# An Evaluation of Michigan Education Corps Early Learning Corps

ANNUAL EVALUATION REPORT











#### **About the National Science & Service Collaborative**

We believe partnerships between researchers, AmeriCorps programs, and communities can transform research and practice, leading to sustainable, community-driven solutions. We value a broad and inclusive definition of "collaboration" because improving societal outcomes is maximized when the tools of science, expertise of communities, and resources of AmeriCorps are deployed in a truly collaborative way.

The Center's portfolio includes projects to evaluate the impact of AmeriCorps programming, projects to advance the existing knowledge base in education, and development projects to bring new and innovative programming to communities across the nation.

https://nssc.serveminnesota.org/



Since 1963, Hope Network has been committed to supporting underserved individuals such as those mental illness, neurological injuries, and developmental disabilities with a recent focus on children through services including literacy intervention, traumainformed care, and residential treatment. Hope Network serves 240 plus communities, with 2,800 staff members, and more than 23,000 people annually throughout Michigan.

#### **Authors**

Holly Windram, PhD, Executive Director, Hope Network's Michigan Education Corps Patrick Kaiser, Director of Education Evaluation, ServeMinnesota David Parker, PhD, Vice President of Research and Development, ServeMinnesota

## **Table of Contents**

About the National Science & Service Collaborative	2
Executive Summary	4
Introduction	7
Early Learning Corps Overview	7
Overview of the Evaluation	8
1. What is the scope of the MEC ELC program?	9
Sites and Supports	9
Students Served	10
2. To what extent was the Early Learning Corps program implemented as intended?	12
Coaching Observations	12
Tutor Fidelity	13
Tutor Caseloads	13
Student Dosage	14
3. To what extent did participating students improve their early literacy and numerac skills?	•
Measures of Early Literacy and Numeracy	15
Student Performance	16
Tutor Perception of Student Performance	18
4. How did serving as a tutor impact their skills and knowledge related to education their future career goals?	
Service Experience	19
Skill Development and Future Careers	20
5.Additional information for MDE	21
References	24
Appendix A: Assessment Measures and Procedures	25
Appendix B: Assessment Research Base	27
Appendix C: Intervention Research Base	28
Appendix D: MEC ELC Internal Coach Empower Hour and All Trainings	31

## **Executive Summary**

Early Learning Corps is an AmeriCorps program that provides Prekindergarten (PreK) sites with trained Interventionists (also referred to as tutors or members) to support the literacy and numeracy development of children ages three to five. Early Learning Corps tutors are embedded into a PreK classroom to collaborate with teaching staff to implement literacy and numeracy-rich practices for all students. Tutors are trained to implement evidence-based class-wide learning activities, targeted small group interventions, and individualized learning opportunities in the preschool classroom. ELC activities are curriculum neutral and do not supplant the preschool curriculum. Tutors are supported by a multi-level coaching model that includes site-based internal coaches and external Coaching Specialists.

The MEC Early Learning Corps evaluation addresses eight broad questions with data collected during the 2023-24 school year.

#### 1. What is the scope of the Early Learning Corps program?

Thirteen Early Learning Corps tutors served a total of 224 students across six sites. White and Black or African American were the largest racial/ethnic categories for participating students.

## 2. To what extent was the Early Learning Corps program implemented as intended?

Early Learning Corps coaches observed tutors administering assessments and delivering interventions throughout the school year. These observations allow for coaches to build on the tutor's formal training and to help tutors improve their implementation of the Early Learning Corps model. The results of the observations show that assessments and interventions were conducted with high levels of mean fidelity (>95% accuracy) and in accordance with their established evidence base.

On average, students received 21 minutes of tutoring per week across 13 weeks. Tutor absences were the most common reasons for missed tutoring sessions.

# 3. To what extent did participating students improve their literacy and numeracy skills?

Tutors administer measures of early literacy and numeracy to develop plans for supporting all students and to select students to receive targeted intervention. The literacy measure corresponds to important early literacy skills including phonemic awareness, phonics, and early vocabulary and language skills while the numeracy measure corresponds to important early numeracy skills including subitizing, object counting, making comparisons, and decomposing and composing numbers.

