIMSweb for benchmarking in 2018-2019. Among the nine schools in Cohort 2, eight used Acadience and one used AIMSweb for benchmarking (Dariotis et al., 2019). As the anticipated timeline for change in student outcomes, shown in Tables 2 and 3, indicates, the Department first expected student changes in kindergarten and grade 1 following the 2018-2019 school year for Cohort 1 students. It does not expect change until 2019-2020 for Cohort 2 students. Likewise, The Department does not expect change in outcomes for students in grades 2 and 3 until the 2019-2020 school year for Cohort 1 students and 2020-2021 for Cohort 2 students. Thus, Ohio should interpret curriculum-based measurement data with caution.

Curriculum-based Measurement Grade-level Data

Cohort 1 Curriculum-based Measurement Grade-level Data

Patterns of change in the percentages of students at or above benchmark varies by grade and measure (Figure 12). From the beginning to the end of the 2018-2019 academic year, which was the third year of implementation for Cohort 1 teachers, the Department observed the following changes related to students meeting benchmark goals (Dariotis et al., 2019):

- A 6.4 percent increase in kindergarten *Phoneme Segmentation Fluency*;
- A 4.9 percent increase in kindergarten *Nonsense Word Fluency*;
- A 2.8 percent increase in grade 1 *Nonsense Word Fluency*;
- A 3.6 percent increase in grade 1 *Oral Reading Fluency*;
- A 5.1 percent increase in grade 2 *Oral Reading Fluency*;
- A 5.9 percent decrease in grade 3 *Oral Reading Fluency*; and
- A 5.5 percent decrease in grade 3 *Comprehension*.

Figure 12. Percentage of kindergarten through grade 3 students at or above benchmarking goals by grade and assessment for all Cohort 1 schools in implementation year three (2018-2019)
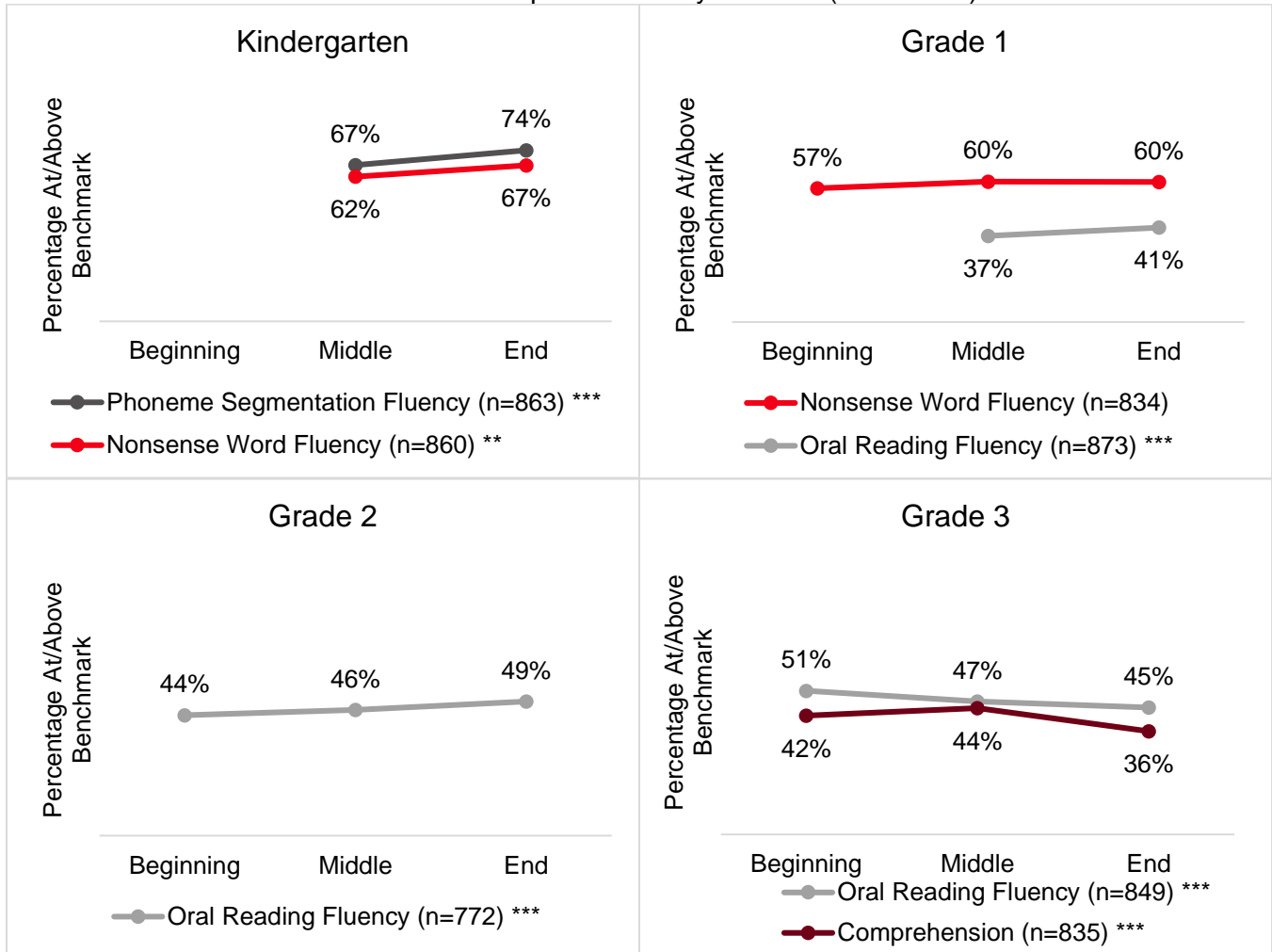
Note: ** indicates statistical significance at p<0.01 and *** indicates statistical significance at p<0.001.

Across all 14 Cohort 1 schools, the Department and external evaluators observed gains in end-of-year benchmarking for *Phoneme Segmentation Fluency* and *Nonsense Word Fluency*, grade 1 *Nonsense Word Fluency* and *Oral Reading Fluency*, and grade 2 *Oral Reading Fluency*. There were decreases in grade 3 *Oral Reading Fluency* and *Comprehension*. A majority of Cohort 1 schools showed improvements in benchmarking performance in kindergarten to grade 2, but not in grade 3. This may be because the content of *Language Essentials for Teachers of Reading and Spelling* professional learning series builds from preschool through grade 3, beginning with foundational skills in the earlier units. It also may be because Cohort 1 teachers learned units 5-8 in 2017-2018 and were in their first year of implementing this material in classrooms in 2018-2019 (Dariotis et al., 2019).

Cohort 2 Curriculum-based Measurement Grade-level Data

Patterns of change in the percentages of students at or above benchmark goals varies across grades and measures (Figure 13). From the beginning to the end of the 2018-2019 academic year, the second year of implementation for Cohort 2 teachers, the Department and external evaluators observed the following changes in students meeting benchmark goals (Dariotis et al., 2019):

- A 9.4 percent increase in kindergarten *Phoneme Segmentation Fluency*;

- No change in kindergarten *Nonsense Word Fluency* (0.6% percent) and grade 1 *Oral Reading Fluency* (0.4 percent);
- A 17.0 percent increase for grade 1 *Nonsense Word Fluency*;
- A 7.3 percent increase in grade 2 *Oral Reading Fluency*;
- A 3.8 percent decrease in grade 3 *Oral Reading Fluency*; and
- A 2.5 percent decrease in grade 3 *Comprehension*.

