

Indicator 17:
State Systemic Improvement Plan (SSIP)
Phase III
2017

03/30/2017



Public Schools of North Carolina
State Board of Education | Department of Public Instruction | EC Division

Table of Contents

Summary of Phase III

Progress toward State Identified Measurable Result (SIMR).....	3
Theory of action and logic model.....	4
Coherent improvement strategies.....	9
Specific evidence-based practices implemented to date.....	9
Brief overview of evaluation activities, measures, and outcomes.....	13
Highlights of changes to implementation and improvement strategies.....	17

Progress in Implementing the SSIP

Description of the State’s SSIP implementation progress.....	18
Stakeholder involvement in SSIP implementation.....	30

Data on Implementation and Outcomes

How the State monitored and measured outputs.....	33
How the State demonstrated progress and made modifications.....	40
Stakeholder involvement in the SSIP evaluation.....	68

Data Quality Issues

Data limitations.....	69
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Progress toward Achieving Intended Improvements

Assessment of progress toward achieving intended improvements.....	71
--------------------------------------------------------------------	----

Plans for Next Year

Additional activities to be implemented.....	74
Planned evaluation activities.....	75
Anticipated barriers and steps to address those barriers.....	75
Needs for additional support and / or technical assistance.....	75

References.....	76
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Commonly Used Acronyms

CEME	Center for Educational Measurement and Evaluation: University of North Carolina at Charlotte
CGR	Cohort Graduation Rate
DAC	Director’s Advisory Council
ECD	Exceptional Children Division
ECATS	Exceptional Children Accountability Tracking System
ESSA	Every Student Succeeds Act
IHE	Institutes of Higher Education
LEA	Local Education Agency (this term is inclusive of charter schools)
LEASA	Local Education Agency Self-Assessment
MTSS	Multi-Tiered System of Support
NCDPI	North Carolina Department of Public Instruction
NC SIP	North Carolina State Improvement Project
PBIS	Positive Behavioral Supports and Interventions
PDSA	Plan, Do, Study, Act
SDI	Specially Designed Instruction
SEA	State Education Agency
SEFEL	Social Emotional Foundations for Early Learning
SET	School-Wide Evaluation Tool
SIMR	State Identified Measureable Result
SIT	State Implementation Team
SPDG	State Personnel Development Grant
SSIP	State Systemic Improvement Plan
SWD	Students with Disabilities
TPOT	Teaching Pyramid Observation Tool

A. Summary of Phase III

Description of State Identified Measureable Result

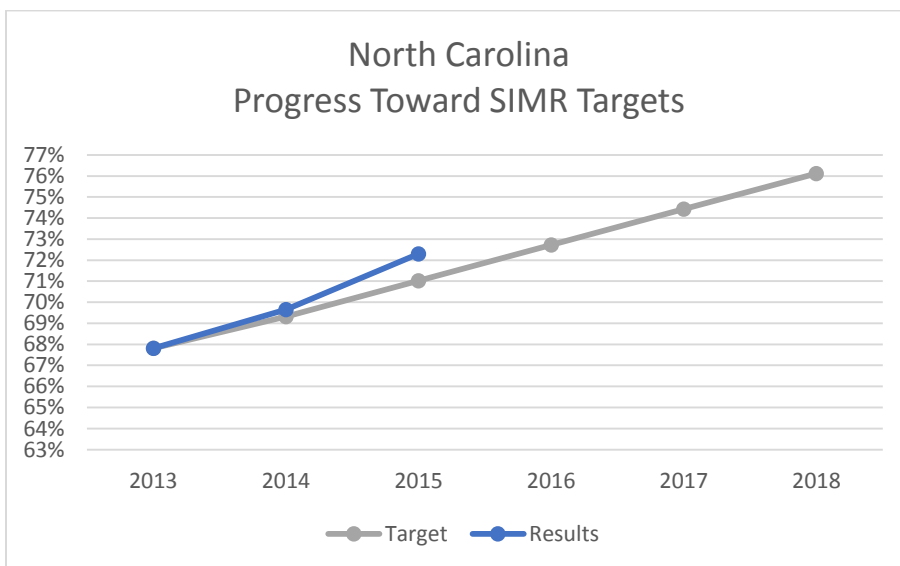
The North Carolina State Identified Measurable Result (SIMR) is the five-year adjusted cohort graduation rate for students with disabilities. The baseline percentage was determined by using the ratio of youth with Individualized Education Programs (IEPs) graduating with a regular high school diploma in 2013-14, or earlier, to all youths with IEPs entering ninth grade in 2009-10 for the first time. The cohort is “adjusted” by adding any students who transferred into the cohort and by subtracting any students who transferred out, emigrated to another county, or died during the years covered by the rate.

Progress toward SIMR Targets

FFY	2013
Five-Year Adjusted Cohort Graduation Rate for Students with Disabilities	67.82%

FFY 2013 – FFY 2018 Targets and Results

FFY	2014	2015	2016	2017	2018
Target	69.32%	71.02%	72.72%	74.42%	76.12%
Results	69.65%	72.3%			



1. Theory of action and logic model

The theory of action is based on the premise that the State Education Agency’s (SEA) provision of support and tools to Local Education Agencies (LEAs) will yield effective data analysis, improved ability to self-assess, and systematic identification of problem(s) that can be measured and mediated. Using data within a systematic LEA Self-Assessment (LEASA) process as a fulcrum, LEAs will work alongside schools to diagnose local root causes of identified problems associated with the State Identified Measureable Result (SIMR). As root causes are identified, LEAs will select SEA supported evidence-based interventions that are aligned to their own need, contextual fit, and capacity. The SEA will support LEAs through stages of implementation providing universal and tiered levels of professional learning and technical assistance based on the extent of LEA need, infrastructure, and general and intervention specific capacity. As a result, the intended impact is increased five-year graduation rate for students with disabilities. This convergence of data-driven problem identification, intervention, and support is represented graphically in Figure 1 below.

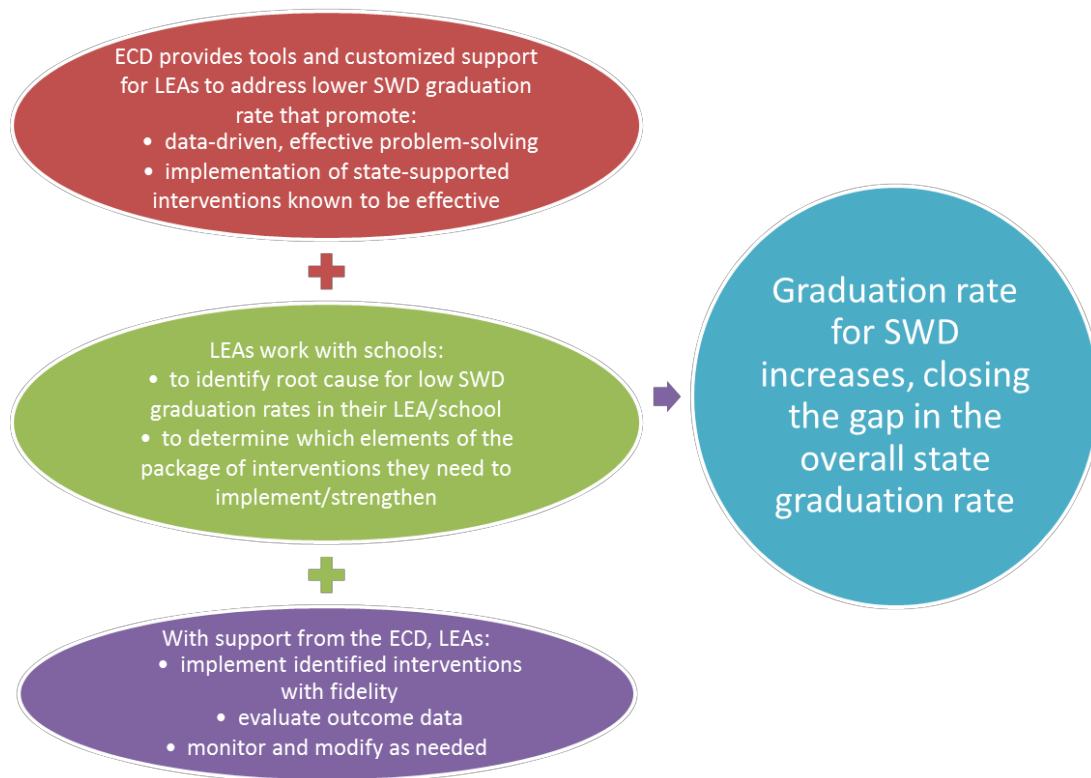


Figure 1. Graphical depiction of the theory of action.

During Phase I of the State Systemic Improvement Plan (SSIP), a data analysis, a review of the extant literature base, and a systematic process for collecting stakeholder feedback resulted in the SEA targeting three domains requiring improvement strategies to impact the SIMR. Broadly construed, these domains include: academics, behavior, and a continuum of transitions. Within each of these domains, there are specific risk and protective factors (see Phase II report, Appendix G) that have demonstrable association with the graduation rates of students with disabilities. Therefore, these three pillars, academics, behavior, and transition serve as the foundational framework for the implementation of evidence-based practices supported by the SEA.

The SEA leveraged implementation of the State Personnel Development Grant (SPDG), Positive Behavioral Interventions and Supports (PBIS), Social Emotional Foundations of Early Learning (SEFEL), and the development of a continuum of transitions toolkit to align usable interventions within these three pillars for ameliorating risk factors and enhancing protective factors. The result is evidence-based practices associated with graduation, carefully selected and implemented by LEAs that the SEA has the infrastructure and capacity to support through cascading teaming structures. The support (strategies/activities) provided to LEAs for data analysis and root cause identification when combined with the usable interventions within the three pillars (outputs) yield several short and intermediate outcomes aligned with the SIMR. This alignment can be seen [Figure 2](#).

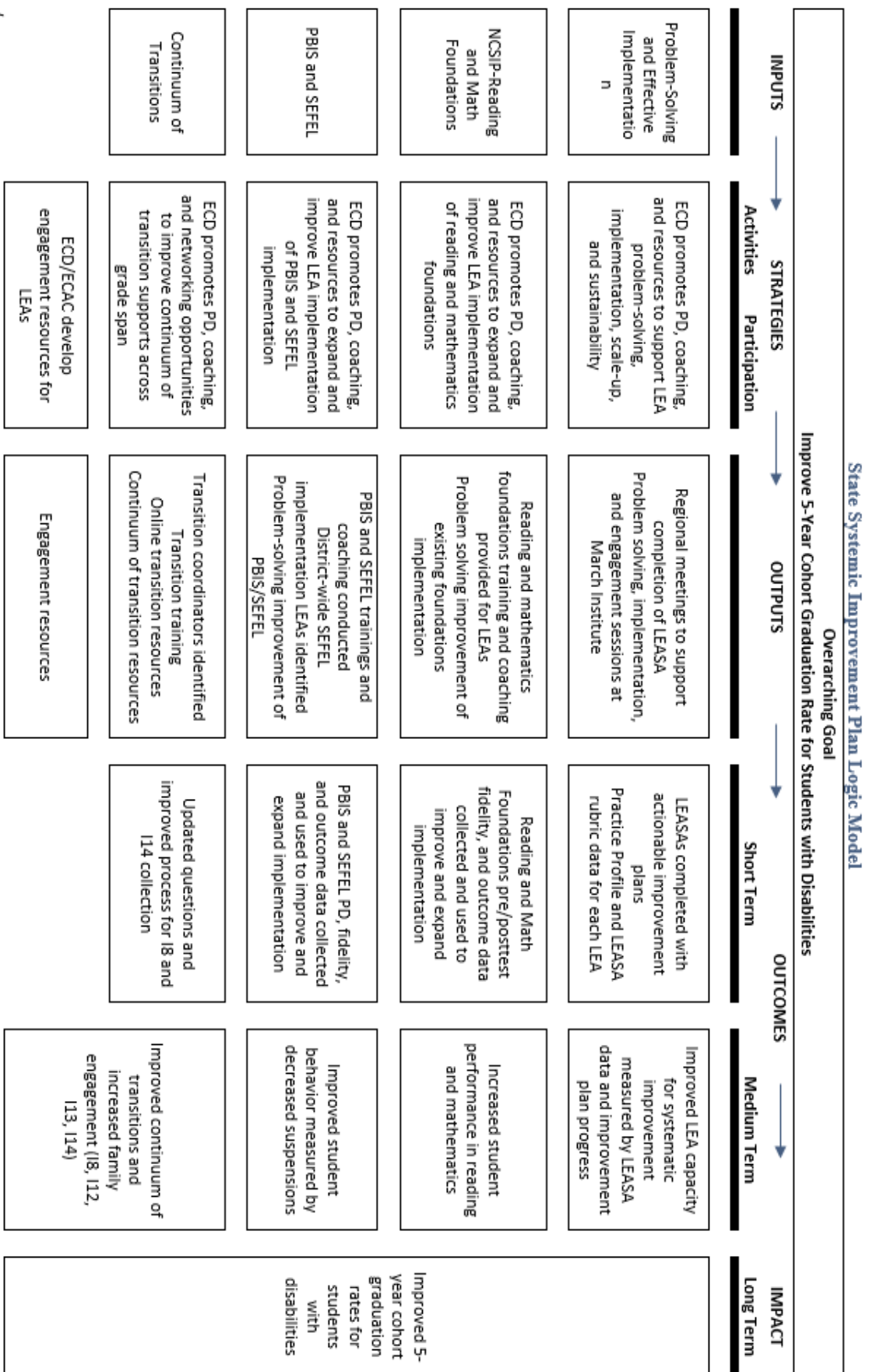


Figure 2. NCSIP Logic Model

The primary supports provided by the Exceptional Children’s Division (ECD), professional learning, coaching and resources to support sustainable problem solving and active intervention implementation, are represented by the top box under “Strategies”. That row in the model represents the coherent improvement strategy utilized to augment implementation at the local level and is predominantly driven by an LEA Self-Assessment (LEASA) and improvement planning process. By helping develop local capacity to analyze data and identify problems and their root causes, the ECD intends for LEAs to select the appropriate interventions, develop strong improvement plans, and ultimately create a culture of systemic improvement. A culture of systemic improvement positions LEAs to adapt to the complex and changing problems and root causes associated with graduation that may arise as previously identified issues are being addressed. The ECD intends for the systemic improvement process to permeate what is represented by the remainder of strategies/activities, outputs and outcomes in Figure 2.

The “Strategies” in the proceeding rows represent more targeted efforts by the ECD to support LEAs implementation of evidence based practices associated with the SIMR. Moreover, these practices are aligned with statewide initiatives, the overall goals of the State Board of Education (see Phase II report Appendix A), the state plan for the Every Student Succeeds Act (ESSA), and the ECD Strategic Vision (see Phase II report Appendix B). Intentionally, the ECD worked across divisions within the SEA to ensure that initiatives and developed improvement plans have the potential to provide needed assistance to all students who attend NC public schools. Thus, the SPDG supported Reading and Math Foundations and PBIS/SEFEL were identified for their potential to have an impact across the educational spectrum within an LEA. Respectively, these supports are intended to lead to increased student achievement in reading and math and improved student behavior. Engagement and transition resources provide a more targeted form of support to improve family engagement and knowledge of the educational process and expectations to ensure students with disabilities remain on-track to graduate within five years.

Table 1 below aligns the goals for each of the main areas, the strategies/activities designed to help achieve those goals, outputs and outcomes from the implementation of those strategies/activities and the summative evaluation questions that form the basis of the SSIP evaluation.

Table 1. Summative evaluation questions aligned with goals, strategies/ activities, outputs and outcomes.

Goals	Strategies/ Activities	Outputs	Summative Outcomes	Summative Evaluation Questions
1. Increase capacity for problem solving and effective implementation	<ul style="list-style-type: none"> LEA Self-Assessment Tiered supports professional learning plan 	<ul style="list-style-type: none"> Enhanced LEA problem identification, selection of evidence-based practices, and planning ability 	<ul style="list-style-type: none"> Policy Changes High LEA fidelity implementation 	1. To what extent are LEAs better able to engage in systematic problem identification and intervention planning using their own data?
2. Increase student performance in reading and math	<ul style="list-style-type: none"> Professional Development <ul style="list-style-type: none"> Problem solving Math/Reading Foundations Instructional Practices Effective Leadership LEA Self-Assessment 	<ul style="list-style-type: none"> Increased Math/Reading Content Knowledge Increased fidelity in use of research-based instructional practices 	<ul style="list-style-type: none"> Increased academic achievement (Proficiency) 	2. To what extent do students exhibit an increase in academic achievement as a result of the shorter-term outcomes being realized (e.g. better teacher content knowledge, accurate problem identification)?
3. Decrease student behavioral issues, including suspensions and	<ul style="list-style-type: none"> PBIS <ul style="list-style-type: none"> Increase overall NC saturation/fidelity SEEEL <ul style="list-style-type: none"> Continued provision of professional development and technical assistance to early childhood communities 	<ul style="list-style-type: none"> Increase in % of schools meeting PBIS implementation criteria Increase in school-level PBIS fidelity ratings (SET, TFI) Increase in % of schools meeting Teaching Pyramid Observation Tool (TPOT)/Child Outcomes Summary Process (COS) implementation criteria 	<ul style="list-style-type: none"> Improved behavioral outcomes (decreased suspensions; increased attendance) 	3. To what extent has the incidence of student suspensions decreased and attendance increased (across time)?
4. Improve continuum of transitions	<ul style="list-style-type: none"> Develop Transition Toolkit <ul style="list-style-type: none"> Checklists/tools Video/in-person training WCU middle school transition resources Transition network Representatives from across NC 	<ul style="list-style-type: none"> More informed students/parents about next-level academic expectations Community of practice sharing transition resources and strategy 	<ul style="list-style-type: none"> Increased Indicator 12, Indicator 13, and Indicator 14 levels Increase WCU website access traffic Increase in student/family engagement – 18 	4. To what extent have LEA Indicator 12, 13, 14 levels increased? 5. To what extent have levels of student/parent engagement, measured by Indicator 8, increased (across time)?

External Factor / Context: Statewide Installation of a Multi-Tiered System of Support (MTSS)

2. Coherent Improvement Strategies

The coherent improvement strategy at the foundation of the SSIP is the LEA Self-Assessment (LEASA) tool and process. All LEAs (including charter schools) were required to complete a comprehensive self-assessment during the 2015-16 school year. Broadly, the LEASA serves several key purposes yielding value to both LEAs and the SEA.

Specific to LEAs, the LEASA process supports an ability to:

- identify root cause associated with the SIMR
- select aligned evidence-based practices that demonstrate a contextual fit
- engage in a deliberate process of improvement planning

At the SEA level, analysis of LEASA data:

- supports alignment of SEA infrastructure to local need
- informs the installation of a tiered delivery framework of professional learning and technical assistance

Therefore, the intent of this coherent strategy is to maximize the benefit of the implementation of the specific evidence-based practices described in the next section.

3. Specific Evidence-Based Practices Implemented to Date

The coherent improvement strategy described above is intended to enhance LEA ability to identify need, select, and implement the evidence-based practices that are aligned to their identified root causes associated with the SIMR. In addition, the ECD's tiered support plan reinforces an LEA's implementation of the evidence-based practices described below through the conduit of statewide implementation of a Multi-Tiered System of Support (MTSS) framework. This section briefly describes how the ECD leveraged the State Personnel Development Grant (SPDG) supported North Carolina State Improvement Project (NCSIP), Positive Behavioral Interventions and Supports (PBIS), Social Emotional Foundations of Early Learning (SEFEL), and the development of a continuum of transitions to support the three pillars of academics, behavior, and transition.