56% of students met the end-of-year target on the PELI Composite, an overall representation of a student's early literacy and language skills. 75% of students met the end-of-year target on the Early Math Inventory, an overall representation of a student's early numeracy skills. For both measures, a greater percentage of white students met the end-of-year target at spring compared to non-white students.

When asked in a survey about the impact of the program on students, 100% of tutor respondents indicated their service in Early Learning Corps had a positive impact on students and their service increased students' confidence in reading and/or math.

# 4. How did serving as a tutor impact their skills and knowledge related to education and their future career goals?

Of tutors who responded to an end-of-year survey from the evaluation team, 100% indicated Early Learning Corps had a positive impact on them personally, and that their service increased their knowledge and skills related to education. Additionally, 50% of respondents answered that they are likely or very likely to pursue a career in education as a result of their service. These results indicate Early Learning Corps likely makes a noteworthy contribution to the education career pipeline.

5. The MEC will work with participating schools to include aggregate program data in the school improvement planning process and applicable data sets.

Not applicable for ELC implemented in preschool classrooms.

- 6. MEC will work with participating schools to include MEC program data in the school's multi-tiered system of supports (MTSS) implementation and monitoring data sets; and,
- 7. MEC program staff will work with school districts, intermediate school districts, and MDE staff to refine the role of the MEC program within overall MTSS processes.

To respond to these, MEC used survey results and the number of opportunities MEC staff had meetings or discussions with stakeholders specific to the role of MEC within overall MTSS processes. The most direct assessment of these outcomes is through an annual survey sent electronically to all participating school Principals/Administrators, Internal Coaches, and Classroom Teachers. Specific statements asking the degree to which these stakeholders agree ELC is an integral part of the school's/site's multi-tier system of supports are included. Responses are on a Likert scale of Strongly Disagree, Disagree, No Opinion, Agree or Strongly Agree.

Question 1: My site uses Early Learning Corps data to inform and monitor our multi-tier system of supports (MTSS) implementation for reading and/or numeracy.

Of Administrators and Teachers 100% strongly agreed or agreed with this statement.

Of Internal Coaches who responded, 60% strongly agreed or agreed with this statement, and 40% indicated no opinion.

#### Question 2: Early Learning Corps is integrated into our MTSS at my site.

Of Administrators and Teachers 100% strongly agreed or agreed with this statement.

Of Internal Coaches who responded, 60% strongly agreed or agreed with this statement, and 40% indicated no opinion.

There are numerous touchpoints with multiple stakeholders throughout the program year. The individuals involved vary based on the purpose for the meeting; however, the majority of conversations center on student outcomes, ELC fidelity, and how ELC is being integrated in a sites overall MTSS literacy framework.

8. MEC will provide a statement of work, which includes a timeline of the project, a budget summary, and a budget detail for progress monitoring and continuous improvement of program implementation.

These items were provided to Kellie Flaminio, Department Analyst/Early Literacy Grant Coordinator, Office of Educational Supports, on September 8, 2023.

9. MEC will provide trainings for newly identified schools as the programs expand.

Trainings were provided throughout the 2023-2024 program year for all new and returning schools. Please see Appendix D for summary.

### Introduction

#### **Early Learning Corps Overview**

Early Learning Corps (previously called Prek Reading Corps) is an AmeriCorps program that provides Prekindergarten (PreK) sites with trained tutors to support the literacy and numeracy development of children ages three to five. Early Learning Corps tutors are embedded into a PreK classroom to collaborate with teaching staff to implement literacy and numeracy-rich practices for all students. Tutors are trained to implement evidence-based class-wide learning activities, targeted small group interventions, and individualized learning opportunities. Tutors are supported by a multi-level coaching model that includes site-based and external coaches.