Figure 13. Percentage of kindergarten through grade 3 students at or above benchmarking goals by grade and assessment in all Cohort 2 schools for implementation year two (2018-2019)
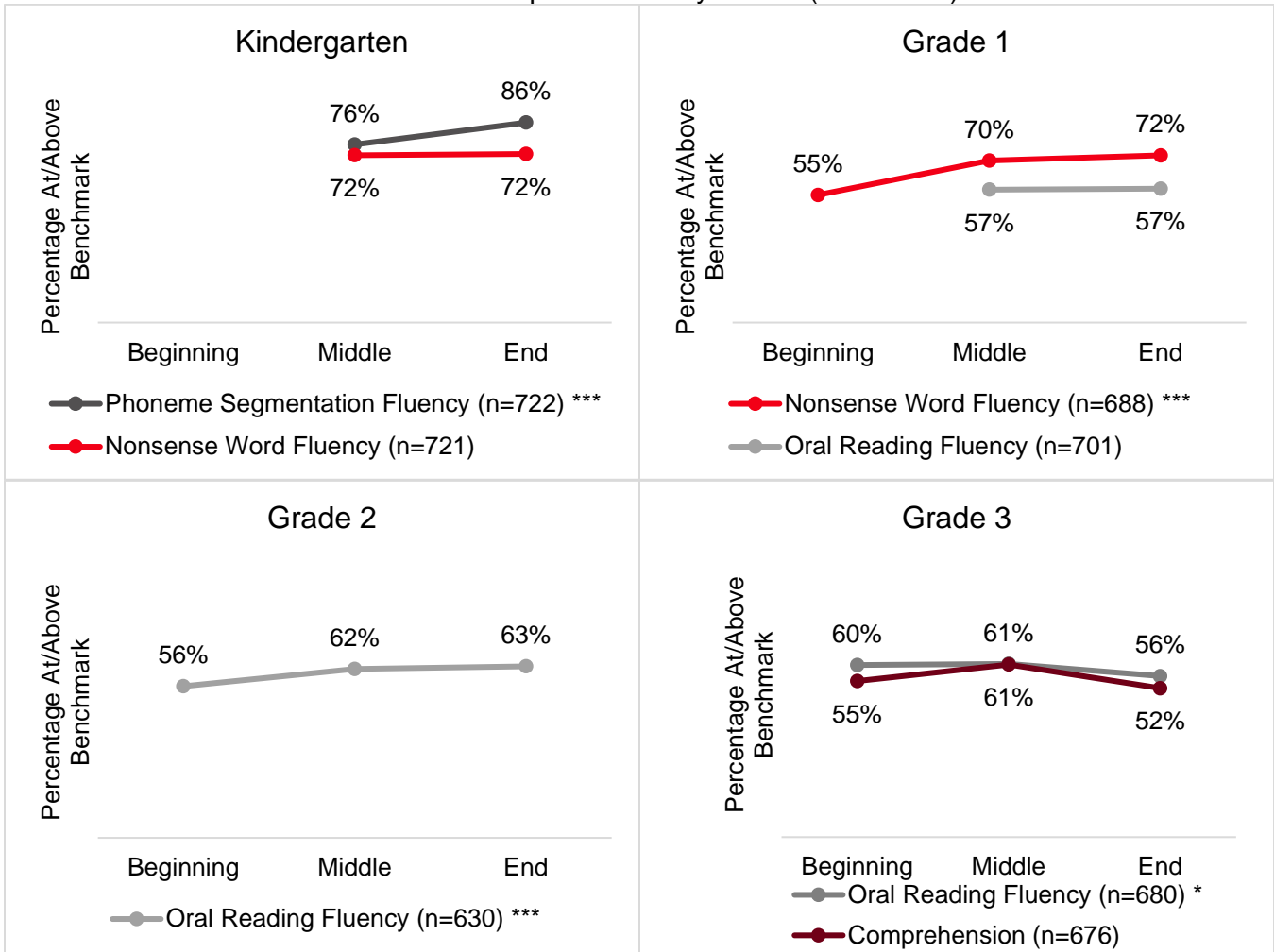
Note: *indicates statistical significance at p <0.05, ** indicates statistical significance at p<0.01, and *** indicates statistical significance at p<0.001.

Across nine Cohort 2 schools, the Department and external evaluators observed gains in end-of-year benchmarking for kindergarten *Phoneme Segmentation Fluency*, grade 1 *Nonsense Word Fluency* and grade 2 *Oral Reading Fluency*. There were no changes for kindergarten *Nonsense Word Fluency* and grade 1 *Oral Reading Fluency*. They observed a decrease for grade 3 *Oral Reading Fluency* and *Comprehension*. Most Cohort 2 schools showed improvements in benchmarking performance in kindergarten to grade 2, but not in grade 3. This can be expected because these more advanced early literacy measures might not show change yet, while earlier measures such as *Phoneme Segmentation Fluency* are more sensitive to the types of instructional changes expected using *Language Essentials for Teachers of Reading and Spelling* units 1 to 4 content (Dariotis et al., 2019).

Curriculum-based Measurement Data Limitations

During this project year, the Department and external evaluators continued efforts to improve the quality and quantity of data from the curriculum-based measures (Acadience or AIMSweb). There are ongoing inconsistencies in the way schools upload data to the dashboard, with key data fields, such as student identification numbers, missing in some cases. The Department is working with external evaluators and the data point person at each pilot district to identify and remedy these issues. There also are concerns with the collection of curriculum-based measurement data. Teachers receive professional learning on whichever of the two required curriculum-based measurement tools their districts opt to use. However, there is no way for the Department to ensure teachers are consistently collecting curriculum-based measurement data. The Department, collaborating with the data dashboard developer and external evaluation team, has developed more guidance on data collection processes and submission of curriculum-based measurement data to avoid potential fidelity issues in the future.

Sit Together and Read

The Department is collaborating with the Crane Center for Early Childhood Research and Policy at The Ohio State University to implement *Sit Together and Read*. This is an empirically tested preschool print-referencing intervention comprised of read-aloud practices and scaffolding strategies to encourage and strengthen children's knowledge and awareness of print (OSU, 2017). The primary focus of *Sit Together and Read* is to increase communication between teachers and families (Tambyraja, 2019). *Sit Together and Read* includes two components, one in the classroom and one at home, that both typically include 30 books. Teachers and caregivers read one book twice a week with their students using the cards and prompts provided in the program. Using feedback from 17 pilot teachers who engaged with *Sit Together and Read* in spring 2018, nonpilot schools that took part in a separate pilot in spring 2017 (Tambyraja, 2017) and stakeholders, the full 30-book program was condensed to include only eight books for use at home, while teachers used the full 30-book program in the classroom.

Cohort 1 implemented *Sit Together and Read* during the 2018-2019 school year. These results are described below. In 2019, Cohort 2 buildings began their first year of *Sit Together and Read* implementation, while Cohort 1 continued into a second year. Evaluation results for 2019-2020 implementation will be available in summer 2020.

Sit Together and Read Data

In fall 2018, seven of the eight Cohort 1 districts, including 46 preschool teachers and 893 families, began implementing the 30-book *Sit Together and Read* in the classroom and eight-book *Sit Together and Read at Home* programs. The classroom component required teachers to read the prescribed book twice during the week, using the cards provided. After six weeks of classroom implementation, teachers began implementing *Sit Together and Read at Home* with their students' families. The home program took place over 16 weeks, focusing on one book for two weeks. *Sit Together and Read at Home* asked families to read the prescribed book twice during the first week, using the cards provided, and respond to the four prompts in the journal provided. Teachers then took the next week to respond to families' journals. At the end of the two-week period, teachers sent another book home with families, asking them to repeat this process with the new book (Tambyraja, 2019).

Data are available only for the 461 (52 percent) families who returned their journals at the end of the year. Of these families, 22 percent completed 15 to 16 readings of the prescribed books, with 16 being the maximum possible. On average, families completed nine readings. Slightly fewer than half the families who returned journals (46 percent) reported reading to their children one to two hours a week. Thirty three percent (154 families) reported reading to their children between three and six hours a week, while 16 percent reported reading with their children more than seven hours a week. Sixteen families reported never reading to their children (Tambyraja, 2019). Child and family characteristics such as a child's individualized education program status, reported levels of family enjoyment in reading and responses to statements about time

pressures were not associated with the number of readings completed (Tambyraja, 2019).

Approximately one-third of families used the journals consistently while another one-third of families rarely or never used the journals. Family journal use was related to families' responses to statements about time pressures, for example, "It is hard to find time to read." Families who did not have difficulty finding time to read completed significantly more journal entries than other families. Additionally, families who were either neutral or did not know if their child enjoyed being read to completed significantly fewer weeks of journal entries than other families.