Academics: The North Carolina State Improvement Project (NC SIP)

Comprehensive professional learning for reading and mathematics instruction offered through [The North Carolina State Improvement Project](#) (NC SIP) has been the primary evidence-based practice to

support districts that identified academics as the root cause impacting graduation of students with disabilities. Throughout the SSIP process, the SSIP and SPDG planning teams have collaborated (with overlapping membership) to ensure the work of the SPDG was leveraged to impact the SIMR. Information detailing the evidence base for NC SIP is included in the Phase II report. Most recently, the implementation of this model has comprised four major components:

- building capacity at the state level
- working with districts to ensure they have the leadership and organizational capacity to implement and support district and building innovations
- providing professional learning and coaching to teachers and administrators on effective instruction
- working with Institutes of Higher Education (IHEs) to align NC SIP courses in pre-service and administrator courses

Over the course of the current year, ECD and LEA staff selected as regional coaches for the project have developed capacity to support districts in the provision of job-embedded follow up to support transfer of training for the Reading and Math Foundations courses. Notably, ECD staff and regional coaches have worked with Dr. Marcia Rock from the University of North Carolina at Greensboro through professional learning focused on the development of a continuum of evidence-based coaching practices (e.g., presentation of theory, models of best practice, individual coaching, and group coaching). These individuals have engaged in book studies, collaboratively completed [online coaching modules](#) within a community of practice, participated in face-to-face trainings (e.g., coaching continuum, coaching feedback loops), observed coaching models, and received coaching from Dr. Rock in the context of their own coaching work within LEAs.

The capability to provide evidence-based coaching practices has been subsequently applied through regional implementation structures to support the scaling and sustainability of the Foundations courses. The regional coaches described above were selected based on rigorous criteria and have expanded the impact of NC SIP by working collaboratively with ECD staff to coach LEA staff as they provide professional learning, measure the fidelity of implementation at the classroom level, and develop their own continuum of job-embedded follow up. To further support the regional implementation of the Foundations courses, the NC SIP project selected five best practice sites and 15 demonstration sites to serve regions of North Carolina. The best practice and demonstration sites work closely with the ECD staff and regional coaches for school-wide implementation of the evidence-based practices supported in Reading and Math Foundations. Consequently, these schools serve as models of best practice to other LEAs and schools in the region. Best practice and demonstration sites are also supporting regional leadership through the

provision of a professional development course titled, *All Leaders Understand, Support, and Collaborate to Provide Evidence-Based Instruction*. The development of this course will allow NC Department of Public Instruction (NCDPI) staff, leadership at best practice sites (e.g., principals and central office staff), and other leaders within the region to work collaboratively in the application of implementation frameworks to the work of NC SIP and the SSIP.

Behavior: Positive Behavioral Interventions and Supports (PBIS)

Comprehensive support for PBIS implementation has been an evidence-based practice to support LEAS that identified behavior as the root cause impacting graduation of students with disabilities. Consistent with the ECD infrastructure shift to regional implementation supports, eight ECD staff work regionally with LEA teams (including identified coaches) on LEA and school-level implementation of PBIS. Over the course of the last year, ECD staff have provided comprehensive professional learning modules to LEAs that are aligned to tier I (universal), II (targeted), and III (intensive) behavioral supports. In addition to these modules, ECD staff have provided professional learning on Team-Initiated Problem Solving (TIPS), classroom management, Functional Behavioral Assessments (FBAs), Behavioral Intervention Plans (BIPs), and school-based mental health. To assist LEAs in overcoming implementation hurdles, ECD consultants have provided ongoing technical assistance on topics such as building implementation teams, data collection (e.g., developing a decision support data system with fidelity and outcome data components), data analysis, development of professional learning and coaching plans, and utilizing the PBIS Data Management System (DMS).

Behavior: NC Social Emotional Foundations for Early Learning (SEFEL)

The NC SEFEL project has also been an evidence-based practice to support districts that identified behavior as the root cause impacting graduation of students with disabilities. One of the primary predictors for later school success is a child's development in the areas of emotional-social skills and behavioral regulation. Therefore, creating early childhood environments that support positive behavior and intentionally teach young children the language, concepts, and problem-solving skills that lead to positive social-emotional outcomes is of primary importance. This approach is considered a "protective factor" in the prevention of dropout, as described previously in this report. The professional learning provided to support SEFEL over the previous year was developed using implementation science frameworks. The frameworks involve implementing the initiative through stages (exploration, installation, initial

implementation, full implementation) with emphasis on the development of a clear logic model, description of the core activities and practices necessary for successful implementation, well developed and supported implementation teams at the local level, and established implementation drivers (organizational, leadership, and competency). This approach has included the support of Local Education Agency (LEA) implementation teams as they provide professional learning to LEA staff, coaches and other leadership positions. In addition, the SEA provides guidance and technical assistance with ongoing implementation evaluation using coach, teacher, and child outcome data. Professional learning support has been provided in a variety of ways to align to the level of support required by LEAs. It has been delivered to LEA training teams, leadership teams and other LEA leadership personnel, and SEFEL coaches so that implementation leadership and responsibility, including professional learning support for implementation, can be sustained at the local level.

To further support implementation, the NC SEFEL project has developed a practice profile that provides a clear description of the key implementation steps necessary for successful implementation. The key implementation steps defined in this tool are:

- establish a leadership team
- establish stakeholder buy-in
- facilitate meaningful family involvement as a means of improving services and results for children
- communicate behavior expectations for preschool classes
- use evidence-based strategies for teaching and acknowledge the implementation expectations for preschool classes, as indicated by level of fidelity on the Teaching Pyramid Observation Tool (TPOT)
- use established procedures for responding to challenging behaviors
- establish and implement a professional development plan for classroom staff
- establish an implementation and professional development plan for coaches
- establish a plan for monitoring implementation and outcomes

The LEA implementation leadership teams have used this practice profile as a guide for planning, data-driven problem solving and decision-making, and evaluation.

Transition: Development of a Continuum of Transitions Support

A team of stakeholders has been charged with the implementation of practices to support a continuum of transitions (from pre-k through high school). To date, the team has developed and provided professional learning support for a transition tool kit to be used for middle and high school transitions. The team is now focused on the development of a tool to assist LEAs and schools in the documentation of transition

activities as well as the selection of evidence-based transition practices within defined bands that cross all grade levels. With the understanding that variables associated with graduation cross the grade span (i.e., all transitions are important), this tool will be designed to assist educators in making evidence-informed transition decisions from pre-school through graduation. Currently, a draft of the tool has been developed with extensive stakeholder feedback, including IHE staff, parents, LEA central office staff, and classroom teachers. The tool is designed to be included within a student's Individualized Education Program (IEP) folder and includes formal documentation of transition activities as well as recommended practices within grade-level bands (pre-k, K-3, 4-5, 6-8, 9-12). Usability testing for the continuum of transitions toolkit will occur in LEAs representing each region of the state, including a charter school, during the 2017-18 school year. Professional learning for sites selected for the usability testing of the tool is scheduled for June and July 2017. Following usability testing, state-wide installation will begin in 2018-19, with regional teams trained to provide coaching and job-embedded follow up.

4. Brief Overview of Evaluation Activities, Measures, and Outcomes

The first year of evaluation activities focused on the review and summary analysis of data aligned with the logic model and summative evaluation questions represented by Figure 2 and Table 1 above. The ECD intentionally chose to make use of largely pre-existing data sources when creating the evaluation plan. The ECD staff collaborated with members of the evaluation team from the Center for Educational Measurement and Evaluation (CEME) at University of North Carolina at Charlotte (UNCC) to develop data file structures that could be used throughout the evaluation process. Many of these structures are based on files or reports already generated by NCDPI Accountability and ECD offices, facilitating efficient data sharing with the evaluation team.

While exploring the data provided by the ECD, the CEME evaluation team members developed a SSIP Metric Baseline Report based on measures from the 2012-13 through 2014-15 school years. The primary evaluation method included examination and understanding of the longitudinal trends in data aligned with the evaluation question. This was deemed the strongest evaluation method, as the statewide implementation of the SSIP precluded the possibility of a comparison group-based design. For evaluation of the SSIP, the focus will be on monitoring the change (improvement) of outputs and outcomes for LEAs across time, particularly focused on trends prior to and following baseline. To provide further clarity on how implementation is impacting all students across the state, the baseline outcome values were disaggregated by various subgroups of interest, such as student gender and race, Economically Disadvantaged Status (EDS),

and Limited English Proficiency (LEP). For example, Figure 3 is a graphical summary of five-year cohort graduation rates (CGR) by various subgroups including SWD, along with the target SWD five-year CGRs. Similar graphical summaries of baseline data were generated for Reading and Math Foundations outcomes, academic performance (i.e., standardized assessment outcomes), PBIS outcomes, NC SEFEL outcomes, behavioral outcomes, and transition outcomes.

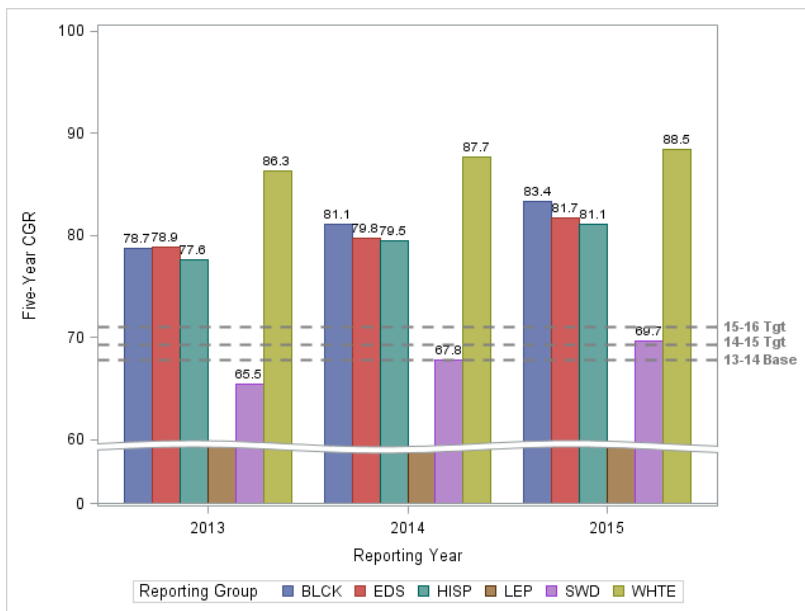


Figure 3. Five-year CGR rates by subgroup (gray, dashed lines represent established targets).

In addition, longitudinal modeling of various metrics (including fidelity and student outcome metrics) to explore changes in trends associated with the installation of the SSIP beginning in 2015-16 was completed. As expected, a small positive effect on the SIMR and other metrics was achieved in this first year, as installation activities began (LEAs engaged in the LEASA process throughout the 2015-16 school year and did not submit the tool until June/July 2016). The current 2016-17 school year represents a more mature stage of SSIP installation, in which the ECD would expect further impact on short-term outcomes. Nevertheless, because longitudinal data points are available for many of the metrics, early exploration helps to shed light on whether implementation is trending in the right direction and will further inform the installation process. When supported by the data, the longitudinal models represent separate trajectories (i.e., random intercepts) and change over time (i.e., slope) for each LEA (as opposed to representing all LEAs with a single pattern). This formulation more appropriately accounts for the relationship (i.e., correlation) of rates for each LEA and allows for a formal diagnosis of variability among LEAs (required for inferential analysis on the significance of change).

The longitudinal data were also analyzed for the effect of participation in Cohort 1. This Cohort 1 indicator included data from eight LEAs that began the LEASA and improvement process approximately 12 months prior to the rest of the state (the selection process for Cohort 1 sites is described in the Phase II report). The data were analyzed in such a fashion to determine the difference between 2014-15 (end of baseline) and 2015-16 data for Cohort 1 sites and the rest of the state (i.e., to answer the question “did Cohort 1 sites experience a different impact from the 2014-15 to 2015-16 school years as associated with longer duration of SSIP implementation?”).

For example, Figure 4 shows a steady increase in the five-year CGR of SWD from 2012-13 to 2015-16, and the data supported a significant linear effect for time ($p < .001$; $d = .052$, a small practical effect size). In addition, the final model supported random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the SSIP Cohort indicator ($p = .918$). For both the Cohort 1 and non-Cohort 1 groups, the change past baseline was significant ($p < .001$, odds ratio=1.10, $d = .05$ and $p = .028$, odds ratio=1.08, $d = .04$, respectively). The interpretation of this model suggests that Cohort 1 sites did not experience a different impact on five-year CGR from 2014-15 (end of baseline) to 2015-16 as compared to the rest of the state. However, for both the Cohort 1 and non-Cohort 1 groups, there was a significant improvement in five-year CGR for SWD associated with SSIP installation. That said, the practical impact of that difference is described below.

Throughout the report, the odds ratio and Cohen’s d are reported to estimate practical significance and the relative size of the effect. For interpretation purposes, an odds ratio close to 1 indicates little practical significance or change. For example, SWD in Cohort 1 sites were 1.10 times more likely to graduate within five years in 2015-16 as compared to 2014-15. In addition, the Cohen’s d effect size of .2 is generally accepted as a “small” effect, .5 as a “medium” effect, and .8 as a “large” effect. Thus, while there was statistically significant change in CRG for SWD from 2014-15 to 2015-16, it was indicative of minimal practical significance. As noted previously, small effect sizes were anticipated at this point due to the evaluation occurring within the installation stage of implementation.

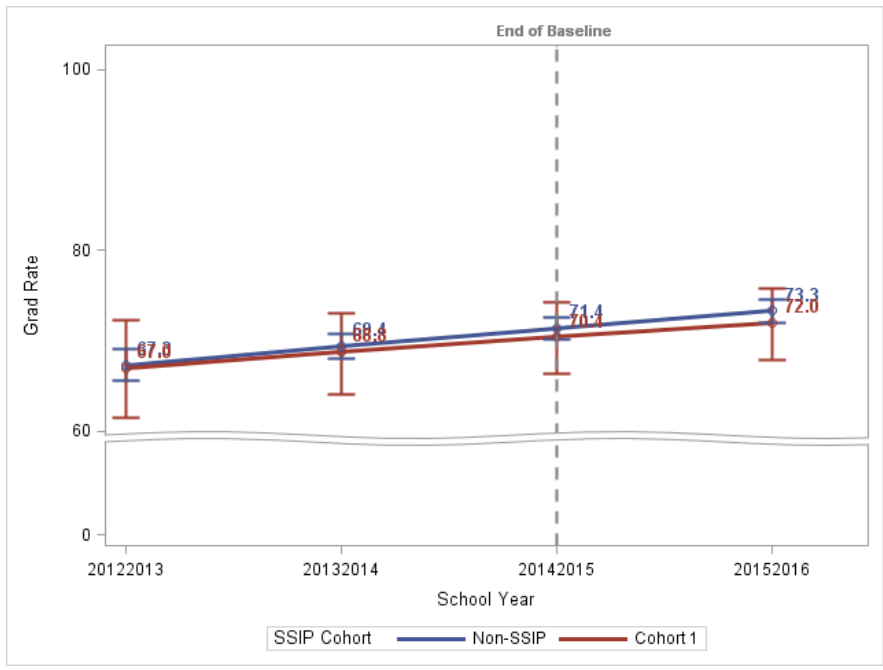


Figure 4. Mean five-year CGR Rates for SWD students, across time for NC LEAs.

A summary of key outcome comparisons to baseline is included in Table 2 below:

Table 2. Summary of key outcome comparisons to baseline

Domain	Key Outcome Comparisons to Baseline
Graduation	<ul style="list-style-type: none"> The SWD five-year CGR rate exceeded the 2015-16 target, and the rate was higher in 2015-16 than it was in the three previous years
Academics	<ul style="list-style-type: none"> High rates of fidelity for model reading and math instruction The SWD subgroup attained a higher level of proficiency in reading and mathematics (3-8) Association between fidelity of math instruction and student proficiency
Behavior	<ul style="list-style-type: none"> High rates of fidelity for School-wide PBIS implementation High rates of fidelity for SEFEL implementation Overall, in-school, long-term out-of-school, and out-of-school (1-10 days) suspensions decreased slightly in 2015-16 compared to 2014-15. Association between fidelity of PBIS and out-of-school suspensions
Transition	<ul style="list-style-type: none"> Indicator 7 metrics A1, B1 and C1 were met Indicator 11 LEA rates were stable, but greater than 96% in each year Indicator 12 LEA rates were stable, but greater than 97% in each year. An increase in the number of LEAs reaching the Indicator 14 targets in the baseline year (as there is a 1-year reporting lag).

5. Highlights of changes to implementation and improvement strategies

The evaluation data contained within this report have informed two modest changes to implementation and improvement strategies. The two changes are associated with an update to the LEA Self-Assessment (LEASA) tool and continued review and refinement of the continuum of transitions.

The Plan, Do, Study, Act (PDSA) improvement cycle has informed the development of the [LEASA-Update](#) (LEASA-U). The intent of the LEASA-U is to support districts in their assessment of progress in the implementation of their improvement plans, facilitate engagement in a systematic improvement cycle, communicate early successes and barriers to stakeholders, and sustain district teams through the implementation process. In addition, there are additional elements in the updated tool that are believed to expedite the review and analysis, resulting in increased efficiency and responsiveness by the ECD.

Concerning transition, the indicator data will be used to inform the continual refinement and training associated with the continuum of transition tool that is currently planned for usability testing during the 2017-18 school year. Specifically, data have resulted in areas of focus that include the facilitation of parent involvement and that timely evaluations and placement occur.

B. Progress in Implementing the SSIP

1. Description of the State’s SSIP implementation progress

a. Description of the extent to which the State has carried out its planned activities with fidelity

2015-16 represented the year designated for initial LEA Self-Assessment (LEASA) data collection, analysis, infrastructure alignment, and development of a tiered system of professional learning and technical assistance. The use of structured problem solving processes (Newton, Horner, Algozzine, Todd, & Algozzine, 2012) such as Plan-Do-Study-Act (PDSA) and Team Initiated Problem Solving (TIPS) is a cornerstone in the implementation science literature (Fixsen, Naoom, Blase, Friedman, & Wallace, 2005) and necessary to ensure that LEAs develop actionable and sustainable plans when implementing evidence-based practices (Fixsen, Blase, Metz, & Van Dyke, 2013). The development of problem-solving and implementation skills is integral to each district completing their own LEASA by collecting data, documenting their identified problem, determining the cause of the problem so the best solution can be identified, and developing an effective implementation plan that monitors fidelity and outcomes. Over the course of the 2015-16 school year, ECD regional staff supported districts in their completion of the LEASA and improvement planning process through regional meetings, a March Institute, scheduled “booster sessions”, and ongoing technical assistance. The broad timeline for the SSIP implementation developed during Phase II, which has been followed, is included in Figure 5 below.

Evolution of NCDPI Results Driven Accountability

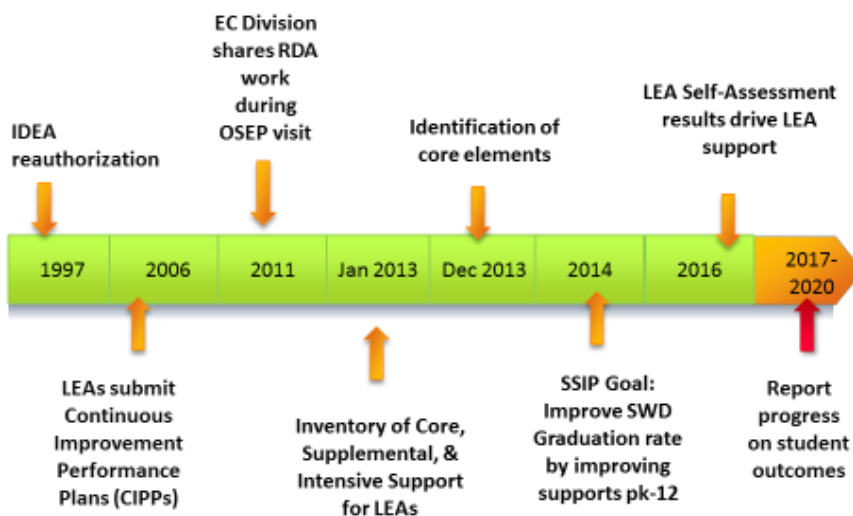


Figure 5. Evolution of NCDPI RDA work and timeline for SSIP implementation.