The ELC model aligns with Response-to-Intervention (RTI) or Multi-Tier System of Supports (MTSS), which are two descriptions of a framework for delivering education services effectively and efficiently. The key aspects of that alignment include the following:

- Clear literacy targets at each age level
- Benchmark assessment three times a year to identify students eligible for small group or individualized interventions
- Evidence-based interventions
- Frequent progress monitoring during intervention delivery
- High-quality training in program procedures, coaching, and observations to support fidelity of implementation

In an RTI/MTSS framework, data are essential. They are used for screening student eligibility, monitoring student progress towards achieving academic goals (i.e., benchmarks), and ensuring accurate program implementation.

ELC literacy content is focused on intervention in the "Big Five Ideas in Literacy" as identified by the National

Early Literacy Panel<sup>2</sup> including phonological awareness, phonics, fluency, vocabulary, and comprehension. ELC also fosters early numeracy

development including skills like quantity comparison, subitizing, etc.<sup>3</sup>

<sup>3</sup> Watts et al., 2018

<sup>&</sup>lt;sup>1</sup> Burns et al., 2016.

<sup>2 2008</sup> 

#### Overview of the Evaluation

The MEC Early Learning Corps evaluation addresses eight broad questions. The evaluation report is organized around each of these questions using data that are collected throughout the program year and are recorded by the implementers of ELC Program administrators collect data about tutors and sites, including survey responses. Tutors collect data about student dosage and literacy outcomes. Coaches collect specific details about tutor implementation of interventions and assessments. These data are used to answer the following questions:

- 1. What is the scope of the ELC program?
- To what extent was the ELC program implemented as intended?
- 3. To what extent did participating students improve their literacy and numeracy skills?

- 4. How did serving as a tutor impact their skills and knowledge related to education and their future career goals?
- 5. MEC will work with participating schools to include MEC program data in the school's multi-tiered system of supports (MTSS) implementation and monitoring data sets.
- 6. MEC program staff will work with school districts, intermediate school districts, and MDE staff to refine the role of the MEC program within overall MTSS processes.
- 7. MEC will provide a statement of work, which includes a timeline of the project, a budget summary, and a budget detail for progress monitoring and continuous improvement of program implementation.
- 8. MEC will provide trainings for newly identified schools as the programs expand.

## 1. What is the scope of the MEC ELC program?

#### Sites and Supports

MEC ELC partners with PreK sites and schools. MEC ELC program staff and participating sites recruit community members to serve as ELC tutors through AmeriCorps. Tutors commit to serving a set number of hours per week (e.g., fulltime AmeriCorps members commit to complete 1,200 hours of service). Tutors receive a living allowance as well as other benefits and are provided coaching by site staff and a program Coaching Specialist throughout their service term. Upon completion of their service, members receive a Segal AmeriCorps Education Award that can be used to pay education costs at qualified institutions of higher education, for educational training, or to repay qualified student loans.

Table 1 displays the number of participating sites, Coaching Specialists, and tutors that served during the 2023-24 program year.

Table 1. Sites. Coaches, and Tutors

Sites	Coaching Specialists	Tutors*
6	4	13

\*Defined as having entered tutoring minutes for at least one student in the program data management system.

ELC tutors receive training through an online Learning Management System (LMS). The intensive, information-filled courses on the LMS provide foundational training in the research-based interventions employed by Early Learning Corps. Throughout the courses,

tutors learn the skills, knowledge, and tools needed to serve as interventionists and support class-wide instruction. Tutors are provided with detailed manuals as well as online resources that mirror and supplement the contents of the manual (e.g., videos of model interventions and best practices). Both the manuals and online resources are intended to provide tutors with just-in-time support and opportunities for continued professional development and skill refinement. Additional training is provided throughout the tutors' year of service.

In addition to extensive training, ELC Corps provides tutors with multiple layers of supervision to ensure integrity of program implementation. First, sites or districts identify a staff member, who is typically a literacy specialist, site coordinator, or early childhood specialist, to be the Internal Coach: an immediate on-site supervisor, mentor, and advocate for tutors. The Internal Coach's role is to monitor tutors and provide guidance in the implementation of ELC assessments and interventions. As the front-line supervisor, the Internal Coach is a critical component of the supervisory structure.