Teachers provided, on average, 15 of a possible 32 responses to family journals across the eight *Sit Together and Read at Home* books (Tambyraja, 2019). Teachers completed online reading logs to document how frequently they read the prescribed books in their classrooms. Ninety percent of participating teachers completed at least one online reading log, but only one teacher completed reading logs for all 30 weeks. On average, teachers completed 13 online reading logs out of a possible 30.

In an end-of-year survey, families indicated that difficult areas of implementation included remembering to return the surveys and staying on schedule with the reading. However, only 10 percent of responding families reported these difficulties. Only 20 teachers completed the year-end survey, which indicated they found the journaling difficult, but these teachers believed *Sit Together and Read at Home* offered moderate or strong benefits in strengthening school and home connections (Tambyraja, 2019).

Sit Together and Read Data Limitations

Participation in *Sit Together and Read* was low for both the classroom and at home components. Data are limited to the perspectives of families and teachers who used and returned the journals and completed the surveys.

Cohort 1's implementation of *Sit Together and Read* in the classroom and *Sit Together and Read at Home* informed the 2019-2020 implementation for all pilot buildings in both cohorts. Researchers will work with the regional early literacy specialists and teachers to better determine why many families do not engage with this program. Additionally, the training for the *Sit Together and Read* programs will include ideas for how families can incorporate reading into their daily schedules (Tambyraja, 2019).

Partnerships for Literacy

Partnerships for Literacy represents a partnership between Ohio's Statewide Family Engagement Center at The Ohio State University and the Ohio Department of Education to design and support family and community engagement for early literacy. *Partnerships for Literacy* offers a systematic approach to family and community engagement that is goal-oriented, sustainable over time, and develops the capacity of both educators and family members. Teams of parents and caregivers and school personnel create continuity from school to home for students and families, develop relationships with community partners to support early literacy, and systematically embed effective family and community engagement in the Ohio Improvement Process in the school. Ohio's regional family engagement leads provide schools with coaching support to implement family and community engagement practices focusing on language and literacy. These regional family engagement leads focus on developing knowledge, skills and perspectives that support meaningful, effective partnership between teachers and families of students with disabilities, English learners and families living in poverty. The Statewide Family Engagement Center leads the design and delivery of the *Partnerships for Literacy* professional learning series and is responsible for procuring resources for supporting family and community engagement in early literacy.

Partnerships for Literacy first was implemented in year 3 of the pilot to allow educators time to complete the intensive, two-year *Language Essentials for Teachers of Reading and Spelling* professional learning series before introducing additional pilot activities. Cohort 1 family engagement leads began implementing *Partnerships for Literacy* in the 2018-2019 school year; Cohort 2 will begin in fall 2019.

The intended result is improved home and school supports and resources for language and literacy

development for young students through the following:

- The implementation of a locally developed plan based on current practices and priorities, aligned with the school's focused plan and linked to community resources;
- A sustainable, representative, family-teacher team linked to the school's building leadership team and focusing on the needs of all families through family and community engagement practices;
- Teachers who practice more effective family engagement; and
- Teams that develop and expand links with community resources to address the identified needs of families and support literacy at home, at school and in community settings.

Each spring, pilot schools complete the *Family and Community Engagement for Early Literacy Inventory*, which is the primary measure of implementation fidelity for Partnerships for Literacy (Boone, Wellman, & Villareal, 2018). The inventory is made up of 17 items organized into three categories, including Communication, Learning at Home and Community Partnerships. School teams are asked to complete two scales for each item on the inventory. The Quality scale measures the school team's perspective of and experience in the how well the school implements current practices, using a range of 0 (not yet), 1 (needs improvement), 2 (acceptable) and 3 (well done). The Quantity scale measures how much each practice is conducted in the school, using a range of 0 (not yet), 1 (some classrooms), 2 (some grade levels) and 3 (school wide).

Partnerships for Literacy Data

As of June 2019, 12 school teams in Cohort 1 had completed the inventory. Although most of the *Partnerships for Literacy* teams completed the inventory for a single elementary school, three teams reflected on practices across two elementary schools in their districts. Team membership included teachers and specialists (*N*=49), parents and caregivers (*N*=47), administrators (*N*=17) and community partners (*N*=6). The mean subscale ratings for *Quality* and *Quantity*, described above, for this first year of implementation provide a baseline to measure gains in school-level family engagement practices.

Baseline data provide evidence of opportunities for growth in both *Quality* and *Quantity* of *Communication* and *Learning at Home* and *Quality* of *Community Partnerships*. The mean subscale rating for *Quality* of *Communication* was 1.68. The mean subscale rating for *Quantity* of *Communication* was 1.72. For *Learning at Home* practices, the mean subscale rating for *Quality* was 1.60 and the mean subscale rating for *Quantity* was 1.98. The mean subscale rating for *Quality* of *Community Partnerships* was 1.95. Figure 8 shows the baseline data results.

Figure 14. Family and Community Engagement for Early Literacy Inventory, Mean Subscale Ratings: Baseline

**Family and Community Engagement for Early Literacy Inventory
Cohort 1 Mean Subscale Ratings**

Subscale	Rating
Learning at Home: Quantity	1.98
Community Partnerships: Quality	1.95
Communication: Quantity	1.72
Communication: Quality	1.68
Learning at Home: Quality	1.60
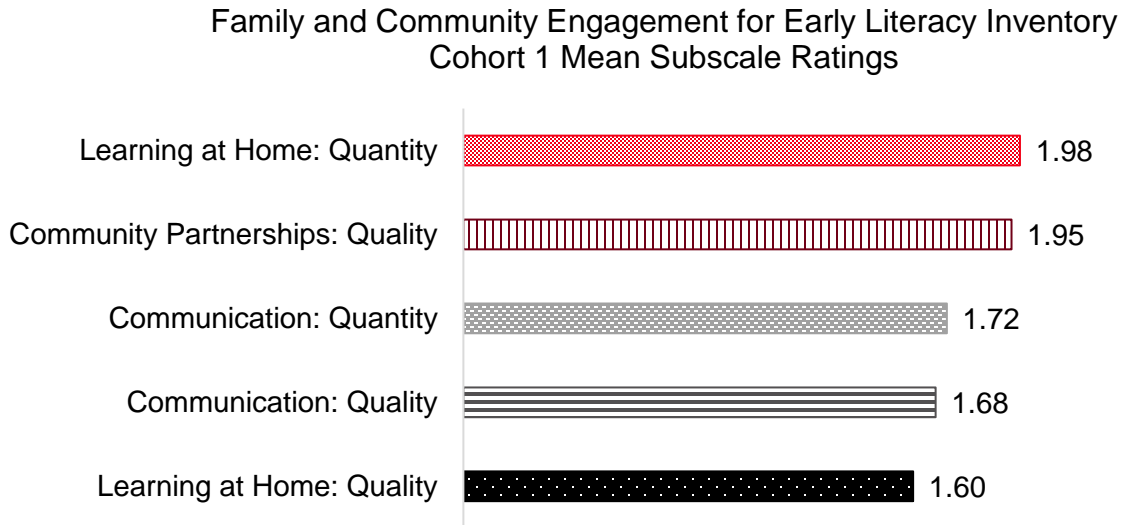
Partnerships for Literacy Data Limitations

The *Family and Community Engagement for Early Literacy Inventory* was designed for use within *Partnerships for Literacy* to enable project accountability. The inventory also serves a dual function as a school-based needs assessment. Although based on research, the inventory has not been rigorously validated for use with the pilot schools. Therefore, evaluators should view the results with caution.

Demonstrated Progress and Modifications

Evaluation data from year three of Ohio's Early Literacy Pilot implementation show several areas of progress toward intended improvements in infrastructure, teacher capacity and student literacy outcomes. Increases across all four Tier 1 subscales of the *Reading Tiered Fidelity Inventory* for both Cohorts 1 and 2 show evidence of continued local systems and infrastructure improvements.