LEASAs were to be submitted by June 30, 2016, though some delays, primarily among charter schools, did occur. All of the LEASA were submitted to the ECD by August 28, 2016. Quantitative analysis and qualitative staff reviews of the LEASA were completed by August 29, 2016. The ECD’s response to the LEASA analysis, in regard to infrastructure alignment and development of a tiered system of professional learning and technical assistance, is described below.

b. Intended outputs that have been accomplished as a result off the implementation activities

The LEASA and Improvement Planning Process

The LEASA was developed through a review of research and an iterative process involving input from ECD staff and stakeholders. The rational for the tool was derived from the usable innovations framework of implementation science (Fixen, Blase, Metz, Van Dyke, 2013) and the structure of the tool was derived from literature on the development of practice profiles (Metz, 2016). One purpose of the LEASA is to elucidate the core elements of the provision of comprehensive special education services that are required for students with disabilities to graduate from high school. Thus, the tool allows LEAs to operationalize the conceptually defined strategy of the “provision of comprehensive special education services” into knowable, teachable, doable, and assessable implementation activities. The six core elements that emerged through the development process are included in Table 3.

Table 3. Core elements identified by the LEASA

Policy Compliance and Monitoring	Fiscal Management
IEP Development, Implementation, and Outcomes	Problem-Solving for Improvement
Research-Based Instruction and Practices	Communication and Collaboration

An LEA’s completion of the LEASA results in several intended benefits. Broadly, these can be defined as increased problem identification and planning ability, practice informed policy decisions, and an increased fidelity of intervention implementation (as indicated in Table 1, Outputs and Summative Outcomes). More specifically, the completion of the LEASA will initially support many activities that are critical to the exploration stage of implementation. For example, the tool should allow districts to better identify and

prioritize needs (related to both systems that support teachers and classroom practices that support students), ultimately informing their selection of appropriate evidence-based interventions that are also aligned to the contextual fit and capacity of the LEA. The tool should also facilitate the development of local “readiness” (Scaccia et al., 2014), as the results can be used by LEA teams to cogently communicate a rationale for change based on a systematic review of local data. Finally, because the tool defines expected implementation activities that are required to produce the intended impact on the SIMR, it promotes the generation of goals, solution actions, and fidelity measures required for improvement planning. In addition to supporting districts in the exploration stage of implementation, the tool is intended to be utilized in a formal Plan, Do, Study, Act (PDSA) improvement cycle. Annually, LEAs will complete components of the LEASA, review the fidelity measures included in their improvement plan, and document the adjustments made to their goals, solution actions, and improvement plan.

Analysis of LEASA Data and Infrastructure Alignment

Upon completion and submission of the LEASA and Improvement Plans the quantitative and qualitative domains of the LEASA were analyzed. Quantitatively, descriptive statistics were obtained at the state-wide and regional levels for the core elements and critical components included in the practice profile of the LEASA. Generally, the quantitative data revealed that districts were experiencing the greatest challenges associated with Core Element 5: Research-Based Instruction and Practices and the most success with Core Element 6: Communication and Collaboration. Figure 6 represents the statewide mean percentage of points obtained within each core element.

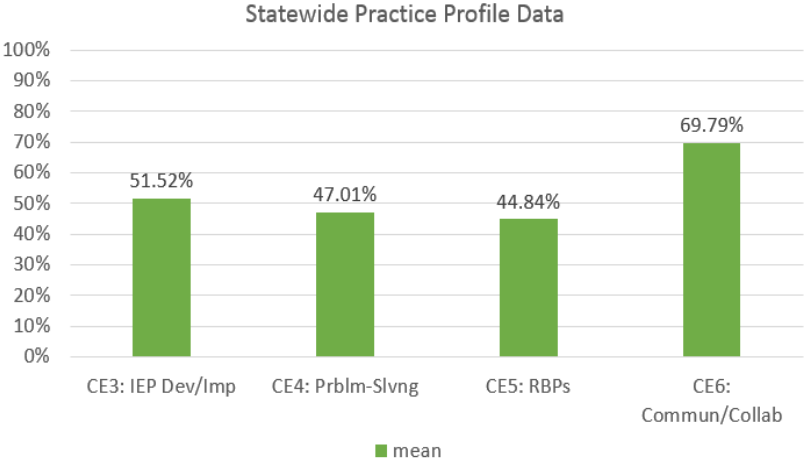


Figure 6. Statewide mean percentage of points obtained within each core element

Within Core Element 5, the lowest statewide mean scores were associated with critical components that deal with the systematic identification of research based practices and purposefully carrying out an implementation plan. These areas of baseline need in the LEASA practice profile statewide data are aligned to the rationale and purposes of the LEASA described above, and improvements within these critical components are expected as a result of engaging with the tool and process.

In addition to quantitative analysis, each LEASA and improvement plan was reviewed by three ECD staff in August 2016. ECD staff used a formal review tool (see Phase II report, appendix C) documenting satisfactory completion of the LEASA and Improvement Plan, identification of priority areas for improvement, and recommendations for the types of support that would be most aligned to priority areas. Upon completion of the review process, two primary priority areas were identified for each LEA. To verify accurate identification of priorities, the two areas were confirmed through individual emails sent to each EC director and coordinator. At the culmination of the qualitative analysis the ECD had identified priority areas aligned to improving the SIMR that were based on a systematic data review and self-assessment process occurring at the local level.

Development of a Universal Support Training Plan

The SSIP team analyzed the quantitative and qualitative data for development of a conceptual framework for the provision of universal professional learning to LEAs. The conceptual framework was designed by identifying the most commonly occurring needs reflected in the critical components of the LEASA and recommendations for support made during the ECD staff reviews. Table 4 below reflects the most commonly recommended support domains within LEAs identified by ECD staff. Each of the domains below were recommended for at least 80% of LEAs in the state.

Table 4. Commonly recommended supports.

Need	Percent of LEAs with identified need through ECD Staff Review
Progress Monitoring	98.17%
Specially Designed Instruction	93.75%
Implementation Planning	92.28%
Problem Solving	91.91%
IEP Implementation	90.80%
Evidence-Based Practices	88.97%
IEP Development	81.32%

As a result of this analysis, the conceptual framework for a universal training plan was developed to include the design and delivery of Specially-Designed Instruction (SDI) within a Multi-Tiered System of Support (MTSS) as the overarching universal domain (progress monitoring is considered a critical component of specially-designed instruction). In addition, the domains of problem solving, the use of evidence-based practices, and IEP development and implementation serve as critical foundational supports. Finally, the SSIP team concluded that all universal support should have content related to implementation frameworks systematically embedded within it (i.e., the implementation frameworks were to be taught within the context of the usable innovation). Figure 7 is the graphic used to develop understanding of the universal support framework with ECD staff and LEAs.

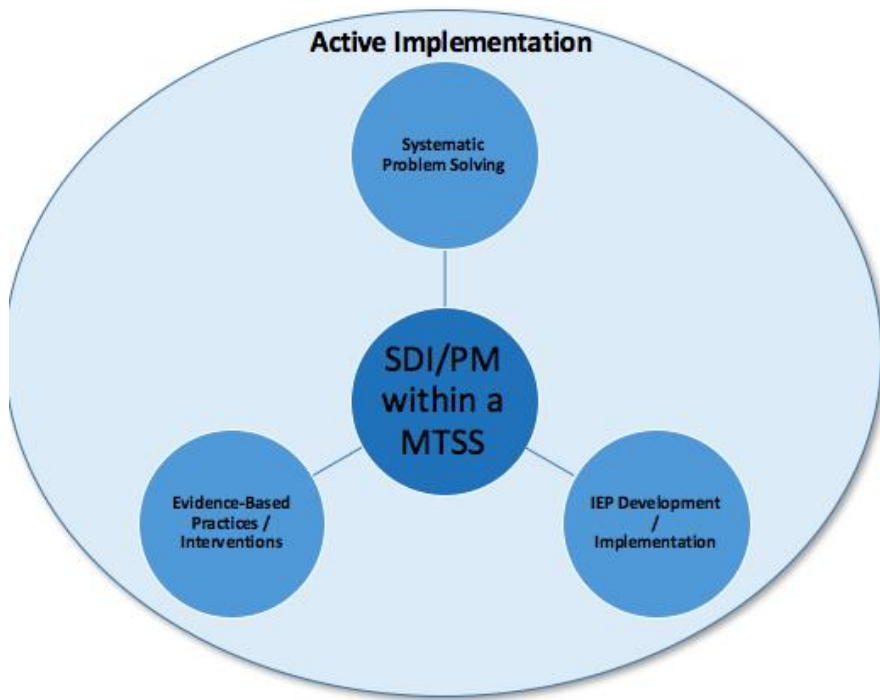


Figure 7. Conceptual framework for universal support.

The design and delivery of specially-designed instruction within an MTSS was included at the core of the universal content delivered because it is ubiquitous within the three pillars of academics, behavior, and transition that support the SIMR. As indicated in Table 1 and the Phase II report, the SSIP work is occurring in the context of state-wide implementation of MTSS. NC MTSS is a multi-tiered framework which promotes school improvement through engaging, research-based academic and behavioral practices. NC MTSS employs a systems approach using data-driven problem solving to maximize growth for all. The universal content delivered has emphasized how deeply enmeshed specially-designed instruction is within core, supplemental, and intensive academic instruction and behavioral programming. Plainly, the SEA is working to support districts in their alignment and integration of general and special education within a single flexible framework of school improvement. It is hypothesized that the evidence-based practices described in the next section have a higher likelihood of scalability and sustainability within a single implementation framework under MTSS, rather than parallel implementation pathways.

In addition, the specialized design and delivery of instruction is the vehicle by which educators ensure students with disabilities receive high-quality instruction and services that will result in progress toward academic and functional standards, graduation, and meaningful post-secondary outcomes. The need for clarification and strengthening of the state’s understanding and delivery of SDI within an MTSS is multi-

faceted, and clearly surfaced through quantitative and qualitative review of the LEASA. The majority of students with disabilities in North Carolina spend 80% or more of the school day in general education settings, where in practice, the delivery of SDI can become difficult to distinguish, especially as differentiated instruction and universal design for learning (UDL) approaches become more prevalent in general education settings. Furthermore, within an MTSS framework, some supplemental and many intensive interventions may not look substantively different than SDI at the surface level. Given these factors, many school and program administrators have asked for guidance in the development, delivery, and monitoring of SDI, particularly as they conduct program reviews and performance evaluations for special education staff. As such, clarification on the distinctive features of SDI—or what makes special education “special”—has been offered to promote common language and understanding for all stakeholders (including general and special educators). Throughout the SDI work, the professional learning intends to operationalize the adapting of the “content, methodology, or delivery of instruction” through the application of evidence-based approaches described in the next section.

Through the use of this conceptual framework, a training plan for universal support was subsequently developed. To support implementation of the training plan, the SSIP team developed a Universal Support workgroup charged with content development, capacity building within the SEA and ECD, and delivery of professional learning. The workgroup is representative of all sections of the ECD, as well as all regions across the state. Intentional selection criteria were applied to ensure content expertise across general knowledge related to the provision of SDI within an MTSS and a wide continuum of specialized knowledge. In addition to ECD staff, three consultants from the Integrated Academic and Behavioral Supports division (the division that supports MTSS) have joined the workgroup. Recently, the SSIP team has also secured commitment for NCDPI Curriculum and Instruction staff to join, as well as implementation support from the State Implementation Team (SIT). Expansion of the workgroup across SEA divisions was deemed a critical next step in order to leverage existing SEA implementation frameworks established by MTSS, coordinate work between SEA, regional, and district teams, and present common rationale, language, and improvement strategies that are required for system-level change.

As the conceptual framework, training plan, and work structures crystallized, the SSIP team employed the universal training plan to support LEAs by leveraging existing professional learning opportunities that included regional directors’ and charter coordinators’ meetings, the annual EC division conference, a March Institute, New Directors’ Leadership Institute (NDLI), and Charter Exceptional Children Leadership Institute (CECLI). The universal training plan is intended to enhance and support the implementation of

evidence based practices by meeting the most common needs identified through analysis of the LEASA. Over the course of the current school year, the workgroup has developed and delivered (or will deliver) universal content in the above referenced venues. The workgroup has also supported ECD staff in preparation for regional directors’ and charter coordinators’ meetings during monthly Division and regional team meetings.

In addition, universal professional learning has had active implementation frameworks embedded throughout. The implementation science content has included presentation of theory related to implementation frameworks (Fixsen, Naoom, Blase, Friedman, Wallace, 2005), models of implementation tools, practice completing tools, and feedback through small group discussions with ECD staff. The work completed during the professional learning has resulted in the development of selection criteria for district implementation teams, the creation of district communication plans, and the completion of a stage-based planning tool. The teams have completed this work to align with their MTSS implementation and the evidence-based practices supporting academics, behavior, and transition. During the regional directors’ meetings, the audience has expanded from the historical participation of Exceptional Children (EC) directors and charter coordinators, to teams of individuals who broadly support implementation work in the district. This shift occurred in response to qualitative feedback from EC directors and charter coordinators indicating that additional participation of district staff would support the transition of implementation work from the meetings into the district. Analysis of the post-meeting surveys from December 2016 and February 2017 regional meetings indicated that participants largely believed the content was aligned and applicable to LEA identified priorities. Figures 8 and 9 represent participant feedback from the February regional meetings.

To what extent was the regional directors' meeting aligned to your district's improvement priorities?

(129 responses)

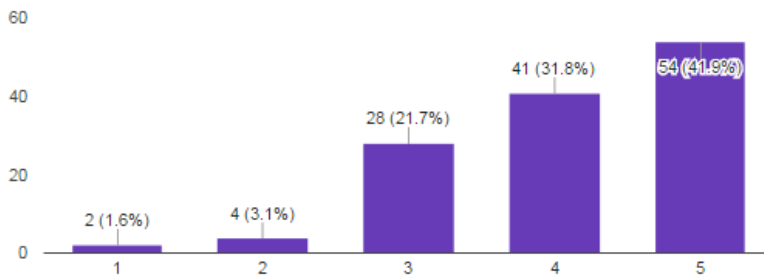


Figure 8. Alignment survey item from February regional directors' meeting.

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree

How likely is it that you will apply information from today's meeting in your work?

(129 responses)

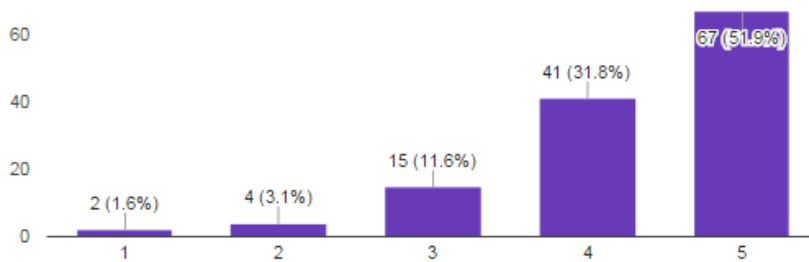


Figure 9. Application survey item from February regional directors' meeting.

1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree, 5 = strongly agree

Additional Universal Support Activities

During Phase II of the SSIP, the ECD began to streamline and align work to the SSIP and LEASA through the revision of IEP documents. As indicated in the Phase II report, the ECD engaged in a process to review and revise IEP forms with stakeholder input during the 2015-2016 school year. Broad stakeholder involvement (see Phase II report, appendix E) in the process included systematic opportunities for review and feedback from EC directors and coordinators, the Special Education Stakeholder Collaborative, the Council on Educational Services for Exceptional Children, and the Director's Advisory Council (DAC).

The form revisions and training development were completed by February 2017 and initial training with draft documents was held at the 2017 March Institute.

In conjunction with development of new IEP documentation and processes, a Request for Proposals (RFP) outlining an Exceptional Children Accountability Tracking System (ECATS) designed with the capability to produce reports and improve data accessibility was finalized in February 2017. ECATS will include three modules offered at no charge to LEAs to enhance data accessibility and analysis related to the provision of EC services, Medicaid billing, and the comprehensive academic, behavioral, and engagement data used to inform decisions within an MTSS framework. ECATS will be piloted in the fall of 2017, and the system is scheduled to go online for all users, with access to new IEP documentation, by January 2018. A comprehensive training plan has been developed to support the transition to the new forms and data system, including face-to-face delivery and online modules to support LEA-level capacity to train and coach staff.

Consequently, the new documentation processes and data system will further augment a district's capacity to assess need, select evidence-based practices, and implement with fidelity. As districts develop decision support data systems to inform implementation, fragmentation of data across a multitude of sources, systems, and reporting features is a significant barrier to efficient and effective analysis. ECATS will have the capacity to seamlessly integrate data sources, including those that are aligned to both fidelity (e.g., School-Wide Evaluation Tool, the Tiered Fidelity Inventory, the Teaching Pyramid Observation Tool, and NC SIP instructional fidelity checks) and outcome data (e.g., Office Disciplinary Reports, suspension data, attendance, child outcome summaries, teacher content knowledge, and progress monitoring data). As a result, LEAs will have easier and increased access to data and reports.

Tailored and Customized Supports

In addition to the design of a conceptual framework and implementation of a universal training plan, the ECD utilized LEASA data and regional teaming structures to identify a response with tailored and customized supports. Throughout the LEASA process, the ECD recognized that despite key advantages, self-assessment possesses limitations that can be mitigated through specific actions. As the LEASA and improvement planning process began, directors and coordinators initially voiced concern that the tool may be utilized for evaluative, rather than supportive purposes. In the development of a tiered system of support, it was critical that the ECD did not conflate tiers of support with evaluative judgments. When

developing definitions for the types of support that the ECD would provide, the language of the definitions was intentionally focused on the elements of the ECD response, rather than the types or level of needs demonstrated by districts requiring or requesting that tier of support. The definitions for universal, tailored, and customized supports are contained within Table 5 below.

Table 5. Current definitions for tiers of support.

Universal	Tailored	Customized
<p>Universal supports address state-wide priority areas identified by the LEA Self-Assessment. These priority areas include (but are not limited to): Specially Designed Instruction and Progress Monitoring within an MTSS, Implementation Planning, Problem Solving, IEP Development and Implementation, and Evidence-Based academic and behavioral practices. Universal supports are provided in face-to-face, blended, and online training modules. Examples of universal supports include Regional Directors’ meetings, March Institute, the Exceptional Children’s Conference, and Summer Institute.</p>	<p>Tailored supports address content that is aligned to common needs of regional participants that are in the process of developing district capacity to sustain and scale the critical components of the LEA Self-Assessment. District teams are utilized to provide job-embedded follow up and coaching. Tailored supports are provided in addition to the universal supports described above by regional teams and sections within NCDPI. Tailored supports are developed and provided to districts in response to common areas of regional need identified in the LEA Self-Assessment and in response to formal professional learning requests.</p>	<p>Customized supports address content that is specifically designed to meet unique needs of a district. Customized supports are provided in addition to universal and (possibly) tailored supports to develop readiness and begin capacity building. NCDPI staff support district staff in the provision of job-embedded follow up.</p>

As tiers of support were defined, LEASA data were utilized in a systematic gap analysis and data visualization for the planning of tailored and customized supports. To engage in the gap analysis process, ECD sections completed a professional learning inventory to document professional learning opportunities

they currently had the capacity to support, and the alignment of those professional learning opportunities to the definitions of universal, tiered, and customized supports. Once completed, the LEA priorities from the LEASA were mapped to the professional learning inventories. In situations where an LEA priority could not be mapped to currently-developed professional learning, the priority was assessed for seriousness, urgency, and potential for growth. This priority assessment will be utilized to inform ECD sections’ conceptualization and development of new professional learning for the 2017-2018 and subsequent school years.