Regional early literacy specialists and district coaches provided a total of 4,425 coaching sessions during the 2018-2019 school year. Preschool through grade 3 teachers received 3,005 instructional coaching sessions and administrators and teams of educators received 1,420 systems coaching sessions. Altogether, teachers from both cohorts participating in the professional learning series demonstrated an increase in knowledge from pre- to post-test for the all eight *Language Essentials for Teachers of Reading and Spelling* units and all four *Language Essentials for Teachers of Reading and Spelling* early childhood units. The 197 Cohort 2 teachers showed a 14 percent increase in overall knowledge for *Language Essentials for Teachers of Reading and Spelling* units 5-8, with 90 percent of these teachers showing gains.

Curriculum-based measurement benchmarking assessments show promising gains in language and literacy for all pilot schools from beginning-of-year to end-of-year collection. Cohort 1 schools showed a 6.4 percent increase in *Phoneme Segmentation Fluency* in kindergarten and a 4.9 percent increase for kindergarten students and a 2.8 percent increase for grade 1 in *Nonsense Word Fluency*. Students in grades 1 and 2 showed increases of 3.6 percent and 5.1 percent, respectively, in *Oral Reading Fluency*. Cohort 2 school students showed a 9.4 percent increase in *Phoneme Segmentation Fluency* for kindergarten students, a 17 percent increase in *Nonsense Word Fluency* for grade 1 students and a 7.3 percent increase in grade 2 students' oral reading fluency skills.

Overall, these data suggest Ohio's Early Literacy Pilot is on the right path to achieve its intended outcomes.

See a discussion of modifications based on evaluation data collected so far in the *Plans for Year 5* sections of this report.

Intended Outputs

The Department continues to meet all the original intended outputs described in the Logic Model. Goal 1 in the Logic Model concentrates on the research-based language and literacy professional learning and coaching needed to improve early literacy outcomes for students in Ohio. The outputs for this goal focus on providing professional learning to teachers, district coaches, school teams, administrators and regional early literacy specialists. Both cohorts of educators now have completed all eight units of *Language Essentials for Teachers of Reading and Spelling* training. Administrators in both cohorts also have been offered professional learning through the *Language Essentials for Teachers of Reading and Spelling* administrator modules. The core team continues to develop and enhance Ohio's coaching framework encompassing systems and instructional coaching. District coaches from both cohorts and regional early literacy specialists completed a 13-module e-course to improve their knowledge and understanding of instructional coaching. Additionally, regional specialists and staff from state support teams and educational service centers statewide are taking part in ongoing professional learning in evidence-based language and literacy instruction as part of the Professional Learning Series in Literacy.

Goal 2 in the Logic Model aims to improve the capacity of the pilot districts to implement data-driven systems, make infrastructure changes and form external partnerships critical to the work to improve student outcomes. School teams from both cohorts have received training in and are using data for screening, progress monitoring and instructional decision-making within a Multi-Tiered System of Supports. Educators, administrators, coaches and regional early literacy specialists reported their schools are using data to inform instruction and planning (Dariotis et al., 2019). As described in the *Data Sources, Data Collection and Associated Timelines* and summarized in the previous section, student data is showing improvement before the time expected at some grade levels, which supports this trend (see the section titled, *Anticipated Timeline for Learning, Implementation and Change*). Educators in pilot buildings also reported high levels of support from their building leaders, coaches and regional early literacy specialists (Dariotis et al., 2019). Concentrated efforts to enhance family and community partnerships began with Cohort 1 schools in fall 2018 through *Sit Together and Read at Home* and *Partnerships for Literacy*. The Ohio State University designed both programs and works with Department staff to increase communication between families and educators to support students' language and literacy development. Cohort 2 began implementation of *Sit Together and Read* and *Partnerships for Literacy* in fall 2019.

Goal 3 in the Logic Model describes the importance of engaging leaders in all pilot districts, including using the shared leadership structures that underly the Ohio Improvement Process. Building administrators and coaches continue to report that literacy is a standing item on existing team agendas. Additionally, pilot participants took part in 1,420 systems coaching sessions focused on shared leadership and teacher-based teams (Dariotis et al., 2019).

Stakeholder Involvement

As in years past, stakeholders add tremendous value to the development of Ohio's Early Literacy Pilot and decision-making about ongoing implementation and evaluation. Several stakeholder groups meet to provide input, review data, address barriers and identify solutions.

Sharing Evaluation Data with Stakeholders

Evaluation data from Ohio's Early Literacy Pilot are regularly shared with pilot participants and relevant stakeholders through stakeholder meetings and the State Literacy Network. With guidance from the Department and stakeholders, Ohio's external evaluation team developed a data profile for each building in the pilot. The stakeholder team and regional early literacy specialists continually have offered feedback to

enhance each year's reports. The external evaluator shares these profiles with each pilot building annually. Finally, pilot participants and relevant stakeholders receive masked versions of each phase III report for their review and comment.

Ohio's State Literacy Team

The State Literacy Team, led by the Ohio Department of Education's Office of Approaches to Teaching and Professional Learning, is a group of experts in language and literacy content, instruction, intervention, assessment, policy and professional learning. These team members represent stakeholders who support educators, families and learners from birth through grade 12.

The State Literacy Team includes individuals and experts from:

- Office of the Ohio Governor Mike DeWine;
- OCALI (formerly the Ohio Center for Autism and Low Incidence);
- Outreach Center for Deafness and Blindness;
- Ohio Department of Developmental Disabilities;
- Ohio Department of Job and Family Services;
- Ohio districts and schools;
- Ohio colleges and universities;
- State foundations and partnerships;
- State support teams and educational service centers; and
- Ohio Chapter of the American Academy of Pediatrics.

The State Literacy Team reconvened in June 2019 to reflect on initial implementation of *Ohio's Plan to Raise Literacy Achievement*, analyze updated state and project-specific data, and offer recommendations to enhance the plan. The Department established workgroups addressing literacy for children from birth to kindergarten entry, kindergarten to grade 5 and middle-high school grade bands. The groups focused on evidence-based practices to support emergent literacy for learners from birth to kindergarten entry, early and conventional literacy for learners from kindergarten to grade 5, and adolescent literacy development for learners in middle and high school. The workgroup also reviewed Ohio's current literacy development efforts and identified opportunities to expand specific, evidence-based language and literacy practices across the state and its regions, districts, grade levels, classrooms, and families and communities.

Department staff work with the State Literacy Team to communicate *Ohio's Plan to Raise Literacy Achievement* to state, regional and local entities to provide consistent messaging about evidence-based language and literacy practices.

State Literacy Network

The Department has developed a State Literacy Network consisting of state and regional literacy specialists that develop statewide and regional resources. This network includes literacy experts from the Department's offices for Approaches to Teaching and Professional Learning and Exceptional Children. It also includes two Ohio literacy leads, 16 regional early literacy specialists, two regional adolescent literacy specialists, staff from OCALI and additional regional specialists providing literacy supports. This group meets monthly to share learning, develop statewide and regional resources and engage in the practice to policy feedback loop for specific projects, such as the Early Literacy Pilot.

Regional Professional Learning Series in Literacy

To promote sustainability and scale-up, staff from Ohio's 16 state support teams and 52 educational service centers were invited to participate in a four-year Regional Professional Learning Series. The series meets the Every Student Succeeds Act criteria for high-quality professional learning in that it is sustained, intensive, collaborative, job-embedded, data-driven and instructionally focused. The series weaves throughout the concepts of presumed competence for all learners and engages participants in discussions that support a

diversity of students, for example, English learners and students with complex needs. This series began in the 2018-2019 school year. Staff taking part in the regional series are developing these capacities outlined in *Ohio's Plan to Raise Literacy Achievement*:

- Support data-driven decision-making through engagement in the Ohio Improvement Process (specific to literacy);
- Support local education agencies in developing sustainable evidence-based language and literacy plans aligned to the state plan and the overall district improvement plan; and
- Support the fidelity of implementation of evidence-based language and literacy practices.

State support team and educational service center staff have taken part in a blended learning training for *Language Essentials for Teachers of Reading and Spelling*. The series is a hybrid of online units and face-to-face sessions conducted by national or in-state trainers. Participation in the *Language Essentials for Teachers of Reading and Spelling* professional learning series is a complimentary component to the Regional Professional Learning Series in Literacy.

Regional Literacy Networks

Each Regional Support Team for Literacy, a group made up of state support team and educational service center staff engaged in literacy improvement, has established a regional literacy network. These regional literacy networks allow educators to learn together to build Ohio's capacity for implementing evidence-based language and literacy instruction for all learners. These networks operate based on the common conceptual frameworks described in Ohio's Plan for Raising Literacy Achievement and will be critical in the implementation of model literacy sites though the Comprehensive Literacy State Development Grant.

State Systemic Improvement Plan Stakeholder Team

Input from the stakeholder team guided the development of the Theory of Action, Logic Model, evaluation questions, state-identified measurable results and targets. Department staff, regional early literacy specialists, pilot school teachers and administrators, and the external evaluation team plan to present this material to the stakeholder team in May 2020. They will spend that meeting time reviewing the pilot's role in Ohio's Strategic Plan for Education, specifically strategy 9 of the plan;

- Developing literacy skills through Ohio's Plan to Raise Literacy Achievement;
- Discussing the most recent evaluation results and updated school data profiles; and
- Discussing literacy practices used in a subset of pilot buildings that address the needs of students with disabilities and facilitate progress.

The stakeholder team will continue to review evaluation data and provide the Department guidance in alignment with *Ohio's Plan to Raise Literacy Achievement*.

Overall Stakeholder Involvement

Table 4 shows stakeholder groups, how often they meet and the topics they discuss. The stakeholder input most often is recorded in meeting minutes, online webinar chat formats and via email. Ohio considers this stakeholder input in all facets of pilot implementation.

Table 4. 2018-2019 stakeholder involvement

| Stakeholder Group	Meeting Topics	Future Involvement
Ohio's State Literacy Team	• Review progress on implementation activities of *Ohio's Plan to Raise Literacy Achievement* • Develop recommendations to enhance this plan, along with Ohio's Regional Professional Learning Series in Literacy	This group will continue to meet bi-yearly to review state, regional and local progress and revise Ohio's plan as needed.
State Systemic Improvement Plan Stakeholder Team	• Review state, regional and local implementation progress • Review evaluation data, including implications and lessons learned • Provide input on specific plan components and overall implementation	This group will review evaluation data and support the Department in making modifications at least annually based on the data.
State Advisory Panel for Exceptional Children	• Review evaluation data, including implications, especially for students with disabilities, and lessons learned • Provide input on plan components, especially those addressing family and community engagement	This group meets four times per year. It reviews the State Systemic Improvement Plan at least annually.
State support team directors	• Provide input on pilot activities, support district implementation and identify district and regional needs • Communicate with district administrators about the District Partnership Agreement and alignment between Ohio's Early Literacy Pilot and other state initiatives • Oversee daily operations of regional early literacy specialists, Ohio Improvement Process facilitators and other staff involved in pilot implementation • Establish regional literacy networks to sustain and scale up learning happening in pilot districts	This group meets monthly and will continue to discuss pilot activities, review data and make data-based decisions regionally.

Stakeholder Group	Meeting Topics	Future Involvement
Regional early literacy specialists	• Review and discuss implementation activities and data • Provide feedback on all aspects of program content and implementation • Share experiences and offer input on the design and role of the regional early literacy specialist position • Provide feedback on issues that impact district and building implementation • Support implementation of Ohio's coaching framework • Lead and participate in and regional literacy networks	These meetings will continue each month. Pilot activities are on every agenda.
Administrator forums	• Participate in and offer administrator feedback on language and literacy leadership professional learning • Build systems-level language and literacy content to support teachers' professional learning • Review and discuss implementation activities and data • Build capacity for principals to be instructional leaders	These forums will continue quarterly with administrators from pilot schools.
Various stakeholder groups	• Ohio shared Early Literacy Pilot information with these stakeholder groups: Dean's Compact on Exceptional Children, Ohio Association of Pupil Service Administrators and participants in Ohio's Literacy Academy and Ohio's Special Education Leadership Conference	Department staff will continue to present updates and gather feedback from these groups through 2021.

All the stakeholder groups listed in Table 4 have had frequent opportunities to learn about implementation activities, ask questions about the pilot and offer insight on how best to implement this important, multifaceted plan. The Department will continue garnering stakeholder input by engaging with these groups.

Plans for Year 5

The Department values robust practice-to-policy feedback loops to identify implementation barriers and successes to creating a highly aligned system (National Implementation Research Network, n.d.). Figure 15 illustrates the practice-to-policy feedback loop used by the Department and supported by research. This type of feedback allows the Department to receive and respond to direct feedback from the field.

Figure 15. Practice-to-policy feedback loops (National Implementation Research Network, n.d.)
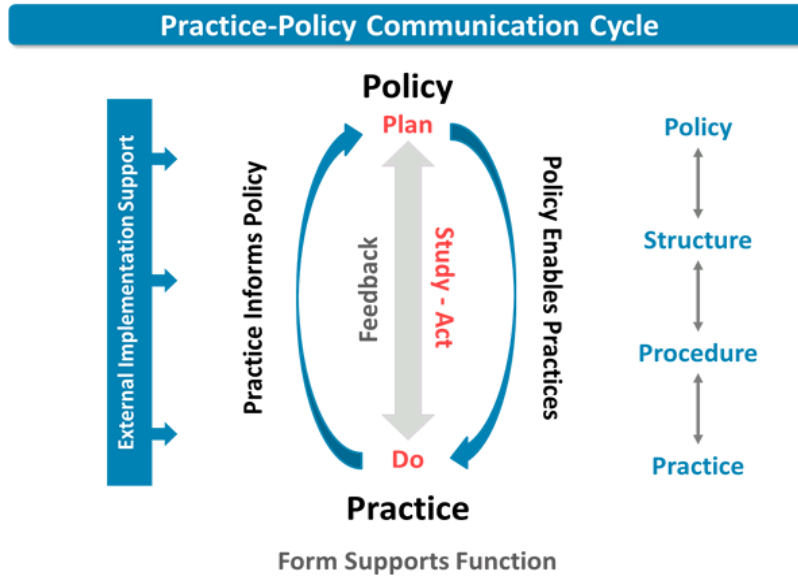
These feedback loops keep communication about policies and program results flowing between those who develop and enact state and regional policies and those who are implementing local evidence-based practices. The Department recognizes that effective practice-to-policy feedback loops are one of the most powerful strategies for supporting districts' implementation of evidence-based early language and literacy practices. Through these feedback loops, the Department is learning from regional and district partners what aspects of Ohio's Early Literacy Pilot support and promote effective implementation and what aspects it should modify to address barriers and challenges to regional, district, school, classroom and student success. Examples of Ohio's practice-to-policy feedback loops include:

- Monthly, face-to-face professional learning sessions for regional state support teams, with topics driven by the feedback and participant requests from preceding months via post-meeting evaluation surveys; and
- Implementation progress reports submitted twice annually by each pilot school to gauge whether those schools are adhering to the partnership agreement and to identify progress, barriers and needed supports.

Practice-to-policy feedback loops are a mechanism the Department uses to engage continuously with stakeholders at multiple levels and use their feedback to inform implementation and progress. The following paragraphs describe lessons the Department has learned and plans for future implementation.

Supporting Instruction

Implementation of Evidence-based Language and Literacy Practices

Literacy Academy

The Department held the third annual, two-day Literacy Academy in February 2020 to support districts, community schools and early childhood programs in implementing evidence-based language and literacy practices. The Literacy Academy offered instruction by national experts, including Mary Dahlgren, Ed.D., Joan Sedita, Tim Shanahan, Ph.D., Natalie Wexler and Daniel Willingham, Ph.D. Regional specialists and early childhood and adolescence specialists also led sessions aligned to *Ohio's Plan to Raise Literacy Achievement*. To allow wider access, the Department recorded sessions for posting on its website.