For LEA priorities that were mapped to existing professional learning opportunities, the data were visualized on a map of North Carolina to assist sections and regional teams in the scheduling locations. These maps allowed teams to visually assess the geographic alignment of common needs and locate professional learning opportunities accordingly. Sections (organized by common work) and regional teams (cross-sectional organized geographically) utilized these data to develop a common [professional learning calendar](#) that is available electronically to districts. In addition, regional newsletters with all upcoming professional learning opportunities are provided monthly to directors and coordinators. Figure 10 represents an example of the North Carolina map containing LEA priorities related to Math Foundations.

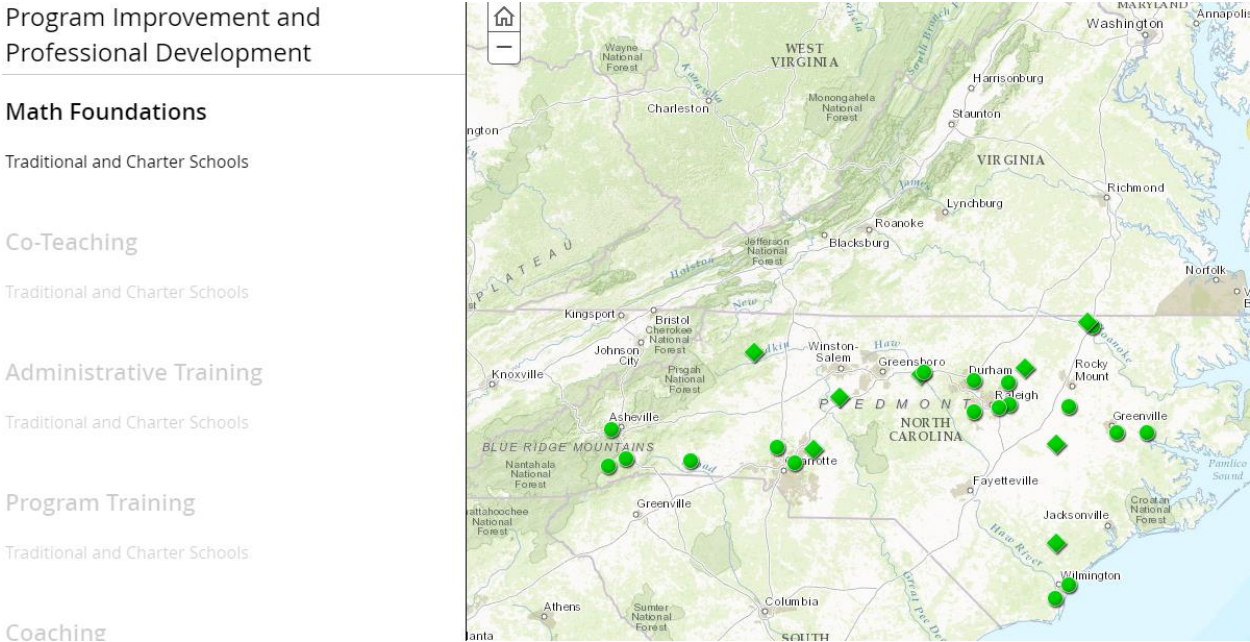


Figure 10. Visualization of LEA priorities aligned to ECD professional learning.

LEAs also have the opportunity to formally request professional learning that falls outside the scope of the universal, tailored, or customized supports that were developed in response to LEASA data. Once a formal request is made, a systematic process occurs to review and respond to the request. This process ensures that professional learning is aligned to a district's improvement plans, the ECD's infrastructure of tiered supports, capacity building within the regions, and efficient use of ECD resources. In addition, this process assures that all responses to LEAs are documented to support the evaluation process of professional learning, implementation, and outcomes.

The completion of a coherent calendar of professional learning activities, aligned to LEA needs, and implemented through regional support teams to district-level implementation teams represents a fundamental shift that has occurred in the ECD as a result of the SSIP. Historically, the ECD primarily relied upon monitoring or LEA requests for technical assistance and professional learning, and the response was inconsistently data driven, coordinated, or designed for building capacity within the LEA. Within our theory of action, the coherent improvement strategies related to the LEASA and improvement process, analysis of LEASA data, infrastructure alignment, and the development of tiered supports will lead to stronger implementation of the evidence-based practices to support the SIMR.

2. Stakeholder involvement in SSIP implementation

- a. How stakeholders have been informed of the ongoing implementation of SSIP**
- b. How stakeholders have had a voice and been involved in decision-making regarding the ongoing evaluation of the SSIP**

Informing the SSIP external team and ECD staff

The ECD has informed stakeholders (within and outside of the agency) of the ongoing implementation in multiple ways. The structure of the SSIP team includes representation of both ECD staff and a wide range of stakeholders. The composition of the team has remained consistent since Phase II (see appendix E of the Phase II report for a list of stakeholders serving on the SSIP team). The SSIP internal team meets monthly with a general focus on implementation of the project. External stakeholders serve on SSIP workgroups that meet monthly and attend quarterly external SSIP meetings.

The SSIP external team and ECD involvement in decision-making

External meetings provide an opportunity for SSIP workgroups to provide detailed updates (including timelines and evaluation of the work), with a designated opportunity to receive feedback from external stakeholders. This feedback is recorded in notes that are shared via email to all ECD section chiefs, who subsequently share it with all ECD consultants. In addition, the notes are accompanied with an email summarizing the key decisions that were made, the rationale for the decision, and the required action items. A summary of the SSIP meeting, including the feedback from stakeholders, is provided at each monthly ECD division meeting or regional meetings.

Informing the State Education Agency

Within the broader SEA, stakeholders are primarily involved with SSIP through the State Implementation Team (SIT). The SIT includes representation from across the agency, LEAs, and institutes of higher education. This allows for stakeholder involvement across the agency, and improves alignment of both initiatives and common practices. As a state agency participating with the State Implementation and Scale-up of Evidence-based Practices (SISEP) center, NCDPI receives support for these teams to facilitate effective implementation practice, including ongoing evaluation.

State Education Agency involvement in decision-making

Work groups on the SIT collaboratively remove barriers, define relationships between agency projects, align the work of the agency, create common language and practices for agency staff, and provide support for LEAs through development of agency-wide infrastructure. The SIT meetings provide opportunities for SEA staff to describe overlapping work associated with the SSIP and construct intentional alignment. Prime examples of results from this work include SSIP alignment with statewide MTSS implementation, the NC SPDG grant, and the PBIS and SEFEL projects.

Informing LEAs

The implementation of the SSIP is regularly shared with LEAs during regional and statewide meetings and through their representatives on the Director's Advisory Council (DAC). The analysis of the LEASA and the rationale and details of subsequent alignment of infrastructure and development of a tiered support system have been ongoing topics shared and discussed within these meetings. This information has been

shared in presentation formats, as well as in small group discussion opportunities between LEA and ECD staff.

LEA involvement in decision-making

With the LEASA driving the ECD infrastructure alignment and development of a tiered system of support, LEAs are the predominant factor influencing the decision making related to SSIP implementation. By aligning areas of focus to LEA needs, the LEASA tool itself is a method of influencing decision making. In addition, feedback is consistently taken in survey format following all regional meetings and March Institute. These data are analyzed by the SSIP team and presented to all ECD staff during regional meetings. In addition to survey-level feedback, DAC representatives have recently been invited to engage in a systematic decision analysis process to further refine how feedback data are efficiently and effectively responded to.

C. Data on Implementation and Outcomes

1. How the state monitored and measured outputs to assess the effectiveness of the implementation plan

a. How evaluation measures align with the theory of action

Figures 1 and 2 provide an over-arching depiction of the theory of action and the logic model, respectively. The logic model displays the associations between the strategies/activities, the resulting outputs and the short, intermediate and long-term outcomes. Thus, the short-term outcomes in the logic model serve as the measures to be monitored to ensure the strategies/activities are having their intended impact at the system level (i.e., are we seeing knowledge and behaviors change with implementing adults?). The intermediate outcomes serve as direct impact measures based on changes in the short-term outcomes (i.e., are we seeing a positive impact on students?). The basis of the theory of action is grounded in the ability of the SSIP to positively impact the intermediate outcomes that, ultimately, will increase the ability of students with disabilities to graduate within five years. As indicated in the logic model, many of the short-term outcomes are related to measures of implementation and fidelity that would be early indicators of successful implementation of the evidence-based practices. Medium and long-term measures are related to student outcomes that would be expected as a result of successful implementation.

b. Data sources for each key measure

Each of the short-term outcomes is aligned with a data source readily available within NCDPI.

Coherent Improvement Strategy: Problem Solving & Effective Implementation

- **LEASA Improvement Plans:** these will provide evidence of LEAs' ability to problem solve and engage in data analysis to develop strategies and target interventions to address their needs.
- **LEASA Practice Profile:** these data will also provide evidence of LEAs' ability to problem solve and analyze data to diagnose needs. The data from the practice profile will help ECD determine which LEAs need specific type of supports, and how much support they will need.

Academics: NCSIP Reading & Math Foundations

- **Fidelity Observations:** these LEA-level data provide evidence of teachers' (aggregated to the LEA level) adherence to the Reading/Math instructional model. Teachers who have taken the Foundations and instructional model course receive at least one fidelity observation by a trained observer who has attained inter-rater reliability.
- **Student proficiency data:** End-of-Grade tests, NCEXTEND2, NCEXTEND1

Behavior: PBIS & SEFEL

- **School-Wide Evaluation Tool (SET):** this measure is designed to assess and evaluate features of school-wide behavioral supports including definition of expectations, teaching of behavioral expectations, system for responding to behavioral violations, etc. Schools are rated 0-100 on each of the components and averaged to yield an overall SET score.
- **Brief School-Wide Evaluation Tool (BSET):** a measure similar to SET involving less-intensive data collection. The calculation and range of BSET scores are similar to those attained for the SET.
- **PBIS Training/Implementation Criteria:** a measure documenting whether schools have been adequately trained on PBIS implementation strategies. The majority of NC schools have been training, limiting the utility of this measure.
- **Social and Emotional Foundations for Early Learning (SEFEL):** LEA-level measures are available to document the percent of LEAs attended SEFEL/Foundations training and what percent have implemented training with their teachers, what percent of LEAs are implementing SEFEL district-wide (including an implementation team, an implementation plan, are providing SEFEL coaching to teachers, and coaches are measuring teachers' use of SEFEL strategies with the Teaching Pyramid Observation Tool [TPOT]), and what percent of teachers in SEFEL district-wide implementation sites have reached fidelity as measured by TPOT.

Transitions: Support for a Continuum of Transitions

- **Office of Special Education Programs (OSEP) SPP/APR Indicator data:** a number of indicators to monitor various outcomes.
 - **Indicator 7:** the percent of preschool children aged 3 to 5 with IEPs who demonstrate improvement in positive social-emotional skills, acquisition and use of knowledge and skills (including early language/communication and early literacy), and the use of appropriate behaviors to meet their needs.

- **Indicator 8:** measures the percentage of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities.
- **Indicator 11:** measures the percentage of students being referred that receive timely (within 90 days) evaluations and placement for special education services.
- **Indicator 12:** measures the percentage of students referred by Part C/Early Childhood Intervention prior to age 3 who are found eligible for Part B/District Special Education Services and who have an IEP (Individualized Education Program) developed and implemented by their 3rd birthday.
- **Indicator 13:** measures the percent of youth with IEPs aged 16 and above that have an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition service needs.
- **Indicator 14:** measures the percent of youth who are no longer in secondary school, and were:
 - enrolled in higher education within one year of leaving high school
 - enrolled in higher education or competitively employed within one year of leaving high school
 - enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school

c. Description of baseline data for key measures

The extant performance data for each of the key measures was reviewed as a basis for future comparisons. As described previously, these data were also disaggregated by subgroups of interest. Baseline levels for key outcome indicators are summarized below (Please note, this report does not represent an exhaustive review of all the analyses conducted and reviewed by the SSIP team. This report reflects key measures, aligned to the logic model, that inform judgments about the current progress and success of SSIP implementation).

State-Identified Measurable Result: Cohort Graduation Rate

- **Five-year Cohort Graduation Rates (CGR):** these data were summarized by demographic subgroups across the 2012-13, 2013-14 and 2014-15 school years. Rates and trends were similar across years for different racial groups (e.g., Black Students 78.7, 81.1, 83.4; White Students 86.3, 87.7, 88.5). Based on the most recent 2014-15 data, the students with disabilities (SWD) subgroup was on-track with the annual target (i.e., 69.7). Overall, over half of all schools with a SWD subgroup increased their five-year CGR, while 8.3% remained the same and 41.7% declined.

Academics: NCSIP Reading and Math Foundations

- **Fidelity of Reading and Mathematics Instruction:** For baseline school years (2012-13 to 2014-15), the average change of percent of teachers achieving minimum criteria on the fidelity assessment was examined. The examination revealed an overall increase across time. Math and reading fidelity percentages varied across LEAs.
- **Academic Performance:** For baseline school years (12/13 - 14/15), proficiency rates of key demographic subgroups were examined on EOGs, NCEXTEND2, and NCEXTEND1. Across reading and mathematics content area assessments, similar trends and gaps were evident for each of the three years, with White students exhibiting the highest performance and SWD and LEP students exhibiting the lowest performance.

Behavior: Positive Behavioral Interventions and Supports (PBIS)

- **Fidelity of PBIS Implementation:**
 - **School-Wide Evaluation Tool:** For baseline school years (12/13 – 14/15), baseline and criterion-level performance on the School-Wide Evaluation Tool (i.e., > 80) was documented for the 2012-13 ($M = 92.33$, $SD = 8.88$) and 2013-14 ($M = 91.74$, $SD = 9.94$) school years. The distribution of scores was negatively skewed (indicating a high proportion of high scores), with nearly equal mean scores across baseline years.
 - **PBIS Implementation Criteria:** For baseline school years (12/13 – 14/15), PBIS implementation criteria was examined for the percentage of schools meeting different criteria levels. In 2012-13, 439 (99.3%) schools met the PBIS Trained Criteria (only three

- did not meet the Trained Criteria) and 407 (92.1%) met the PBIS Implementation Criteria (35 did not meet the Implementation Criteria). In 2013-14, 566 schools (99.7%) met the PBIS Trained Criteria (only two did not meet the Trained Criteria) and 534 (94.01%) met the PBIS Implementation Criteria (34 did not meet the Implementation Criteria).
- **Discipline Data:** For baseline school years (13/14 – 14/15), the overall rates of In-School Suspensions (ISS), Out of School Suspension (OSS), and Long-Term Out of School Suspension (LT OSS) were small and ISS and OSS rates declined over time.

Behavior: Social and Emotional Foundations for Early Learning (SEFEL)

- **Scale-Up, Spread, and Fidelity of SEFEL implementation:**
 - **SEA training LEAs:** All (100%) of eligible districts attended Modules 1-7 training in 2012-13 ($n = 17$) and Modules 8-12 in 2012-13 ($n = 16$). Thirty-nine percent of LEAs attended Module 1-7 training in 2013-14 and no districts attended training for Modules 8-12 in the same year; and, 54.7% ($n = 115$) attended Modules 1-7 training in 2014-15 and 40% attended Modules 8-12 ($n = 115$).
 - **LEAs training teachers:** The percent of LEAs providing training for Modules 1-7 remained relatively consistent across 2013-14 and 2014-15, while the percent for Modules 8-12 declined. Information collected across the state tracking full, district-wide implementation showed 12% of districts had achieved district-wide implementation in 2012-13, with 23% in 2013-14 and 24% in 2014-15 and 23% in 2015-16.
 - **SEFEL Fidelity:** Median rates of teachers reaching TPOT fidelity increased from Fall to Spring each year, but declined from 2012-13 to 2013-14, with approximately similar values in 2013-14 to 2014-15 and across the state LEAs are relatively successful in helping their teachers attain TPOT fidelity.

Transition Outcomes

- **Indicator 7:** For the baseline school years (12/13 – 14/15), data were analyzed for the percent of preschool children aged 3 to 5 with IEPs who demonstrated improvement in outcomes related to positive social-emotional skills, acquisition and use of knowledge and skills (including early language/communication and early literacy), and the use of appropriate behaviors to meet their needs. Within each of these three outcomes are two different metrics and accompanying targets, outlined as follows:

1. Of those children who entered or exited the program below age expectations in the Outcome, the percent who substantially increased their rate of growth by the time they exited the program.
2. The percent of children who were functioning within age expectations in the Outcome by the time they exited the program.

For the 2012-13 school year, NC did not meet the established targets for both metrics for any Indicator 7 outcomes. New baselines were established for the 2013-14 school year. For the 2014-15 school year, NC met targets for both metrics within Outcome C. Across baseline years, considerable variability existed among LEA level measures.

- **Indicator 11:** For the baseline school years (12/13 – 14/15) data were analyzed for the percentage of students being referred that receive timely (within 90 days) evaluations and placement for special education services. For the baseline school years, indicator 11 decreased slightly from 93.3% in 2012-13 to 92.5% in 2014-15. Across baseline years, considerable variability existed among LEA level measures.
- **Indicator 12:** For the baseline school years (12/13 – 14/15) Indicator 12 data were analyzed for the percentage of students referred by Part C/Early Childhood Intervention prior to age 3 who were found eligible for Part B/District Special Education Services and who had an IEP (Individualized Education Program) developed and implemented by their 3rd birthday. NC consistently failed to meet the 100% target each year, but, was consistently above 97%.

d. Data collection procedures and associated timelines

NCDPI adopted PowerSchool as the primary Student Information System (SIS) several years ago. A number of the data points necessary for tracking and reporting on the implementation and impact of the SSIP project are collected from all NC LEAs through this system. As a result, data for a particular school year for all LEAs are provided in a standardized format in the following fall. Occasionally, when standardized assessments are re-calibrated delays in reporting occur.

NC discipline data has been made available via the Common Education Data Analysis and Reporting System (CEDARS) Oracle based data warehouse. The Center for Educational Measurement and Evaluation (CEME) and ECD staff have collaborated to generate a standard query that will retrieve and summarize discipline data at the LEA level. Exports from this system will provide standardized discipline data that can be added over the life of the project.

The NC SIP fidelity data are collected through electronic forms submitted through the NC SIP data base over the course of the year. At any time, the data that can be exported from the database.

The PBIS and SEFEL projects each have their own data collection processes and submission guidelines. Data from PBIS were obtained from the project’s Data Management System. Data from SEFEL was provided by the project lead in Excel format. Data are collected throughout the year and available as requested.

Indicator data are collected by separate managers within NCDPI. Though these data are also presented in a standardized format, the timeliness of their collection and summarization can vary. However, because of fewer protocols for review and release, these data are sometimes available in more timely fashion than the larger reporting efforts of NCDPI.

e. Sampling procedures

No probabilistic sampling procedures are planned for the evaluation of SSIP. Data that are already being collected and readily available are being used, thus, available longitudinal data for all LEAs will be captured.

f. Planned data comparisons

The primary research design for the evaluation of the SSIP is longitudinal, meaning the primary comparisons to be made will involve LEA performance on various metrics across time. Thus, the primary metric analyses will involve looking to see how much change occurs from the initial SSIP implementation year and subsequent years after.