Instructional Coaching

Pilot implementation will continue as planned because multiple years of learning and implementation are necessary before schools can expect change in student outcomes (see Anticipated Timeline for Learning, Implementation and Change section of this report). The Department and external evaluators will assess educators who received professional learning in *Language Essentials for Teachers of Reading and Spelling* using a second post-test that will occur two years after they completed the professional learning series. Early childhood educators in both cohorts and K-3 educators in Cohort 1 will complete the assessments in spring 2020. Kindergarten-grade 3 educators in Cohort 2 will complete the assessments in spring 2021. The *Language Essentials for Teachers of Reading and Spelling* follow-up assessment will measure teachers' retention of knowledge about the evidence-based practices they learned in the series and provide the state team data on where educators may need additional professional learning and support for coaching.

In addition to the coaching framework used in the Early Literacy Pilot, Ohio developed a peer coaching model through a State Personnel Development Grant. As districts engaged with the grant continue to learn and implement this model, the state will learn more about the sustainability and effectiveness of each approach to coaching. This will inform future literacy work.

The Department became aware by analyzing coaching data and through anecdotal observations that regional early literacy specialists offered varied implementation of coaching supports. As a result, the Department is beginning to develop a fidelity review process for the regional early literacy specialists and working with an external facilitator to develop a tool and process and analyze data on the quality and effectiveness of Ohio's regional support system of literacy specialists.

Sustainability and Scaling up

Ohio's Plan to Improve Learning Experiences and Outcomes for Students with Disabilities

Building on the state's strategic plan, *Each Child, Our Future*, and the Early Literacy Pilot, Ohio brought together several stakeholders across four workgroups to develop a plan for improving learning experiences and outcomes for students with disabilities across the state. Those workgroups are literacy, disproportionality, postsecondary outcomes and graduation, and inclusive leadership and instructional practices. The groups were comprised of representatives from schools, districts, disability advocacy organizations, regional service providers, Department staff and other key state partners, including Early Literacy Pilot schools. The workgroups met several times throughout the 2019 calendar year to review literature, analyze data, determine gaps, identify specific practice guidelines and craft a set of recommendations to advance special education services and supports in Ohio.

All the workgroups referenced Ohio's Early Literacy Pilot model frequently, and the model provided a foundation for the literacy workgroup's recommendations for statewide implementation, listed below:

- Partner with universities, state support teams, educational service centers, districts and community organizations to improve literacy outcomes for students with disabilities through related professional learning opportunities for educators; and
- Develop and deliver guidance and resources to support thorough, ongoing implementation of the five reading components for students with disabilities from birth to grade 12 within a Multi-Tiered System of Supports.

Ohio's Plan to Improve Learning Experiences and Outcomes for Students with Disabilities now is being drafted based on workgroup recommendations and targeted stakeholder engagement, including a statewide survey of targeted stakeholder engagement district personnel, focus groups with educators to expand on statewide survey findings, family town hall meetings for parents and families of students with disabilities, and focus groups that directly engaged students with disabilities. Implementation of this plan, including strategies, action steps and resources tied to each recommendation will serve as a primary scale-up effort stemming from Ohio's State Systemic Improvement Plan.

Ohio LETRS Facilitators

Implementation science research guided the development of the Early Literacy Pilot, with the Department intending to scale up implementation throughout the state over time. Information on scale-up plans is included in the district literacy agreements between the Department and participating districts. Specifically, participating districts must develop scale-up and sustainability plans supported by alternative funding. In-state experts, such as the regional early literacy specialists, are an integral part of the scale-up and sustainability efforts. Regional early literacy specialists and district coaches are prime candidates to become authorized *Language Essentials for Teachers of Reading and Spelling* facilitators. The first Ohio facilitator training took place in June 2018 for units 1-4 of *LETRS 3rd Edition* and in June 2019 for units 5-8. Potential facilitators had to meet these criteria established by Voyager Sopris Learning:

1) Demonstrate deep understanding of the content and a commitment to becoming an expert in the research- and evidence-based theories of LETRS through completion of the LETRS online content and one day of face-to-face training per unit and by passing the end-of-course LETRS exams following unit 4 and unit 8 with a score of 90 percent or better;
2) Complete an additional two-day, face-to-face facilitator training conducted by a LETRS consultant; and
3) Attend ongoing professional learning through the LETRS Online Community Webinar Series and complete assigned activities.

The Department intends to offer facilitator training for the LETRS Early Childhood series in the next year and is working with Voyager Sopris Learning to determine eligibility criteria.

State Scale-Up

As previously described, the Department and its stakeholders revised the state literacy plan in January 2020. Four objectives drive *Ohio's Plan to Raise Literacy Achievement*:

1) Support data-driven decision making and planning through engagement in the Ohio Improvement Process;
2) Ensure districts and community schools develop evidence-based Local Literacy Plans. These plans should align to Ohio's plan and local, overall school improvement efforts. The plans should be sustainable and based on increased capacity;
3) Support full implementation of evidence-based language and literacy practices, including leadership, instructional, and family and community engagement practices; and
4) Provide financial support to literacy improvement efforts and help identify sustainable practices through the awarding of Striving Readers subgrants.

The Striving Readers Comprehensive Literacy grant allowed for the scale up of some components of the Early Literacy Pilot by giving "priority preference points" to subgrantees. For example, larger pilot districts proposed to expand the pilot to additional elementary buildings. Smaller districts proposed to expand what they have learned across the birth to age 5 and middle and high school grade bands. Two Cohort 1 pilot districts were awarded subgrants to scale practices to additional grade levels, and two pilot districts (one from each cohort) were included as consortium members in subgrants awarded to educational service centers that were scaling practices to additional elementary buildings. The Department will track Striving Readers subgrantees who are Early Literacy Pilot districts to monitor the effectiveness of scale-up activities in those districts. Ohio's State Personnel Development Grant also allowed for scaling up in three pilot districts – one from Cohort 1 and two from Cohort 2.

Ohio also recently received a Comprehensive Literacy State Development grant from the U.S. Department of Education to continue its work to improve language and literacy development for Ohio's children. Almost 95 percent of the award will go directly to local districts, community schools and early childhood education programs to improve literacy outcomes for children from birth through grade 12. This four-year subgrant will focus on developing model literacy sites in early childhood education programs, district preschools and

elementary, middle and high schools across the state. The model sites will implement practices outlined in *Ohio's Plan to Raise Literacy Achievement*. The grant also will support professional learning and coaching. The partnership between the proposed model sites and the Department will allow early childhood education programs, districts, schools and families to improve student literacy and increase educational options available to traditionally underserved students.

Implementation Barriers and Limitations

As with any pilot, there are barriers and limitations to implementation, many of which are beyond the control of the planning and evaluation teams. Here are major challenges and limitations worthy of noting:

- Any observed changes cannot be directly attributed to the pilot because the design lacks control or comparison groups. Alternative explanations for findings may be student maturation, such as natural brain development, or schools, districts and the Department implementing other programs or initiatives;
- Students observed for the state-identified measurable results are not the same students across time, limiting direct comparison for change results;
- Implementation varied among schools in several ways, including the assignment and availability of regional early literacy specialists and district coaches, either shared or individual, to a school; the length of pilot exposure, stemming from the start date of online units; substitute teachers or stipends paid to teachers; and inconsistent coaching implementation, for example, the absence of systematic coaching schedule and teacher targets being varied among schools;
- Changing definitions and instruments limit the ability to make comparisons over time. For example, there may be inconsistency with reading diagnostic assessments, used to measure state-identified measurable result 2, over time as schools are able to select different assessments each year;
- Teacher and administrative turnover have implications for training and data comparisons. Several schools had many teachers leave. This means new teachers are entering the school and the pilot without the same professional learning experience. Furthermore, teacher-based teams have new members who may not be familiar with processes and measures like the *Reading Tiered Fidelity Inventory*, which changes scoring in mid-pilot;
- Schools experienced data quality issues and other project-related challenges, although not to the degree of the first and second project years. This might be expected in a project involving this many schools. For example, the reading diagnostic data were collected from only a subset of students in some schools.