That said, ECD and CEME staff will also maintain data organized by participating cohorts to facilitate comparisons of growth among LEAs from SSIP Cohort 1 and the rest of the state. In addition, comparisons of growth will be made between Cohort 1 and all other LEAs to determine if similar (or dissimilar) amounts of change are occurring in LEAs where shorter duration of SSIP participation have occurred.

Finally, although primary analyses will be focused on measures representative of the SWD subgroup, analyses will also investigate other subgroup categories including Economically Disadvantaged (ED), English Speakers of other Languages (ESL) or student race when data are available.

g. How data management and data analysis procedures allow for assessment of progress toward achieving intended improvement

As stated previously, the ECD deliberately chose to identify metrics associated with the SSIP that are already being collected and maintained by NCDPI. Prior to conducting initial baseline analyses, data files

provided to CEME staff by the ECD were standardized to facilitate management and the addition of future data points as the project evolves. Currently, ECD and CEME staff are working from a shared Dropbox folder allowing ECD to upload data files for the various metrics and allowing CEME staff to work from the same raw files.

As alluded to in the Planned Data Comparison section, longitudinal analyses have been the primary method for determining whether the strategies of the SSIP are having an impact on short, intermediate, and long-term outcomes. CEME staff have made use of as many years of data representing the time *before* SSIP installation to increase the statistical power (i.e., likelihood) of being able to detect statistically significant change in metrics.

2. How the State has demonstrated progress and made modifications to the SSIP as necessary

a. How the state has reviewed key data that provide evidence regarding progress toward achieving intended improvement to infrastructure and the SIMR

At the current time, longitudinal analysis was expected to yield small effect sizes associated with SSIP implementation. Implementation science literature suggests three to five years are typically required to achieve intended outcomes, if active implementation frameworks are intentionally adhered to (Fixsen, Blase, Timbers, & Wolf, 2001). Notwithstanding, trends in the longitudinal analysis of these key data points will serve to inform the judgment of progress toward achieving intended improvement to infrastructure and the SIMR. Following the logic model developed for the evaluation process, the SSIP team has primarily focused on analysis of outputs and short-term outcomes to make decisions concerning expected progress for this stage of implementation.

b. Evidence of change to baseline data for key measures

Longitudinal analysis of key measures is included below. The analysis is organized in relation to the SIMR and the domains of academics, behavior, and transition. As described previously, the longitudinal analysis indicates whether the change from baseline was statistically significant and whether participation in Cohort 1 is associated with a different change from baseline as compared to the rest of the state (i.e., to answer the question “did Cohort 1 sites experience a different impact from the 2014-15 to 2015-16 school years as associated with longer duration of SSIP implementation?”). When LEA level data were available and when supported by the data, the models represent separate trajectories (i.e., random intercept) and change

over time (i.e., slope) for each LEA (as opposed to representing all LEAs with a single pattern). This formulation more appropriately accounts for the relationship (i.e., correlation) of rates for each LEA and allows for a formal diagnosis of variability among LEAs. Throughout this section, the odds ratio and Cohen's d are reported to estimate practical significance and the relative size of the effect. For interpretation purposes, an odds ratio close to 1 indicates little practical significance or change. In addition, the Cohen's d effect size of .2 is generally accepted as a "small" effect, .5 as a "medium" effect, and .8 as a "large" effect.

Graduation

What is the longitudinal trend in five-year cohort graduation for all students in North Carolina?

First, the LEA-level five-year CGR rates for all students (e.g., inclusive of all subgroups) was examined. Figure 11 shows a steady increase in the five-year CGR of all students from 2012-13 to 2015-16, and the data supported a significant linear effect for time ($p < .001$; $d = .053$, a small practical effect size). In addition, the final model supported random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the Cohort 1 indicator ($p = .907$). Despite the lack of a significant main effect or interaction term for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. For both the Cohort 1 and non-Cohort 1 groups, the change past baseline was significant ($p < .001$, odds ratio=1.10, $d = .05$ and $p = .001$, odds ratio=1.10, $d = .05$, respectively).

To answer the question above, this model suggests that five-year CGR for all students in North Carolina has been consistently increasing from 2012-13 to 2015-16. Cohort 1 sites did not experience a different impact on five-year CGR for all students from 2014-15 (end of baseline) to 2015-16 as compared to the rest of the state. The increase in CGR from 2014-15 (end of baseline) to 2015-16 was statistically significant for Cohort 1 and the rest of the state; however, the increase represents little practical significance and it did not differ significantly from the prior pattern.

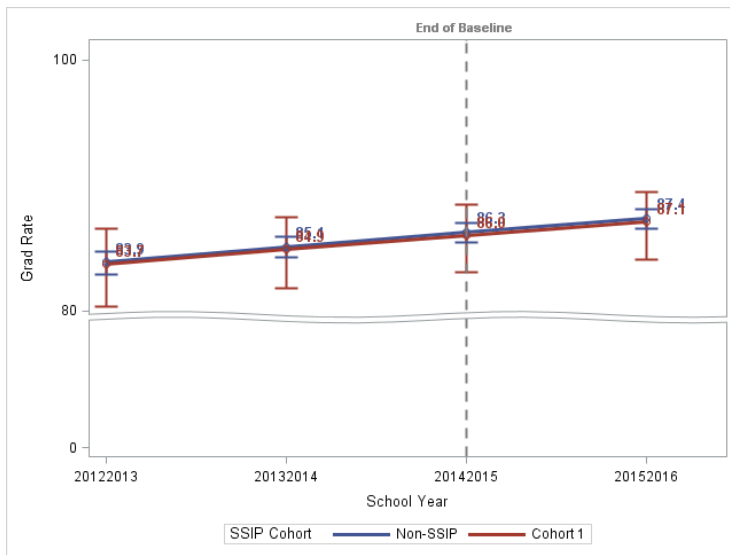


Figure 11. Mean five-year CGR Rates for all students, across time for NC LEAs.

What is the longitudinal trend in five-year cohort graduation for students with disabilities in North Carolina?

A similar analysis was conducted focusing on the students with disabilities (SWD) subgroup. Figure 12 shows a similar, steady increase in the five-year CGR of SWD from 2012-13 to 2015-16, and the data again supported a significant linear effect for time ($p < .001$; $d = .052$, a small practical effect size). In addition, the final model supported random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the Cohort 1 indicator ($p = .918$). Despite the lack of a significant main effect or interaction term for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. For both the Cohort 1 and non-Cohort 1 groups, the change past baseline was significant ($p < .001$, odds ratio=1.10, $d = .05$ and $p = .028$, odds ratio=1.08, $d = .04$, respectively).

To answer the question above, this model suggests that five-year CGR for students with disabilities (SWD) in North Carolina has been consistently increasing from 2012-13 to 2015-16. Cohort 1 sites did not experience a different impact on five-year CGR for SWD from 2014-15 (end of baseline) to 2015-16 as compared to the rest of the state. The increase in CGR for SWD from 2014-15 (end of baseline) to 2015-16 was statistically significant for Cohort 1 and the rest of the state. However, the effect was small and the pattern was consistent to the five-year CGR for all students. Keep in mind, this model is consistent with

expectations for this stage of implementation of the SSIP activities. In future years, it is the intention that the rate for students with disabilities increases at a rate that exceeds the rate of all students (to effectively close the gap).

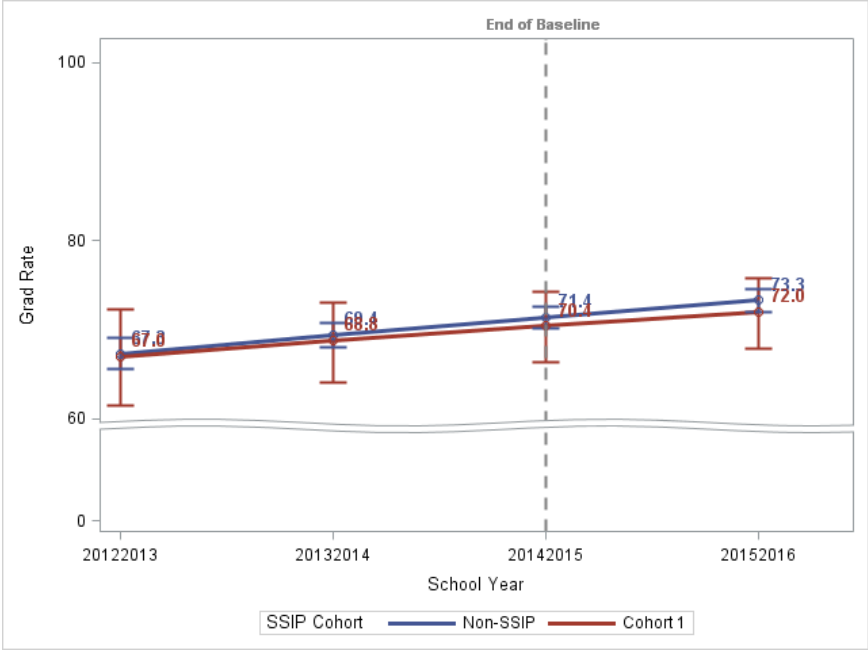


Figure 12 . Mean five-year CGR Rates for SWD students, across time for NC LEAs.

Academics: NC SIP Reading and Math Foundations

What is the longitudinal trend in the rate of teachers meeting fidelity criteria for model reading and mathematics instruction?

Figure 13 shows a steady rate of fidelity for model reading instruction across all four years. The final model supported by the data included a quadratic effect for time, random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the Cohort 1 indicator ($p = .588$). Despite the lack of a significant main effect or interaction term ($p = .732$) for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. For both the Cohort 1 and non-Cohort 1 groups the change past baseline was non-significant ($p = .276$, odds ratio=.817, $d = .11$ and $p = .963$, odds ratio=1.02, $d = .01$; respectively).

To answer the question above for fidelity of model reading instruction, the rates of teachers meeting fidelity criteria has been steadily high over time. The change in teacher fidelity rates in Cohort 1 and non-Cohort 1 sites did not differ significantly from 2014-15 (end of baseline) to 2015-16. The difference in rates of teachers meeting fidelity from 2014-15 (end of baseline) to 2015-16 was not statistically significant for Cohort 1 sites or the rest of the state. Overall, these data indicate that as SSIP sites implement NCSIP as an evidence-based practice to support academics, it is expected that teachers will reach high levels of fidelity for model reading instruction after participation in Foundations and model reading professional learning. In the SSIP logic model, this is a precursor to improved academic proficiency and increased graduation.

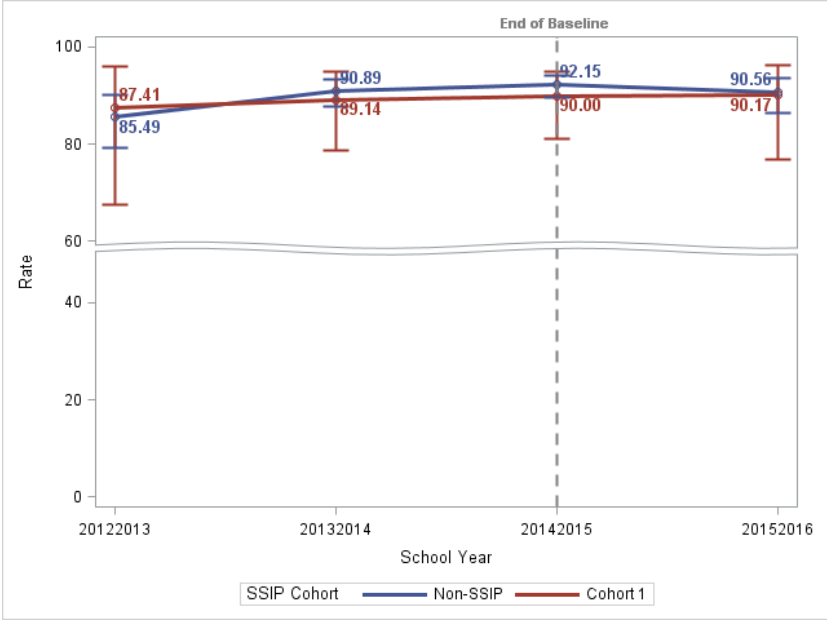


Figure 13. Mean estimated reading teacher fidelity rates across time for NC LEAs.

Figure 14 shows the corresponding analyses related to the rates of fidelity for model math instruction across all four years. The final model supported by the data included a cubic effect for time, random intercepts but no random slopes allowing each LEA their own trajectory across time, but a non-significant main effect for the SSIP Cohort indicator ($p = .813$). Despite the lack of a significant main effect or interaction terms ($p = .657, .751$ and $.932$ across the polynomials) for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. Change past baseline was significant for the Cohort 1 group ($p = .001$, odds ratio=6.34, $d = 1.02$) and not significant for the non-Cohort 1 group ($p = .051$, odds ratio=1.82, $d = .33$).

To answer the question above for fidelity of model math instruction, the rates of teachers meeting fidelity criteria has been steadily high over time. Cohort 1 sites did not experience a different impact on rates of teachers meeting fidelity criteria from 2014-15 (end of baseline) to 2015-16 as compared to the rest of the state. However, the difference in rates of teachers meeting fidelity from 2014-15 (end of baseline) to 2015-16 was statistically significant for the Cohort 1 sites. In addition, the large effect size reveals a dramatic increase in fidelity for Cohort 1 sites from 2014-15 to 2015-16. Overall, these data indicate that as SSIP sites implement NCSIP as an evidence-based practice to support academics, it is expected that teachers will also reach high levels of fidelity for model mathematics instruction after participation in Foundations and model mathematics professional learning. In addition, there may be an enhanced impact in NC SIP implementation in mathematics that corresponds to the LEASA improvement process.

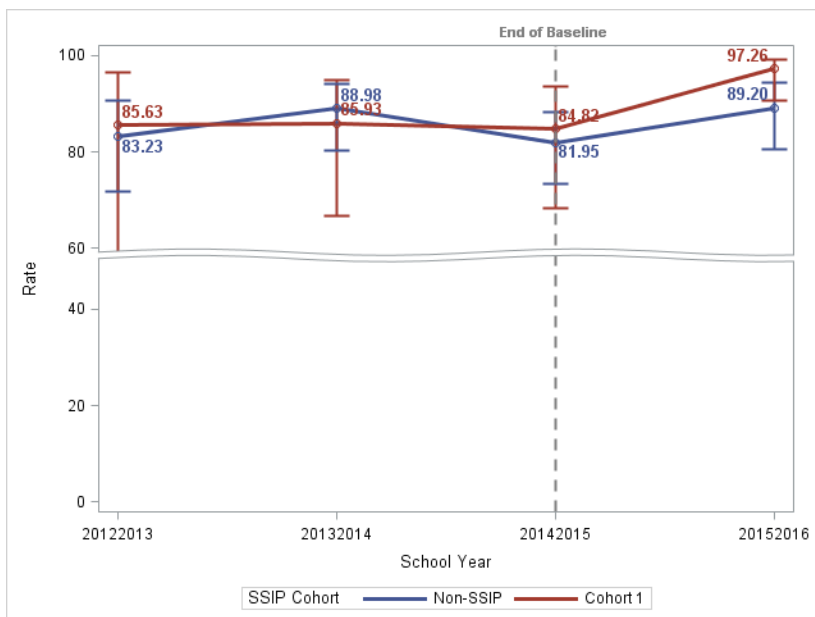


Figure 14. Mean estimated math teacher fidelity rates across time for NC LEAs.

What is the longitudinal trend in students with disabilities’ proficiency in reading and mathematics?

Concerning reading proficiency for students with disabilities in grades 3-8, Figure 15 shows a dramatic increase in the proficiency of SWD from 2012-13 to 2013-14 (the shift was significant for both the Cohort 1

LEAs and the non-Cohort 1 LEAs). However, from 2013-14 forward the mean rate of proficiency remained relatively unchanged. The final model supported by the data included a cubic effect for time, random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the Cohort 1 indicator ($p = .303$). Despite the lack of a significant main effect or interaction term for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. For both the Cohort 1 and non-Cohort 1 groups, the change past baseline was non-significant ($p = .319$, odds ratio=1.03, $d = .01$ and $p = .339$, odds ratio=1.01, $d = .01$, respectively).

To answer the question above for students with disabilities' reading proficiency in grades 3-8, there was a large increase in proficiency from 2012-12 to 2013-14 which has since stabilized. Cohort 1 sites did not experience a different impact on reading proficiency for SWD from 2014-15 (end of baseline) to 2015-16 as compared to the rest of the state. While there was positive change from 2014-14 (end of baseline) to 2015-16, it was not significant. Overall, these data support a continued focus on academics as a root cause impacting the SIMR and active implementation of NC SIP for LEAs who have identified this as a root cause.

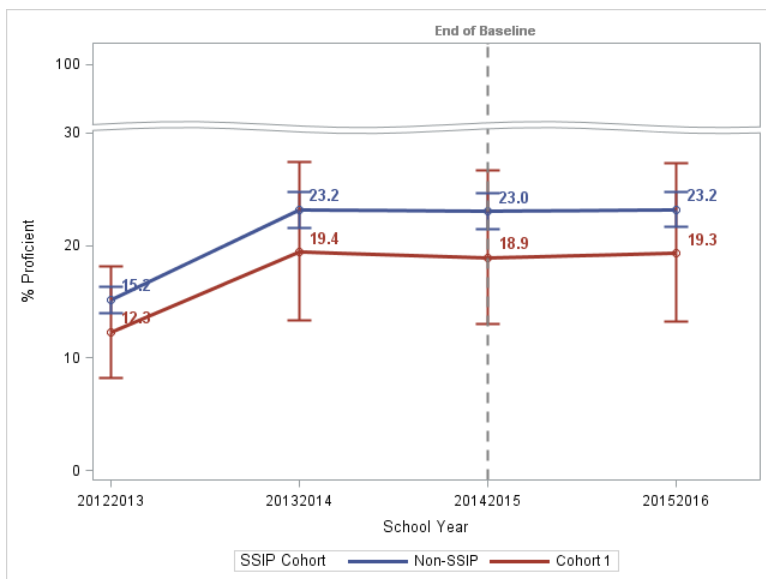


Figure 15. Mean estimated SWD reading proficiency rates across time for NC LEAs.

A similar pattern can be viewed in figure 16 associated with mathematics assessment results, where performance jumped in 2013-14 compared to 2012-13, but leveled off again in 2014-15. The final model supported by the data included a cubic effect for time, random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the Cohort 1 indicator ($p = .596$). Despite the lack of a significant main effect or interaction term for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. For the Cohort 1 and non-Cohort 1 groups, the change past baseline was significant ($p = .027$, odds ratio=1.07, $d = .04$ and $p = .000$, odds ratio=1.09 or Cohen's $d = .05$, respectively).

To answer the question above for students with disabilities' mathematics proficiency in grades 3-8, there was a large increase in proficiency from 2012-13 to 2013-14 which has since leveled off. The change in students with disabilities' reading proficiency rates in Cohort 1 and non-Cohort 1 sites did not differ significantly from 2014-15 (end of baseline) to 2015-16. However, the change from 2014-15 (end of baseline) to 2015-16 was statistically significant. Despite reaching statistical significance, the effect was small. Notwithstanding, the data are trending in the positive direction and additional analyses below lends further evidence to the impact of the NC SIP model on mathematics performance.

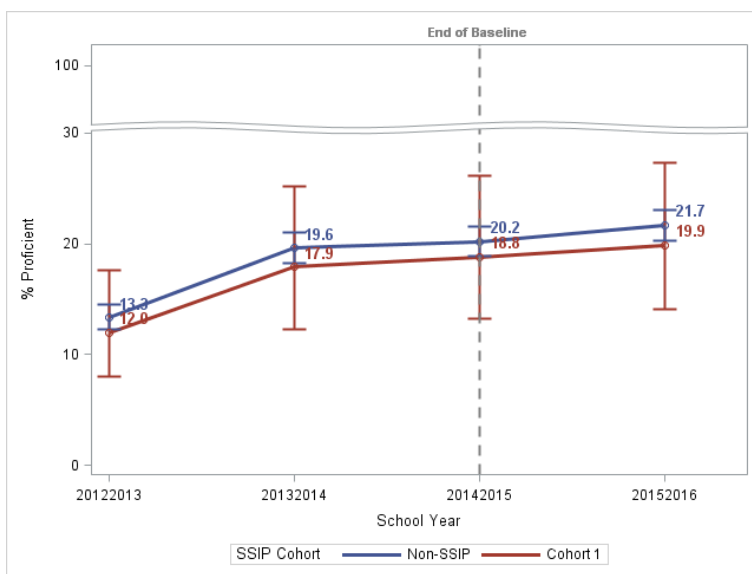


Figure 16. Mean estimated SWD reading proficiency rates across time for NC LEAs.

What is the longitudinal trend in the relationship between the rate of teachers meeting fidelity criteria and student performance?

To elucidate the relationship between teacher fidelity and student proficiency, the percentage of teachers achieving fidelity for LEAs was merged with the percent of students proficient on the NC standardized assessments. Once merged, correlational analyses were conducted to determine whether a relationship exists between an LEA's percentage of teachers achieving fidelity in reading and math and the percent of students attaining proficiency. Figure 17 provides two panels (one for the SWD subgroup, the other for all students) showing the correlation between the percent of teachers achieving fidelity and the percent proficient across time for the elementary and middle school level.

The graphs overall show relatively small correlations (i.e., less than .3) but also display separate patterns for reading and math. For SWD, the correlations in both reading and math declined from 2012-13 to 2013-14 and increased in 2014-15. However, the correlation for math increased dramatically in 2015-16 while reading leveled off again. A similar pattern can be seen for all students and math, while reading steadily increased through 2014-15 but declined in 2015-16. Note that the ability to achieve particularly high correlations is suppressed by the skewed NCSIP fidelity data (i.e., the skewed data limits the amount of variability among LEAs, which is necessary to yield a range of correlation values).

To answer the question above, the SSIP logic model posits that LEAs with larger percentages of teachers attaining fidelity would translate into better student academic outcomes and increased five-year CGR. At the very least, figure 17 suggests a strong support for this linkage for math in 2015-16. Examination of what occurred with implementation of the new SPDG grant, particularly related to job-embedded coaching to support the Math Foundations course over the 2015-16 school year, is a logical next step in translating the NCSIP professional learning into evidence-based instructional approaches, increased student proficiency, and graduation.

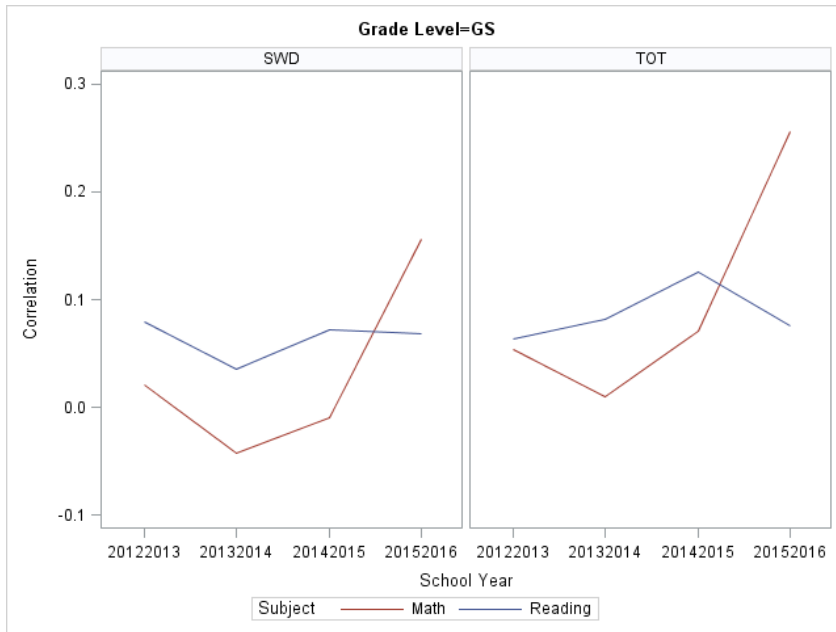


Figure 17. Correlations between the percent of teachers achieving fidelity and percent of students proficient across time by subject and student subgroup for the elementary/middle school level.

Behavior: Positive Behavioral Supports and Interventions

What is the longitudinal trend in fidelity of school-wide implementation of PBIS?

The School-wide Evaluation Tool (SET) is designed to assess and evaluate the features of school-wide behavioral support, including:

1. Definition of Expectations
2. Teaching of Behavioral Expectations
3. On-Going System for Rewarding Behavioral Expectations
4. System for Responding to Behavioral Violations
5. Monitoring & Decision-Making
6. Management
7. District-Level Support

Each school receives a score of 0 to 100 on each of the components defined above, and an overall mean of those scores is calculated representing the school's overall SET score. Figure 18 below displays the distribution of LEA-level SET scores for the 2012-13 through 2014-15 school years (average across all schools in an LEA). In both years, scores are negatively skewed, with nearly equal mean scores.

To answer the question above with baseline data, from 2012-13 to 2014-15, the negatively skewed distribution with a small range of high mean scores (ranging from 91.53 to 94.63) suggests that districts who receive PBIS professional learning support are able to implement with a high degree of fidelity. Broadly, this lends credence to the selection of PBIS as an evidence-based practice to support LEAs that identify behavior as a root cause. In the SSIP logic model, fidelity of PBIS implementation is a precursor to increased student behavioral outcomes and ultimately, graduation.

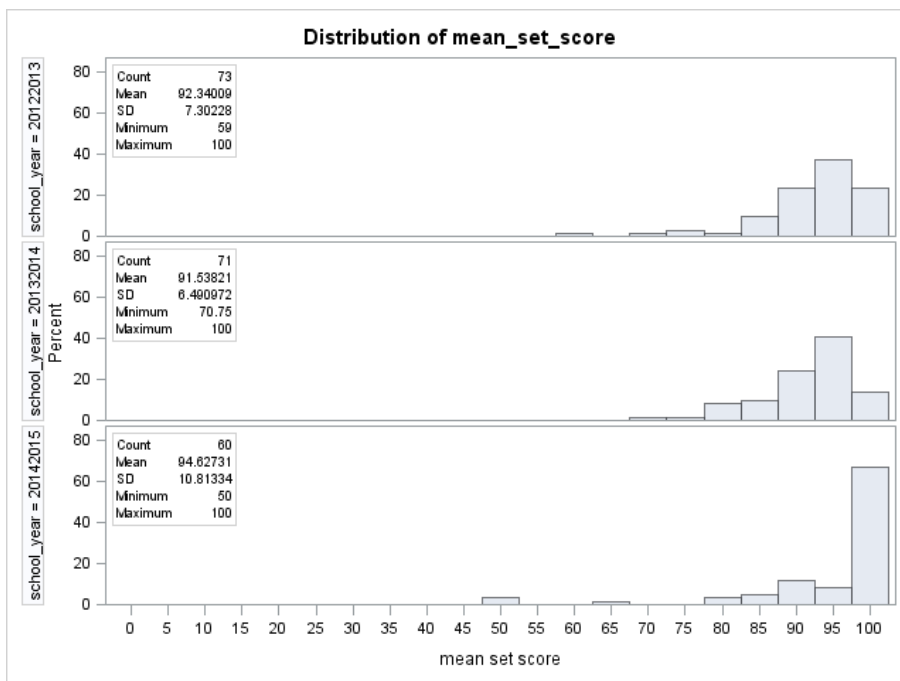


Figure 18. Distribution of NC Schools Overall Mean SET Scores by School Year.

What is the longitudinal trend in schools meeting NCDPI PBIS implementation criteria?

In 2012-13, 433 (99.5%) schools met the PBIS Trained Criteria (only two did not meet the Trained Criteria) and 402 (92.4%) met the PBIS Implementation Criteria (33 did not meet the Implementation Criteria). In 2013-14, 562 schools (99.8%) met the PBIS Trained Criteria (only one did not meet the Trained Criteria) and 530 (94.1%) met the PBIS Implementation Criteria (33 did not meet the

Implementation Criteria). Finally in 2014-15, 581 schools (99.8%) met the PBIS Trained Criteria (three did not) and 557 met the PBIS Implementation Criteria (95.7%) and 25 did not.

When isolating schools that had Trained Criteria data in all years, two schools did not meet the Implementation Criteria in all three years, while one school didn't meet the criteria in 2012-13 or 2013-14 but did in 2014-15. Additionally, there were 12 schools that met the Implementation Criteria in 2012-13 and 2013-14 but failed to meet it in 2014-15. 307 schools met in all three years.

To answer the question above, the majority of schools that attend PBIS professional learning are subsequently meeting NCDPI implementation criteria. Again, this supports the use of PBIS as an evidence-based practice to support behavior and indicates a high transfer of training into the implementation practices of the school.

What is the longitudinal trend in behavioral outcomes for students in North Carolina?

Figure 19 below displays the rates for each type of behavioral measure for the three school years (2013-14 to 2015-16), where rates were calculated as the LEA-level number of days of each behavioral outcome divided by the total days of student enrollment for the LEA. This provides a standardized measure across LEAs of different sizes, but also yields rates less than 1% (because the majority of students enrolled are not suspended; and those that are suspended only serve suspensions for a small portion of their total days enrolled).

To answer the question above, the graph reveals two main findings, including (a) the overall rates of ISS, OSS, and LT OSS are relatively low and (b) ISS and OSS rates declined slightly (non-significantly) across time. However, as described in the Data Quality section below, issues with the PowerSchool data information system prevented disaggregation of behavioral outcome data by subgroups of interest (including students with disabilities). Continued analysis of these trends, including subgroups of interest, is expected to continue throughout the evaluation process.

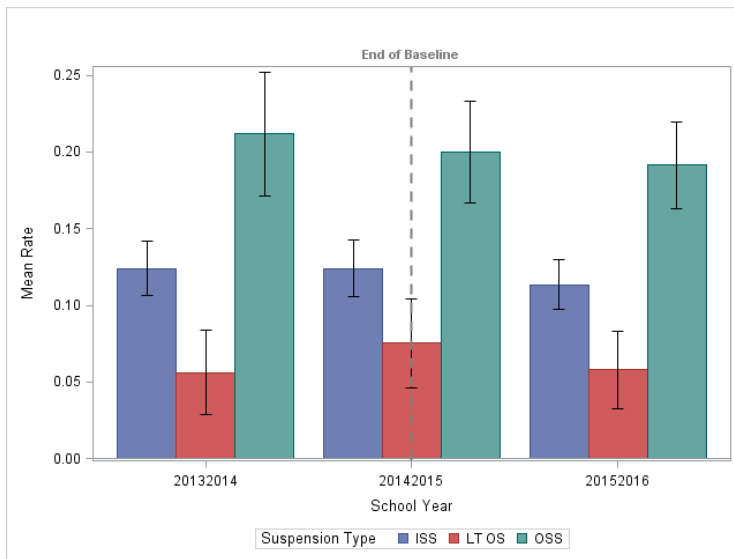


Figure 19. Mean LEA rates of suspension type across the 2013-14 to 2015-16 school years.

What is the longitudinal trend in the relationship between fidelity of school-wide implementation of PBIS and Out of School Suspension (OSS) Days rates?

LEA-level SET scores were merged with suspension information to determine whether a relationship existed. In their original, skewed forms, 2013-14 LEA-level SET scores were negatively correlated with OSS Days rates ($r = -.15$). However, the skewed distributions may violate the requirements for a linear measure of association. Kendall’s Tau b correlation, as a non-parametric form of association, uses ranks based on agreeable (concordant) and non-agreeable (discordant) pairs. Using this metric, 2013-14 LEA-level SET scores were still negatively OSS Days rates ($r_t = -.011$). The correlations in 2014-15 were weaker, with a Pearson $r = -.002$ and a Kendall’s Tau b correlation of $-.03$.

To answer the question above, the analysis revealed a weak negative relationship between SET scores and OSS Days rates. In other words, as SET scores increased the number of OSS Days rates decreased. While not a strong relationship, this analysis lends support (within the expected range) to the SSIP logic model that posits that increased fidelity of PBIS implementation will lead to improved behavioral outcomes for students.

Behavior: Social Emotional Foundations for Early Learning (SEFEL)

What is the longitudinal trend in the percent of LEAs attending and completing SEFEL training (i.e., what is the ECD's capacity to spread the training)?

Figure 20 below depicts the percent of LEAs attending and completing the SEFEL Modules 8-12 training from 2012-13 to 2015-16. The graph shows that for both Cohort 1 and non-Cohort 1 LEAs, no LEAs were trained during 2013-14 (LEAs were receiving modules 1-7) but dramatic increases in the mean percentages occurred over 2014-15 and 2015-16. Each LEA had its own trajectory (i.e., a random intercept effect), though the change in trajectories (i.e., slopes) did not vary among LEAs. The model supported a quadratic trajectory ($p < .001$) and a marginally significant interaction between time and the SSIP cohort indicator ($p = .078$) representing the cross-over between red and blue lines from 2013-14 to 2015-16. Focusing on the change from 2014-15 to 2015-16, there was a significant effect for both the non-Cohort 1 ($p = .000$, odds ratio=10.48, $d = 1.30$) and Cohort 1 sites ($p = .004$, odds ratio=49.8, $d = 2.15$).

To answer the question above for the culminating SEFEL training modules 8-12, there has been a significant positive trend in the percentage of LEAs attending and completing the SEFEL trainings from 2012-13 to 2015-16. Notably, the interaction described above reveals that Cohort 1 sites were impacted differently over time than the non-Cohort 1 sites. Focusing on the odds ratio, Cohort 1 sites were 49.8 times more likely to receive modules 8-12 training in 2015-16 as compared to 2014-15. This lends strong evidence of the ECD's capacity to provide the requisite professional learning to support SEFEL as an evidence-based practice to support the SIMR.

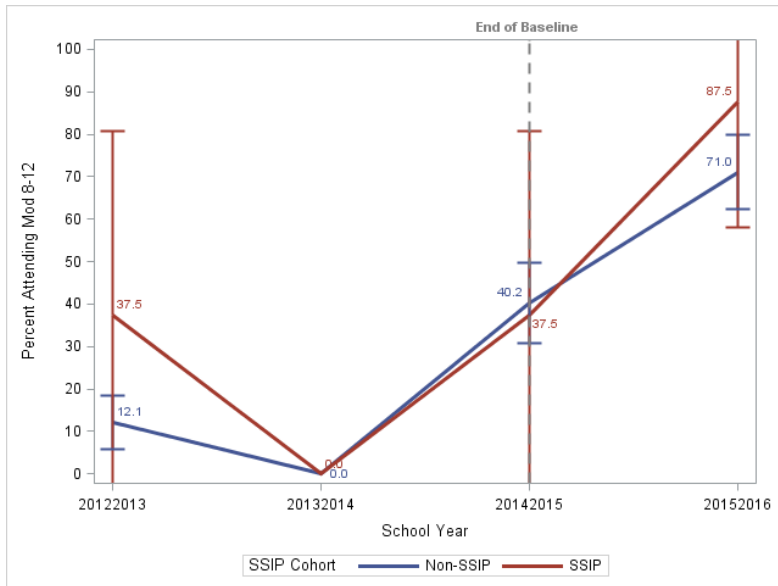


Figure 20. Percent of LEAs Attending SEFEL Training Modules 8-12 in 2012-13 through 2015-2016 by SSIP Cohort.

What is the longitudinal trend in the percent of LEAs completing SEFEL training with its teachers (i.e., what is the LEA’s capacity to spread the training)?

Figure 21 below depicts the percent of LEAs providing training modules 8-12 to teachers and LEA staff. The graph shows that for both non-SSIP and SSIP Cohort 1 LEAs, no training modules were provided during the 2012-13 school year. An increase occurred during the 2013-14 school year, with a small decline in 2014-15 as the last baseline year. A significant effect for time was supported by the data ($p < .000$), but an interaction with the Cohort 1 indicator was not supported ($p = .854$). Focusing on the line segment between 2014-15 and 2015-16 for the non-Cohort 1 and SSIP groups, results showed a significant effect for the non-Cohort 1 group ($p = .040$, odds ratio=2.60, $d = .53$) but not for the Cohort 1 group ($p = .102$, odds ratio=2.35, $d = .47$).

To answer the question above, there was overall significant progress in the spread of SEFEL training from LEAs to its teachers and staff. The change from 2014-15 (end of baseline) to 2015-16 was statistically significant for the non-Cohort 1 group, but not the Cohort 1 group. However, note that the odds ratio and effect size are quite similar across both groups. Despite the steeper slope of the Cohort 1 group, the sample size likely prevented a significant result.

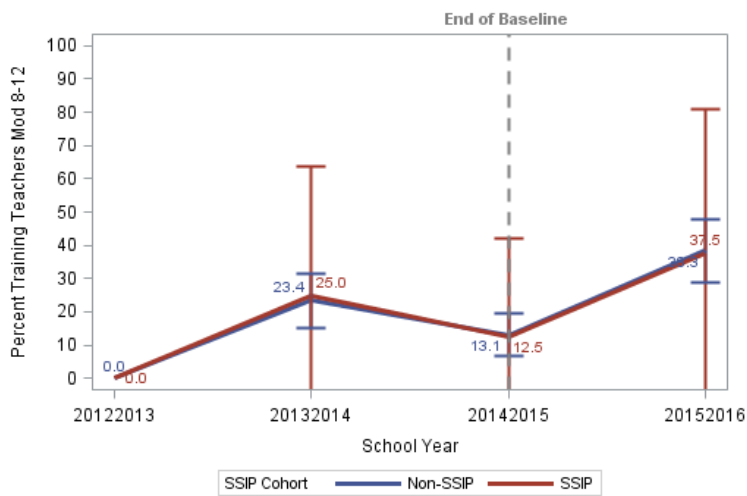


Figure 21. Percent of LEAs Providing Teachers SEFEL Training Modules 8-12 in 2012-13 through 2015-2016 by SSIP Cohort.

Broadly, looking across the SEFEL statewide training data, the percent of LEAs attending SEFEL training and providing training to teachers generally increased across time. In particular, rates tended to increase between 2014-15 and 2015-16, during what is considered the first year of SSIP implementation. Across all SEFEL training outcomes (including some not presented in this report), the odds ratios (a standardized effect) suggest larger change in rates for the SSIP LEAs compared to the non-SSIP LEAs, despite the lack of consistent statistical significance. Overall, these data reaffirm the ECD’s capacity to fully support LEAs to build local capacity to provide the professional learning required to actively implement SEFEL as an evidence-based practice for behavior to support the SIMR.

What is the longitudinal trend in the distribution of teachers’ fidelity for implementing SEFEL?

Figure 22 shows the distribution of Teaching Pyramid Observation Tool (TPOT) percentage scores earned by teachers in district-wide implementation LEAs across the Fall and Spring of the 2012-13 through 2015-16 school years. The circle within each box represents the mean TPOT score (scaled as a percentage), the line across the boxes represents the median percentage. In general, the distributions are skewed, suggesting the median may be a more appropriate central tendency metric.

To answer the question above, median scores increased from Fall to Spring each year. Importantly, the scores presented below do not include Fall TPOT ratings for teachers who achieved fidelity in the previous

school year (these are conducted to identify possible supports they may need). As indicated in the boxplots, the median score drops each fall, which may be accounted for new teachers who are only beginning to develop implementation practices. Broadly, the fact that the median rates are relatively similar and hover near 80% in the spring (which meets SEFEL fidelity criteria), it seems that LEAs are relatively successful in supporting their teachers in reaching fidelity. This supports the SSIP logic model, as this is a precursor to an increase in positive behavioral outcomes for students.