The third project year (2018-2019) continued to generate a great deal of information about what worked well in the process and what improvements were needed. Both the project and evaluation teams used these findings to institute programmatic (such as school implementation reporting) and data related (such as data collection instrument, consistent identifier use, strategy and training) changes for improvement in Years 4 and 5 (Dariotis et al., 2019).

Technical Assistance and Support

The State Systemic Improvement Plan core team members and their collaborators continued to use technical assistance from many sources to address needs related to Ohio's Early Literacy Pilot. Working across agencies and systems, the Department sought technical assistance to plan, implement and evaluate evidence-based practices for improving early literacy outcomes for children, based on needs developing across the following State Systemic Improvement Plan components:

- Support for school implementation of evidence-based practices;
- Evaluation; and
- Stakeholder involvement.

The Department continues to benefit from several technical assistance sources in its efforts to enhance

Ohio's infrastructure and plan for successful implementation and evaluation:

- Jennifer Averitt, J Averitt Consulting
  - Averitt developed the pilot's data dashboard with guidance from the Department. She continues to enhance the dashboard system regularly and provides direct assistance to pilot participants uploading data to the dashboard.
- Barbara Boone, Ph.D., Director, and Meredith Wellman, Ph.D., Project Lead, Ohio's Statewide Family Engagement Center, The Ohio State University
  - Boone and Wellman are leading the development and implementation of the family and community engagement strand of the Early Literacy Pilot, titled *Partnerships* for *Literacy*. In implementation year 3, Boone and Wellman began providing professional learning and ongoing support to state support team specialists facilitating family and community engagement activities for their pilot buildings. They will continue to deliver this level of support to state support team specialists through the end of pilot implementation.
- Deborah Glaser, Ed.D., Educational Consultant and Teacher Training, Deborah R Glaser, EdD, LLC
  - Glaser conducted a training session in ParaReading, a professional learning and training handbook developed to support paraprofessionals using evidence-based language and literacy practices.
- Julie Morrison, Ph.D., Associate Professor, University of Cincinnati
  - Morrison works closely with the Ohio Department of Education and Ohio's Statewide Family Engagement Center to evaluate *Partnerships for Literacy*.
- Jennifer Pierce, Ph. D, National Center for Systemic Improvement
  - As part of the stakeholder-driven process to develop *Ohio's Plan to Improve Learning Experiences and Outcomes for Students with Disabilities*, Pierce co-led one of the four workgroups asked to develop recommendations to drive the plan. Pierce and the group used Ohio's Early Literacy Pilot as a model for making recommendations on inclusive leadership and instructional practices.
- Stephanie Stollar, Ph.D., Vice President of Professional Learning, Acadience Learning
  - Stollar delivered professional learning on using direct assessment to improve student outcomes, including the Acadience curriculum-based measure. She provided training to regional early literacy specialists and literacy coaches in Acadience administration.
- Sherine Tambyraja, Ph.D., Senior Research Specialist, Crane Center for Early Childhood Research and Policy, Ohio State University
  - Tambyraja works closely with the Department on implementing and evaluating *Sit Together and Read*. In implementation year 3, Tambyraja provided professional learning opportunities for Cohort 1 regional early literacy specialists. She will continue to provide these opportunities during the following year of implementation.
- Carol Ann Tomlinson, Ph.D., William Clay Parish, Jr. Professor and Chair of Educational Leadership, Foundations, and Policy and Co-Director of the Institutes on Academic Diversity at the Curry School of Education, University of Virginia
  - Carol Ann Tomlinson provided professional learning and training on differentiation in teacher education to the Higher Education Literacy Steering Committee, funded by the State Personnel Development Grant. This committee includes higher education faculty, K-12 building administrators and state staff and guides alignment of postsecondary core curriculum to *Ohio's Plan to Raise Literacy Achievement*.
- Mary Watson, IDEA Data Center
  - As part of the stakeholder-driven process to develop *Ohio's Plan to Improve Learning Experiences and Outcomes for Students with Disabilities*, Watson facilitated the steering committee overseeing development of the plan. She also co-led one of the four workgroups asked to craft the recommendations to drive the plan. Both groups used Ohio's Early Literacy

Pilot as a model when making recommendations to improve outcomes for Ohio's students with disabilities.

Technical Assistance Needed

The Department actively engages help from all the sources described above during the implementation and evaluation of Ohio's State Systemic Improvement Plan. Support for scaling and sustaining effective instructional practices continues to be especially critical. The Department is collaborating with pilot building administrators to develop tools for sustainability through the administrator forums in school year 2020. It needs additional help to support local sustainability of the pilot efforts and scaling effective practices to other districts throughout the state.

The Department continues to consider principles of implementation science (Fixsen, Blase, Horner, & Sugai, 2009; Fullan & Quinn, 2016) in the use of practice-to-policy feedback loops to identify progress, barriers and needed supports for implementation of Ohio's Early Literacy Pilot.

The Department will continue to use feedback loops and evaluation data to identify technical assistance needed for successful implementation, sustainability and scale up.

Conclusion

Through effective application and evaluation of the Early Literacy Pilot, Ohio is on track to achieve three major goals:

1) More educators will be equipped to provide evidence-based reading instruction;
2) More educators will diagnose why students are struggling and provide evidence-based reading interventions; and
3) More learners, including students with disabilities will read at grade level, be on track to graduate and be ready for college and careers.

Highlights from Ohio's Early Literacy Pilot that align to the first two goals include:

- Implementation of a Multi-Tiered System of Supports for language and literacy has increased during three years of pilot implementation;
- Preschool through grade 3 educators have increased knowledge of evidence-based language and literacy instruction significantly through engagement with the pilot's professional learning and coaching opportunities.

Ohio also is seeing progress in student outcome measures (goal 3) earlier than anticipated, including:

- The percentage of students with disabilities scoring proficient or higher on Ohio's third grade English language arts achievement test increased 12.9 percent from baseline to year three for Cohort 1;
- Curriculum-based language and literacy measures showed increases in measures of phonemic awareness for students in kindergarten and grade 1.

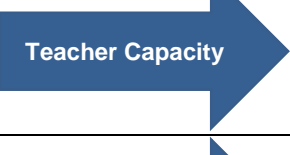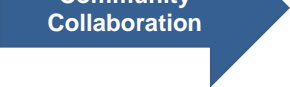This report illustrates the Department's commitment to successfully implement Ohio's State Systemic Improvement Plan: Early Literacy Pilot. The Department will continue to strengthen partnerships among agencies and regional and local entities as it works with them to improve outcomes for all Ohio students.

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Appendix A: Ohio's Theory of Action

Strands of Action	If ODE/OEC	Then	Then	Then
Leadership	Promotes evidence-based reading instruction for students with disabilities (SWD) in inclusive settings based on effective practices of high-performing schools…	Through shared instructional leadership, districts will use proven practices to provide reading instruction and interventions to students with disabilities in less restrictive settings.	More students with disabilities will be proficient or above in reading by third grade.	More students with disabilities will graduate ready for college, careers, and/or independent living.
Multi-Tiered System of Supports	Creates a Multi-Tiered System of Supports network at the state, regional, and district levels to provide continuous support…	Districts will thoroughly implement Multi-Tiered System of Supports so all students receive appropriate academic and behavioral supports.		
Teacher Capacity	Builds capacity of practicing PK-3 teachers to deliver high-quality reading instruction and data-driven interventions…	All students, including students with disabilities, will have access to high-quality instruction with interventions designed to meet their needs.		
Family Partnerships	Facilitates family engagement and parent partnerships to support language and literacy development…	Families will be more equipped, empowered, and engaged partners in the literacy development of their children.		
Community Collaboration	Coordinates local community partnerships among agencies providing services to children to support language and literacy development…	More children will experience language-rich, literacy-based environments outside of school.		