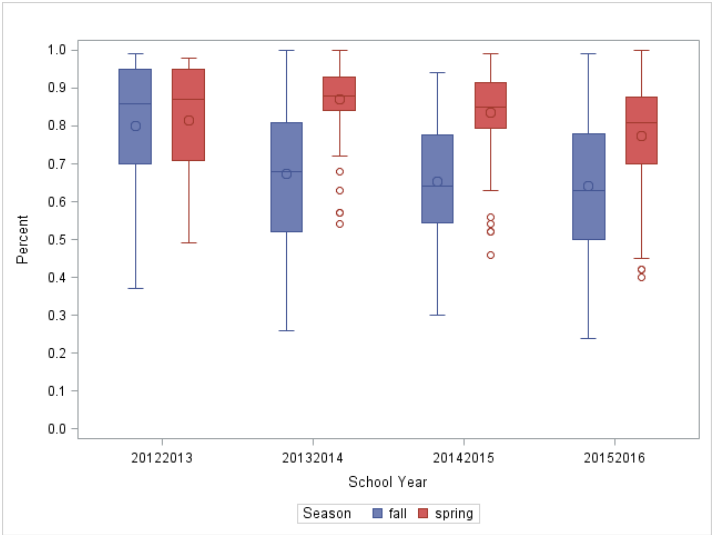


Figure 22. Distribution of Teacher TPOT scores in District-Wide Implementation Sites.

Transition: A Continuum of Transitions

While a continuum of transitions tool is planned for usability testing during the 2017-18 school year, transition data are presented for trend analysis for the transition activities that have occurred to date (including the secondary transition toolkit). However, it should be noted that the implementation of the continuum of transition supports is within the exploration stage.

What is the longitudinal trend in the percent of preschool children aged 3 to 5 with IEPs who demonstrate improvement in positive social-emotional skills, acquisition and use of knowledge and skills (including early language/communication and early literacy) and the use of appropriate behaviors to meet their needs?

Figure 23 below depicts the percentage of students who demonstrate improvement in positive social-emotional skills for metrics 1 and 2 for the 2012-13 through 2015-16 school years. Metrics 1 and 2 are described below.

1. Of those children who entered or exited the program below age expectations in the outcome, the percent who substantially increased their rate of growth by the time they exited the program.
2. The percent of children who were functioning within age expectations in the outcome by the time they exited the program.

To answer the question above in relation to social emotional skills, rates have remained relatively stable over time. Most recently, NC met the established target for metric 1 during the 2015-16 school year but failed to meet the target for metric 2.

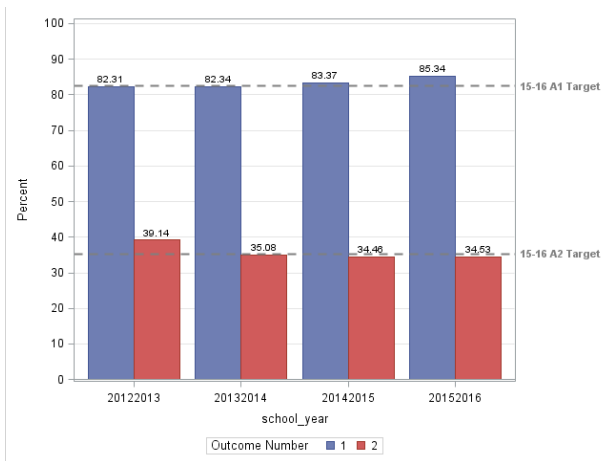


Figure 23. NC SEA Indicator 7 Positive Social Emotional Skills (Outcome A) Rates for 2012-13 through 2015-16 school years.

Figure 24 below depicts the percentage of students who demonstrate improvement in acquisition and use of knowledge and skills, metrics 1 and 2 for the 2012-13 through 2015-16 school years. To answer the question above for this metric, we again see relative stability over time. Most recently, NC met the established target for outcome B, metric 1 but not metric 2 during the 2015-16 school year.

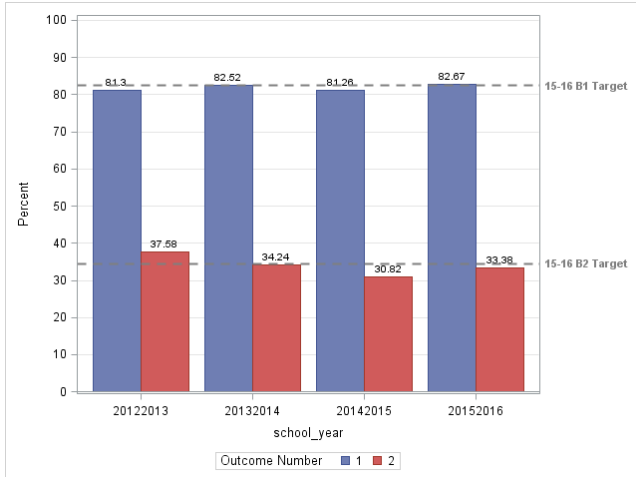


Figure 24. NC SEA Indicator 7 Acquisition and Use of Knowledge/Skills (Outcome B) Rates for 2012-13 through 2015-16.

Figure 25 below depicts the percentage of students who demonstrate improvement with the use of appropriate behaviors, metrics 1 and 2 for the 2012-13 through 2015-16 school years. To answer the question above, once again, there is relative stability in the data over time. NC met the established targets for outcome C, metric 1 but not metric 2 during the 2015-16 school year.

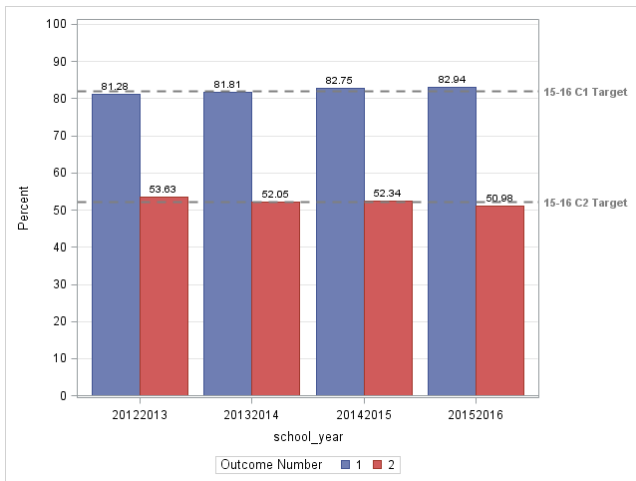


Figure 25. NC SEA Indicator 7 Appropriate Behaviors (Outcome C) Rates for 2012-13.

What is the longitudinal trend in the percentage of parents with a child receiving special education services who report that schools facilitated parent involvement as a means of improving services and results for children with disabilities?

Table 6 below displays the counts, by school year of the Indicator 8 target attainment status. In both years, the target percentage for North Carolina was 50.0% (at the SEA level, the rates were 46.0% and 43.8%, respectively, for 2013-14 and 2014-15). As illustrated in the table, in 2013-14, 31.6% of LEAs with available data attained a percentage of parents greater than the 50.0% target while 31.0% of LEAs had a percentage greater than 50.05% in 2014-15. To answer the question above, there was a stable number of LEAs meeting the target percentage of 50% from 2013-14 to 2014-15. However, this indicator supports the facilitation of parent involvement as a critical component of the continuum of transitions work.

Table 6. Count and percent of LEAs by Indicator 8 target attainment status.

School Year	Target Attainment Status								Total
	<5		Not Applicable		No		Yes		
	n	%	n	%	n	%	n	%	N
20132014	7	18.4	.	.	19	50.0	12	31.6	38
20142015	6	14.3	1	2.4	22	52.4	13	31.0	42
Total	13	16.3	1	1.3	41	51.3	25	31.3	80

What is the longitudinal trend in the percentage of students being referred that receive timely (within 90 days) evaluations and placement for special education services?

Using LEA-level data, individual LEA rates were modeled across time in Figure 26. The final model supported by the data included a linear effect for time, random intercepts and slopes allowing each LEA their own trajectory and change across time, but a non-significant main effect for the Cohort 1 indicator ($p = .515$). Despite the lack of a significant main effect or interaction term for the Cohort 1 indicator, these effects were included to model the difference in rates from 2014-15 to 2015-16 as an indication of impact of the SSIP model. For the Cohort 1 group the change from 2014-15 to 2015-16 was not significant ($p = .969$, odds ratio=.993, $d = .09$) and it was significant for the non-Cohort 1 group ($p = .000$, odds ratio=.835 or Cohen’s $d = .11$).

To answer the question above, this model suggests that the percentage of students who receive timely evaluation and placement in North Carolina has been consistent for the Cohort 1 group from 2012-13 to 2015-16 and slightly decreasing for non-Cohort 1 group. While the decrease in timely evaluation and placement from 2014-15 (end of baseline) to 2015-16 was statistically significant for the non-Cohort 1 group, the effect was small with little practical significance. However, the general decreasing trend strongly suggests the continuum of transitions support should focus on timely evaluation and placement.

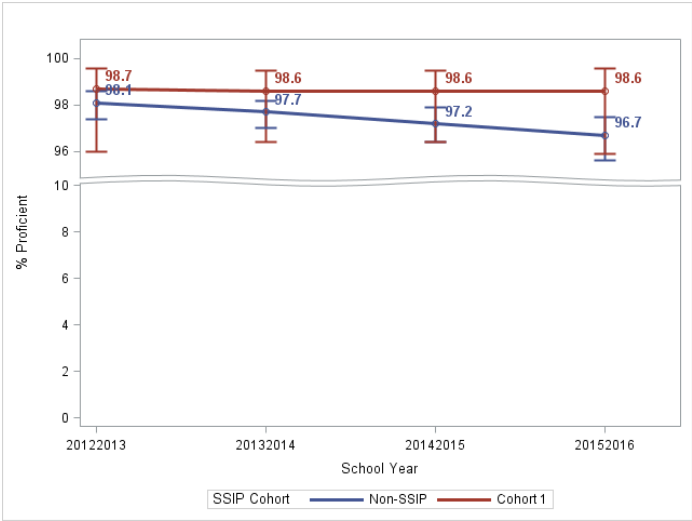


Figure 26. Mean estimated Indicator 11 rates across time for NC LEAs.

What is the longitudinal trend in the percentage of students referred by Part C/Early Childhood Intervention prior to age 3 who are found eligible for Part B/District Special Education Services and who have an IEP developed and implemented by their 3rd birthday?

Table 7 below shows the descriptive statistics across each of the school years 2012-13 to 2015-16. The median values of 100, coupled with the large negative skew values confirm that little variability among rates exist. To answer the question above, the LEA rates are consistent across the school years and while missing the target, are consistently above 97%.

Table 7. Descriptives on LEA rates of IEPs in place by child's 3rd birthday.

	n	Mean	Med	SD	Min	Max	Skew
20122013	112	97.76	100.00	7.43	50.0	100.0	-4.16
20132014	115	97.81	100.00	7.34	50.0	100.0	-4.23
20142015	114	98.92	100.00	3.69	80.0	100.0	-3.92
20152016	113	98.42	100.00	5.31	66.7	100.0	-4.31

What is the longitudinal trend in Indicator 13 data?

Indicator 13 data represent the percent of youth with IEPs aged 16 and above that have an IEP that includes appropriate measurable postsecondary goals that are annually updated and based upon an age appropriate transition assessment, transition services, including courses of study, that will reasonably enable the student to meet those postsecondary goals, and annual IEP goals related to the student's transition service needs.

Table 8 below displays the counts, by school year of the Indicator 13 target attainment status. In both years, the target percentage for North Carolina was 100.0% (at the SEA level, the rates were 85.1% and 88.4%, respectively, for 2013-14 and 2014-15). As we can see, in 2013-14, 6.5% of LEAs with available data attained a percentage of youth aged 16 and above with an IEP that meets the secondary transition requirements target while 10.5% of LEAs had a percentage greater than 100.0% in 2014-15. This represents a small increase over time, however, this indicator should also be a focus of the continuum of transition work.

Table 8. Count and percent of LEAs by Indicator 13 target attainment status.

School Year	Target Attainment Status						Total N
	<5		No		Yes		
	n	%	n	%	n	%	
20132014	12	38.7	17	54.8	2	6.5	31
20142015	8	42.1	9	47.4	2	10.5	19
Total	20	40.0	26	52.0	4	8.0	50

What is the longitudinal trend in the percent of youth who are no longer in secondary school, and were:

- **A) enrolled in higher education within one year of leaving high school?**
- **B) enrolled in higher education or competitively employed within one year of leaving high school?**
- **C) enrolled in higher education or in some other postsecondary education or training program; or competitively employed or in some other employment within one year of leaving high school?**

Table 9 below displays the counts, by school year of the Indicator 14 target attainment status (indicated by A, B, and C above). The target percentages for North Carolina were $\geq 39.5\%$ (target A), $\geq 62.5\%$ (target B) and $\geq 73.5\%$ (target C). At the NC SEA level, the rates were 30.0%, 54.0% and 73.5%, respectively, for targets A, B and C in 2013-14 and 31.8%, 61.1% and 72.7%, respectively, for targets A, B and C in 2014-15. To answer the question above, we can see that across targets there was an increase in the percentage of LEAs meeting targets from 2013-14 to 2014-15.

Table 9. Count and percent of LEAs by Indicator 14 target attainment status.

Target/School Year		Target Attainment Status								Total N
		<5		No Response		No		Yes		
		n	%	n	%	n	%	n	%	
A	20132014	8	21.1	11	28.9	15	39.5	4	10.5	38
	20142015	8	26.7	.	.	15	50.0	7	23.3	30
B	20132014	8	21.1	11	28.9	12	31.6	7	18.4	38
	20142015	8	26.7	.	.	10	33.3	12	40.0	30
C	20132014	8	21.6	11	29.7	13	35.1	5	13.5	37
	20142015	8	27.6	.	.	9	31.0	12	41.4	29
Total		48	23.8	33	16.3	74	36.6	47	23.3	202

c. How data supports changes that have been made to the implementation and improvement strategies

At the current time, the evaluation data support staying the course and making minimal changes to implementation and improvement strategies. The coherent improvement strategy at the foundation of the SSIP is a systematic LEA Self-Assessment (LEASA) process. The current evaluation data support the use of the process to improve the problem-solving and implementation capacity of LEAs to address

root cause associated with the SIMR. To defend this argument, the state developed the infrastructure and capacity to support districts in completing the process with a high degree of fidelity. The LEASA tool was largely completed and submitted by LEAs in a timely fashion and the review process was completed in a thorough and expeditious manner. The LEASA served the purpose of providing a robust data set from which to develop a conceptual framework for universal supports as well as inform the development of a tiered system of support. Data garnered from LEAs during regional meetings lends support to accurate data analysis and subsequent infrastructure alignment.

In regard to supporting academics through the implementation of NC SIP the fidelity data reveal that high levels of fidelity of model reading and mathematics instruction are attained after teachers complete the professional learning. In addition, there was a dramatic increase in the association with the fidelity of math model instruction and student achievement from 2014-15 to 2015-16. During that period, ECD and district staff were expanding their use of evidence-based coaching practices to support the training. This model is currently being studied by the ECD and applied to the provision of other professional learning.

In regard to behavior, the PBIS professional learning modules also result in high levels of fidelity with school-wide PBIS implementation. In addition, over the time periods examined in the analysis, in-school, long-term out-of-school, and out-of-school (1-10 days) suspensions decreased slightly. This supports the continued implementation of PBIS as an evidence-based practice to improve behavioral outcomes for students. The Social-Emotional Foundations for Early Learning (SEFEL) data indicate that the ECD is able to quickly develop capacity within LEAs to train and support teachers to the point of reaching fidelity of implementation. Future data sources will allow the evaluation to determine the impact of high fidelity implementation on student outcomes.

d. How data are informing next steps in SSIP implementation

In regard to transition, the data were examined primarily within the context of a baseline analysis. This data will be used to inform the continual refinement and training associated with the continuum of transition tool that is currently planned for usability testing during the 2017-18 school year. The stakeholder team is taking into account particular areas of focus to ensure the facilitation of parent involvement and that timely evaluation and placement of SWD occur.

In addition, while the LEASA process has shown to be an effective tool for LEA level implementation planning and SEA infrastructure alignment, many of the longitudinal data showed insignificant differences between Cohort 1 and non-Cohort 1 sites in terms of short-term outcomes. Much of this can likely be accounted for in the small sample size associated with the Cohort 1 indicator, though, it also lends insight in the responsiveness of the ECD to analyze and subsequently respond to data in a way that quickly impacts implementation (i.e., within the course of a year). As a result, the ECD has revised the LEASA-Update tool and developed a new set of timelines for data analysis and response for the 2017-18 school year.

The Plan, Do, Study, Act improvement cycle informed the development of the [LEASA-Update](#) (LEASA-U) that was shared with districts during the February regional directors' and coordinators' meetings. All LEAs that engaged in the LEA self-assessment and improvement process during the 2015-2016 school year will submit the LEASA-U in May 2017. New charter schools will complete the original LEASA. The intent of the LEASA-U is to support districts in their assessment of progress in the implementation of their improvement plans, facilitate engagement in a systematic improvement cycle, communicate early successes and barriers to stakeholders, and sustain district teams through the implementation process. In addition, as noted above, there are additional elements that are believed to expedite the review and analysis of the tool, resulting in increased efficiency and responsiveness by the ECD. For example, additions to the LEASA-U include:

- An analysis tab that graphs core element and critical component data from the 2015-2016 and 2016-2017 practice profile
- A priority analysis tab that asks LEAs to directly align priorities to core elements and the pillars of academics, behavior, and transition
- Opportunities for districts to document modifications to goal statements and the details of their implementation plan.

During the February director's meeting, several items were modified from the Usage Rating Profile-Assessment to receive feedback on the LEASA-U from EC directors and coordinators (Chafouleas, et al., 2012). The items are aligned to usability domains of assessment that include acceptability, understanding, system climate, and system support (Chafouleas, et al., 2012). Summarized data from those items are presented in Figures 27-30 below (n=94).

Item: The LEA Self-Assessment Update supports improvement planning.

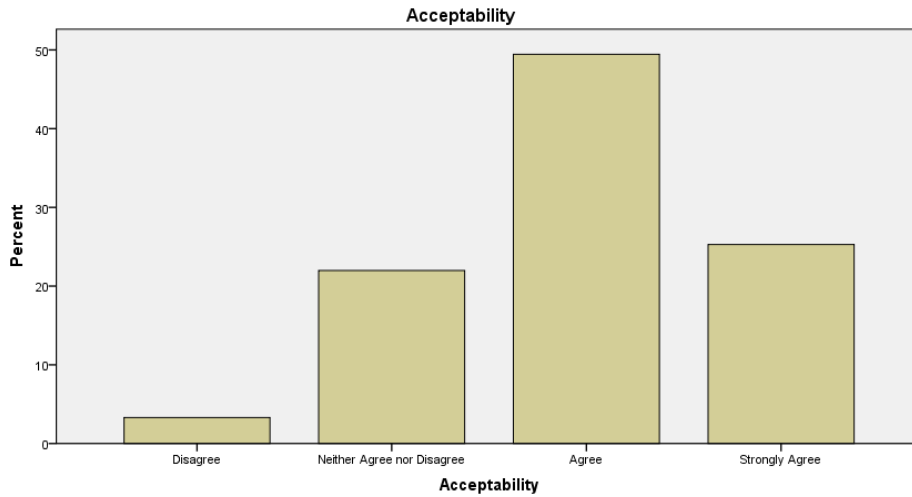


Figure 27. February Meeting LEASA-U Acceptability Item.