Appendix B: Ohio's Logic Model

Goal 1.	One hundred percent of preschool-grade 3 teachers and specialists in targeted buildings in selected districts will engage their teachers and administrators in professional learning and instructional coaching to increase their competent use of evidence-based early literacy and language core instruction and interventions within a proactive, preventive, equitable systems of supports by 2021 through:

Strategy 1.1. Professional learning and coaching teachers and administrators in evidence-based early literacy and language core instruction, strategic interventions and intensive, individualized interventions within proactive, preventive, equitable system of supports that extends outside of the school environment and into the home.

Strategy 1.2. Professional learning language and literacy coaches at the district and regional levels and trainers at the state and regional levels.

Inputs	Outputs		Adult Performance and Student Outcomes		
	Action Step	*Participation*	*Short*	*Medium*	*Long*
Staff: Department Project Staff State Support Team Directors & Staff External Evaluator Consultants: Dr. Louisa Moats Dr. Jennifer Pierce Certified national trainers Materials: LETRS modules, professional learning materials & assessments; Instructional coaching professional learning materials and tools; LETRS principal professional learning materials; Reading Tiered Fidelity Inventory Technology: LETRS blended learning platform, early literacy data dashboard	Develop, train, and coach school teams in *Language Essentials for Teachers of Reading and Spelling (LETRS)*, addressing each essential component of reading instruction. Provide professional learning to principals in leadership practices to promote language and literacy development. Provide coaching of evidence-based early literacy and language core instruction and interventions within Ohio Improvement Process. Provide professional learning to district coaches in language and literacy standards and instructional coaching.	School teams comprised of preschool-grade 3 teachers, intervention specialists, speech-language pathologists, Title I reading teachers, principals; State Support Team early literacy specialists Principals State Support Team early literacy specialists, elementary level Building Leadership Team and Teacher-Based Team members Internal district coaches	School team members will demonstrate competency in LETRS principles following the professional learning and transfer that knowledge and skill into their classrooms and in their communication with families. Internal coaches will demonstrate mastery of the content (LETRS) and process (instructional coaching) following the professional learning and transfer that knowledge and skill to their support of teachers in classrooms.	Teachers of students in preschool-grade 3 will implement early literacy and language core instruction using LETRS principles with fidelity, as assessed by an instructional coach. Internal coaches will provide instructional coaching in the use of LETRS principles, as documented by the LETRS coaching program.	Students in preschool-grade 3 will demonstrate gains in early literacy skills with accelerated rates of improvement for students at the greatest risk of reading difficulty.

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Goal 2. Within each participating district, 100% of participating elementary schools will demonstrate the capacity to accelerate early literacy and language achievement for all students through the implementation of proactive, data-driven systems providing a continuum of supports implemented with fidelity by 2021.
Strategy 2.1. Decision support data systems are in place to inform decisions regarding adult implementation and student outcomes.
Strategy 2.2. Infrastructure at the state, regional and district levels provides a continuum of supports for teaming, planning, scheduling, and access to intervention.
Strategy 2.3. Proactive systems foster external partnerships (e.g., teacher preparation programs, early childhood providers, family and community supports).

Inputs	Outputs		Adult Performance and Student Outcomes		
	Action Step	*Participation*	*Short*	*Medium*	*Long*
Staff: Department Project Staff State Support Team Directors & Staff External Evaluator Materials: DIBELS Next/AIMSweb professional learning materials; Reading Tiered Fidelity Inventory; MTSS materials; Family engagement guidance materials; Levels of Collaboration Survey Technology: Early literacy data dashboard Partners: Head Start, DD preschool programs, libraries, childcare providers, business partners, IHEs, faith-based orgs, after-school programs	Train school teams in data literacy for screening, progress monitoring, and instructional decision making within a Multi-Tiered System of Supports (MTSS). District Leadership Teams and Building Leadership Teams will establish family and community partnerships to promote early literacy development.	School teams comprised of preschool-grade 3 teachers, intervention specialists, speech-language pathologists, Title I reading teachers, principals; State Support Team early literacy specialists District Leadership Teams and elementary level Building Leadership Team and Teacher-Based Team members	School team members will demonstrate competent usage of indicators of basic early literacy skills (DIBELS Next, AIMSweb) for screening, progress monitoring, instructional decision making, and communicating with families within a Multi-Tiered System of Supports (MTSS). Schools and teachers will increase family engagement in literacy development.	Teachers of students in preschool-grade 3 will use data literacy skills to implement screening, progress monitoring, and instructional decision making with fidelity, as assessed by the Reading Tiered Fidelity Inventory and the LETRS implementation checklist. District Leadership Team and Building Leadership Team members will use collaborative partnerships to guide the development of and access to community-wide systems of support for literacy, as assessed by the Levels of Collaboration Survey.	Students in preschool-grade 3 will demonstrate gains in indicators of basic early literacy skills with accelerated rates of improvement for students at the greatest risk of reading difficulty.

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Goal 3.	All (100%) of the participating districts will engage their district and building administrators and teacher leaders in professional learning (i.e., professional learning and instructional coaching) to strengthen leadership and systems change practices that support evidence-based early literacy and language core instruction and interventions by 2021. Strategy 3.1. Implementation of Ohio Improvement Process's shared leadership structures to promote proactive, equitable practices at every level.

Inputs	Outputs		Adult Performance and Student Outcomes		
	Action Step	Participation	Short	Medium	Long
Staff: Department Project Staff State Support Team Directors & Staff External Evaluator Materials: Ohio Improvement Process 5-step process resources; LETRS principal professional learning materials; Reading Tiered Fidelity Inventory Technology: Early literacy data dashboard	Implement the Ohio Improvement Process, targeting evidence-based early literacy and language core instruction and interventions. Provide coaching to Teacher-Based Teams in strengthening core instruction using LETRS principles and data-based decision making.	Members of the District Leadership Teams and elementary level Building Leadership Teams; State Support Team early literacy specialists. Members of elementary level Teacher-Based Teams; instructional coaches; State Support Team early literacy specialists.	District Leadership Team, Building Leadership Team, and Teacher-Based Team members will support early literacy instruction and intervention through shared leadership to promote proactive, equitable practices at the district, building, and classroom level.	Ohio Improvement Process shared leadership structures will be used comprehensively at the district, building, and teacher levels to ensure shared accountability for data-driven strategic planning to support (with instructional coaching) the implementation of a proactive continuum of early literacy and language core instruction and interventions.	Students in preschool-grade 3 will demonstrate gains in indicators of basic early literacy skills with accelerated rates of improvement for students at the greatest risk of reading difficulty.

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Appendix C. Data Source, Timeline and Collection Method

Measure(s)	Theory of Action Strand	Collection Timeline	Collection Method
Coaching log	Leadership, Multi-Tiered System of Supports, Teacher Capacity	Collected continuously	Data Dashboard
Family and Community Engagement for Early Literacy Inventory	Parent Partnerships, Collaborative Structures	Spring inventory administration for each incoming cohort beginning in year 3 and then annually in the spring	Data Dashboard
K-3 LETRS Application of Concepts (AoC) Early Childhood LETRS Application of Concepts	Leadership, Multi-Tiered System of Supports, Teacher Capacity	Two observations per teacher twice per year, beginning January 2019 for Cohort 1 and August 2019 for Cohort 2	Data Dashboard
Reading Tiered Fidelity Inventory	Leadership, Multi-Tiered System of Supports, Teacher Capacity	Baseline Tier 1 in fall of implementation year 1, annual administration of Tier 1 and baseline Tiers 2 & 3 in spring of implementation year 1, annual administration of Tiers 1, 2 & 3 in spring of years 2-5	Data Dashboard
Early literacy curriculum-based measures (DIBELS Next or AIMSweb); Ohio's Third Grade English Language Arts Test; state-approved Reading Diagnostic Assessments	Leadership, Multi-Tiered System of Supports, Teacher Capacity	Fall, winter and spring CBM benchmark periods; annual spring administration of Ohio's Third Grade English Language Arts Test; annual fall administration of state approved reading diagnostic assessment	Education Management and Information System
Kindergarten Readiness Assessment	Leadership, Multi-Tiered System of Supports, Teacher Capacity	Annually in the fall	Education Management and Information System