Item: I understand the purpose and rationale of the LEA Self-Assessment Update.

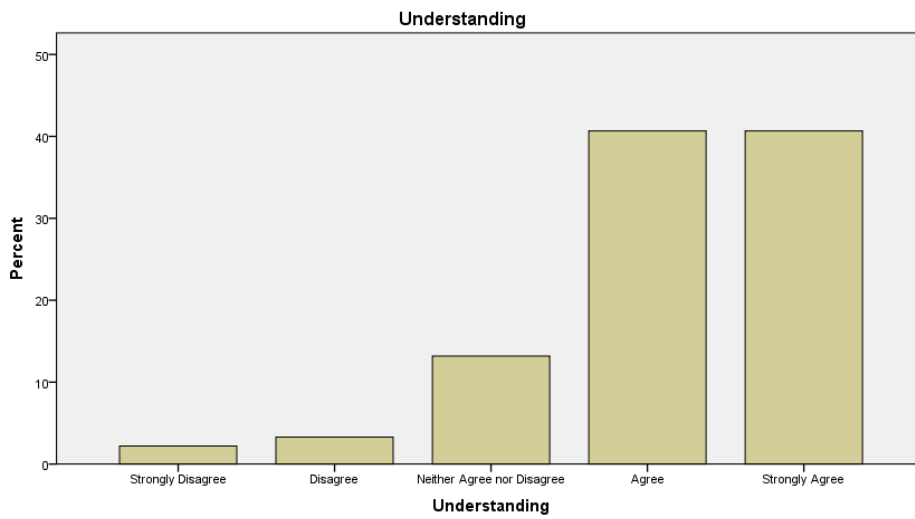


Figure 28. February Meeting LEASA-U Understanding Item.

Item: Use of the LEA Self-Assessment Update is consistent with the way things are done in this district or charter school.

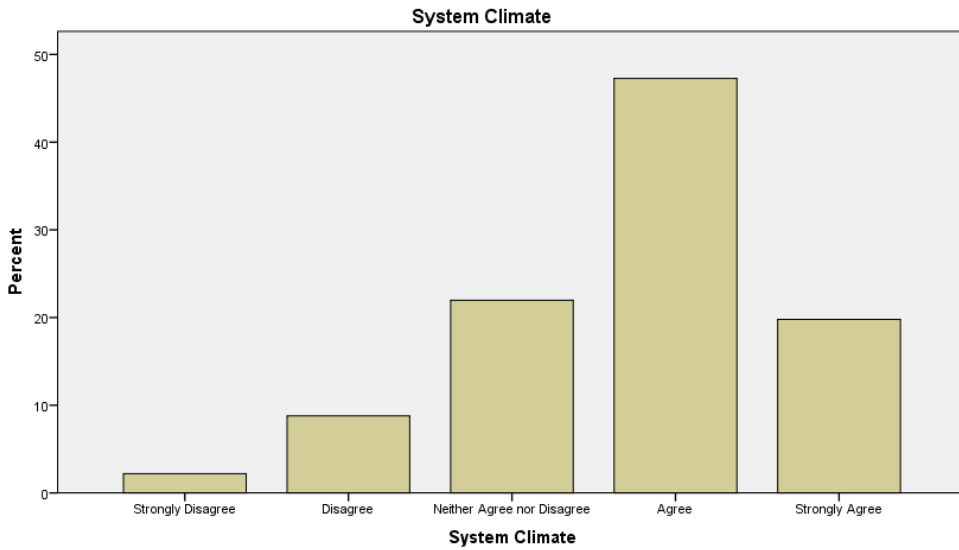


Figure 29. February Meeting LEASA-U System Climate Item.

Item: I have the necessary resources and support to engage in the process and complete the LEA Self-Assessment update.

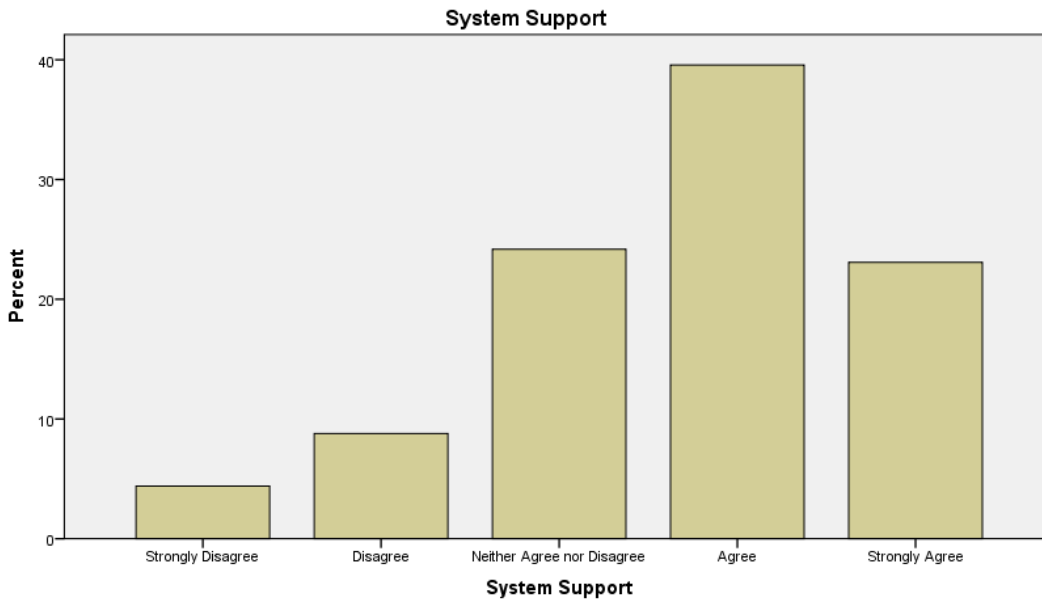


Figure 30. February Meeting LEASA-U System Support Item.

From a usability standpoint, these data lend evidence that the LEASA-U will generally be used in a context in which internal (acceptability and understanding) and external factors (system climate and system support) will facilitate the use of the tool. 5% or less of respondents indicated disagreement related to internal factors (acceptability and understanding) and approximately 13% of districts indicated disagreement related external factors (system climate and system support). When respondents indicated disagreement, they had an opportunity to provide qualitative feedback describing the greatest barriers they faced in completing the tool and the types of support that they would consider most effective. Through frequency analysis of the qualitative data, the greatest barriers described by EC directors and charter school coordinators was the timely access to fidelity and outcome data to effectively engage in the plan, do, study, act improvement process. As a result, future webinars, meetings, and technical assistance opportunities will describe accessible data sets from which to study the implementation process.

e. How data support planned modifications to intended outcomes (including the SIMR) and rationale for how data support that the SSIP is on the right path

As indicated throughout the longitudinal analysis, the outputs and short-term outcomes of the logic model are generally being met within expected timelines, supporting the overarching theory of action. Notably, the data reveal that the ECD has developed the capacity and infrastructure to adequately provide professional learning and technical assistance for the LEASA and improvement process, the NC SIP Reading and Math Foundations professional learning, PBIS, and SEFEL. The ECD is currently developing the capacity to support the continuum of transitions tool. As a result of this support, relatively high levels of fidelity are being reached for the completion of the LEASA tool, model instructional programs, schoolwide PBIS implementation, and SEFEL implementation. Subsequently, longitudinal data trends show increases in graduation rate for students with disabilities, increases in students with disabilities' proficiency in reading and mathematics, and decreases in-school and out-of-school suspensions. The strong support for achievement of the intended outputs and the current trends in short-term outcomes lend credence and justification to continue on the same path.

3. Stakeholders involvement in the SSIP evaluation

a. How stakeholders have been informed of the ongoing evaluation of SSIP

The ECD has informed stakeholders (within and outside of the agency) of the ongoing evaluation in multiple ways. As indicated previously, the structure of the SSIP team includes representation of both ECD staff and a wide range of stakeholders. The SSIP internal team meets monthly with a consistent agenda item related to the ongoing evaluation of the project. Updates on analyses conducted and their implications on the work moving forward have become ingrained and expected practices for the meetings. The SSIP meetings provide an opportunity for key stakeholder involved with the implementation of the evidence-based practices to describe the data sources they have access to as well as suggest the types of analysis that would be most conducive to answering the desired evaluation questions.

b. How stakeholders have had a voice in the evaluation process

As described in the Phase II report, stakeholders shared their voice during the development of the evaluation plan in Phase II. The broad components of the evaluation plan have been adhered to (e.g., the theory of action and the components of the logic model). In addition, these components are aligned to the needs of the broad SSIP evaluation process, as well as evaluation of the coherent improvement strategy and specific evidence-based interventions. This evaluation framework has facilitated discussion of the implication of various evaluation metrics from a broad and narrow focus, providing multiple avenues for sharing feedback. For example, the SSIP meetings typically spark feedback concerning the examination of state-wide implementation of the LEASA, while disaggregated data associated with the implementation of evidence-based practices lends itself to feedback offered through regional and sectional meetings. In addition, the broad evaluation plan has been shared in various venues (e.g., EC Conference Town Hall Meeting and National Center for Systemic Improvement meetings) that have allowed for feedback and subsequent refinement of the evaluation process.

D. Data Quality Issues

1. Data limitations that affected reports of progress in implementing the SSIP and achieving the SIMR due to quality of the evaluation data

a. Concerns or limitations related to the quality or quantity of the data used to report progress or results

The predominant issue related to data quality is in regard to the behavioral outcome information. With the state-wide conversion to the PowerSchool data information system, the ability to maintain archival, accurate information pertaining to disciplinary actions and incident involvement has been difficult. The complexities of the information captured when an incident occurs, coupled with a lack of flexibility in the PowerSchool system have made longitudinal recovery of data problematic. As such, all new disciplinary/behavioral outcome data was obtained for the 2013-14 through the 2015-16 school years. Thus, models and data originally explored in the initial NCSSIP baseline report were replaced using the latest, most accurate information supplied by NCDPI.

b. Implications for assessing progress or results

Due to the issues described above, the current discipline information is available at the student level while enrollment (the number of days enrolled in a school) is only available at the LEA level. The implication for this was that it was impossible to calculate aggregate days of enrollment could by student subgroups of interest (e.g., SWD, Economically Disadvantaged, etc.). As of now, only overall LEA-level information is available. CEME staff will continue to work with NCDPI staff and the CEDARS system to identify a way to capture more nuanced data.

c. Plan for improving data quality

As indicated previously, a Request for Proposals (RFP) outlining an Exceptional Children Accountability Tracking System (ECATS) was finalized in February 2017. ECATS will have the capacity to seamlessly integrate data sources, including those that are aligned to both fidelity (e.g., School-Wide Evaluation Tool, the Tiered Fidelity Inventory, the Teaching Pyramid Observation Tool, and NC SIP instructional fidelity checks) and outcome data (e.g., Office Disciplinary Reports, suspension data, attendance, child outcome summaries, teacher content knowledge, and progress monitoring data). That said, the authoritative data

source for some ECATs data will be PowerSchool. As a result, we are in discussion with the vendors to ensure data are available in the necessary formats for SSIP evaluation.

E. Progress Toward Achieving Intended Improvements

1. Assessment of progress toward achieving intended improvement

a. Infrastructure changes that support SSIP initiatives, including how system changes support achievement of the SIMR, sustainability, and scale-up

During Phase II, regional teaming structures were developed and implemented that have persisted into Phase III. Primarily, ECD staff are now collaborating not only in sections organized by focus of work, but also by the regions of the state they are serving. In addition, the data from the LEASA process are able to provide operationalized guidance as to the greatest needs of the region in the provision of high quality special education services. This infrastructure has several distinct advantages that support sustainability over time and the scaling up of critical components of evidence-based practices across sites. First, these systematic teaming structures facilitate bi-directional information flows between the SSIP team, sections, regional teams, and LEAs. Second, the use of self-assessment data has proven to be a more reliable way to conceptualize and implement universal and tiered supports to districts. As opposed to a system that typically relied upon LEA requests for professional learning, the new process is evolving to result in systematic analysis of need, selection of evidence-based practice, intentional professional learning opportunities to develop LEA capacity, and evaluation.

An additional infrastructure focus has been removing barriers to nimbly accessing data sources. While data from NCDPI Accountability and basic EC data could be compiled at the state and local levels, disaggregating data in all the ways needed for decision-making was a tedious and time-consuming process. To address these data needs, the Exceptional Children Accountability Tracking System (ECATS) will drastically improve the ease and capability to produce reports and improve data accessibility. In addition, ECATS will also house data collection from universal screening and progress monitoring tools being developed for statewide use and norming in conjunction with the MTSS initiative. By the fall of 2017-2018, LEAS will have free access to validated tools for screening and progress monitoring in reading and mathematics that should continue to augment the implementation and evaluation of SSIP evidence-based practices.

Moreover, because students with disabilities are general education students first (and many receive the majority of instruction in the general education setting), the initiatives and improvement plans across the agency impact students with disabilities as well as their general education peers. In recognition of this, the

ECD has intentionally worked across divisions in the agency to promote alignment. One notable example is in regard to the universal work associated with the provision of specially-designed instruction (SDI) within a Multi-Tier System of Support (MTSS). This work is bringing together individuals across the agency to tackle the challenges of developing seamless tiered systems of support that includes the provision of SDI throughout the framework.

Finally, a fundamental shift has occurred with the RDA work specific to developing implementation capacity within the LEAs. The State Implementation Team (SIT) has produced guidance documents and tools to support critical implementation activities across stages of implementation, with the expectation that these activities become common practice across the agency and within districts. Most notably, professional learning that is offered through the ECD is designed and delivered with the intent to develop and sustain the LEA's capacity to provide the training to its staff, measure the transfer of training with reliable fidelity measures, provide job-embedded follow up, and engage in critical evaluation activities.

b. Evidence that SSIP's evidence-based practices are being carried out with fidelity and having the desired effects

The first significant piece of evidence suggesting that SSIP's practices are being carried out was the completion of the LEA Self-Assessments over the summer of 2016. Having all LEAs and charter schools engaging in Self-Assessments to identify target areas for improvement is the main, over-arching practice that has the potential for positively impacting how LEAs implement the evidence-based practices. The evaluation data reveal that the ECD has the capacity to support this process with fidelity and that the LEAs find the utility of the process and connect it to improvement planning.

In addition, this evaluation report has provided data suggesting high fidelity of evidence-based practices including:

- High levels of fidelity for Reading and Math Foundations instructional implementation by teachers
- High levels of fidelity for School-wide PBIS
- Substantial longitudinal increases in NC SEFEL training outcomes such as the percent of LEAs providing training modules and the percent of LEAs attending training
- High levels of SEFEL implementation by teachers

c. Outcomes regarding progress toward short-term and long-term objectives that are necessary steps toward achieving the SIMR

Table 10. Progress toward key outcomes

Domain	Key Outcome Comparisons to Baseline
Graduation	<ul style="list-style-type: none"> • The SWD five-year CGR rate exceeded the 2015-16 target, and the rate was higher in 2015-16 than it was in the three previous years
Academics	<ul style="list-style-type: none"> • High rates of fidelity for model reading and math instruction • The SWD subgroup attained a higher level of proficiency in reading and mathematics (3-8) • Association between fidelity of math instruction and student proficiency
Behavior	<ul style="list-style-type: none"> • High rates of fidelity for School-wide PBIS implementation • High rates of fidelity for SEFEL implementation • Overall, in-school, long-term out-of-school, and out-of-school (1-10 days) suspensions decreased slightly in 2015-16 compared to 2014-15. • Association between fidelity of PBIS and out-of-school suspensions
Transition	<ul style="list-style-type: none"> • Indicator 7 metrics A1, B1 and C1 were met • Indicator 11 LEA rates were stable, but greater than 96% in each year • Indicator 12 LEA rates were stable, but greater than 97% in each year. • An increase in the number of LEAs reaching the Indicator 14 targets in the baseline year (as there is a 1-year reporting lag).

d. Measureable improvement in the SIMR relation to targets

A review of the graphs related to the five-Year Cohort Graduation Rates shows a positive trend in graduation rates across all subgroups, including SWD students, with rates currently surpassing previously-established targets. The most recent rates from 2015-16 have continued a trend over the last several years where rates have steadily increased. The long-term trends cannot be ignored as a currently positive indicator for the attainment of SIMR targets.

F. Plans for Next Year

1. Additional Activities to be implemented next year, with timelines

In addition to sustaining the implementation of the evidence-based practices described in this report, there are two primary activities that will begin next year. The first of these includes the installation of the tool to support a continuum of transitions. A broad timeline with key implementation activities for this work includes:

- May 2017 - June 2017: Review and finalize complete grade band sections of tool: Pre-K; K-3; 4-5; 6-8; 9-12
- May 2017 - June 2017: Develop Stakeholder Usability Training Session
- July 2017: Convene Stakeholder Usability Session
- August 2017 - May 2018: Engage in Usability Testing with Stakeholders
- August 2017 – May 2018: Refine professional learning for implementation
- August 2017 – May 2018: Develop and validate fidelity tools
- August 2018 – May 2019: Provide professional learning at Regional Meetings
- August 2018 – May 2019: Develop coaching modules & follow-up supports

In addition to the continuum of transition tool, the ECD is also planning for the review, analysis, and response to the LEASA-Update data. As described previously, the intent of this planning is to ensure efficient and responsive support from the ECD to LEAs through the provision of universal and tiered supports. The plan for this process includes:

- April 2017: Refine and confirm consensus on ECD definitions of tiers of support and technical assistance
- April 2017: Revise the professional learning inventory by section to align to established definitions
- April 2017: Revise the LEASA-Update Revision tool based on the revised professional learning inventory
- May 2017: Receipt of LEASA-Updates
- May 2017: ECD coaching sessions on use of the LEASA-Update Review Tool
- May 2017: Sections schedule universal professional learning for 2017-18 school year
- May 2017 - June 2017: ECD staff review the LEASA-Updates
- June 2017: Analyzed LEASA Update data (and LEASA data for new charter schools) are reviewed by regions and sections
- June 2017: Tailored and Customized supports are planned and scheduled
- June 2017 – May 2018: Universal and tiered support plans support implementation of evidence-based practices

2. Planned evaluation activities including data collection, measures, and expected outcomes

The planned evaluation activities for the following year mirror the activities of the current year. Additional evaluation activities will need to be developed for the implementation of the continuum of transitions tool. Over the course of the year, a fidelity instrument will need to be developed and validated as well as metrics to evaluate the spread of the training across the state. Based on the current evaluation data, the measures related to the coherent improvement strategies and evidence-based practices will remain the same (substituting the LEASA-Update for the LEASA).

3. Anticipated Barriers and steps to address those barriers

The primary barrier for next year includes unforeseen issues with the installation of the ECATS data system. While data are transferred, business rules are developed and implemented, and LEAs are trained on the system – the awkward initial stage of implementation has the potential to compromise the quality and efficiency of data collection in a time limited fashion. To prepare for this, redundant data systems will be used through January of 2018 to ensure data are available and accessible.

4. Supports and Technical Assistance

As the ECD has shifted into Phase III, we have continued to engage with several technical assistance providers and partners:

- Exceptional Children Assistance Center (ECAC), to provide professional learning and improve collection of parent and student information;
- National Technical Assistance Center for Transition (NTACT), as a resource for development of the continuum of transition supports;
- IDEA Data Center (IDC) for review of and feedback on evaluation logic and SSIP plan;
- National Center for Systemic Improvement (NCSI) for Graduation and Results Based Accountability; and
- UNC Charlotte for evaluation planning and support.

These partnerships are expected to continue into Phase III and beyond, and to provide the support needed by the ECD and SEA to effectively serve LEAs. As the evaluation of the project develops and other needs are identified, additional partnerships may be sought.

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