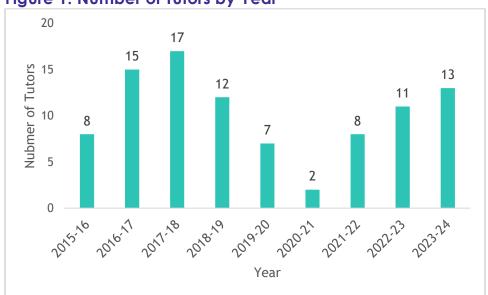
Coaching Specialists are MEC staff providing both tutors and Internal Coaches with expert support on program literacy and numeracy instruction, and ensure implementation integrity of ELC program elements. In addition to these two coaching layers, a third layer consisting of MEC AmeriCorps program support helps ensure a

successful year of AmeriCorps service. These are MEC staff who provide administrative oversight for program implementation to ELC sites.

The number of tutors serving varies by program year based on a number of

factors including tutor recruitment, tutor types (i.e. full-time or part-time tutors), site interest, tutor retention, and available public and private funding. Figure 1 displays the number of ELC tutors who served each year with MEC.

Figure 1. Number of Tutors by Year



#### **Students Served**

All students in a classroom with an MEC ELC tutor are served by the program through Tier 1 class-wide interventions and general educational support. These do not supplant core instruction.

Table 2 displays the number of students served by age across all sites. A student's age category is determined by their age at the beginning of the school year. Students are categorized by age as it generally coincides with the number of school years until the student will enroll in Kindergarten and is used to set benchmark targets (i.e. Age 3 students are usually two years from starting Kindergarten and Age 4 students are usually one year from starting Kindergarten).

Table 2. Number of Students Served

Age	Number of Students
Age 3	39
Age 4	185
Total	224

The number of students served varies by program year based on many factors including tutor recruitment and retention, the number of sites interested in the program, and whether tutors are serving one group of students in full-day five-day per week classrooms or multiple groups of students such as separate morning and afternoon half-day classrooms. Figure 2 displays the number of students served each year. Note the

number of students served in 2019-2022, were significantly impacted by the COVID-19 pandemic.

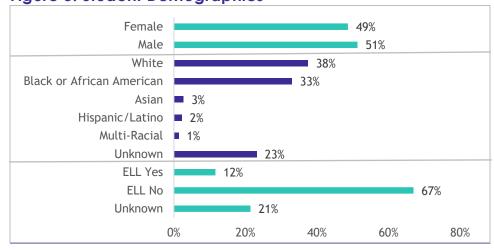
Figure 2. Number of Students Served by Year



Early Learning Corps tutors record demographic information of students served, which allows evaluators to disaggregate student outputs and outcomes by important demographics to ensure the program is having an equitable impact. The information is also

used in various reports to describe the students participating in the program. Figure 3 shows White and Black or African American students were the largest racial/ethnic groups, and 10% of students were English Learners.

Figure 3. Student Demographics



## 2. To what extent was the Early Learning Corps program implemented as intended?

#### **Coaching Observations**

Ensuring accurate, effective implementation is a core principle of ELC. Both types of coaches—Internal Coaches and Coaching Specialists—provide tutors with expert support on literacy and numeracy instruction and ensure implementation integrity of ELC program elements through ongoing monitoring and observation.

During coaching sessions ELC Coaching Specialists and Internal Coaches discuss student selection for targeted tutoring, track student progress for databased decisions, and observe tutors administering assessments and delivering interventions. The observations allow coaches to build on a tutor's formal training and to help tutors improve their implementation of the ELC model. Coaches are expected to observe tutors administering each assessment throughout the year to ensure seasonal benchmark data are

collected accurately. These observations occur before each seasonal benchmark window or prior to baseline. Coaches are also expected to observe tutors delivering interventions at least once per month to ensure fidelity to each intervention's effective instructional processes. Table 3 displays the percent of Coaching Specialists and Internal Coaches who observed tutors administering assessments and delivering interventions during the school year. The table also shows the percentage of coaches who met the program's expectation for observations throughout the school year.

Coaching Specialists observed each tutor administering assessments and delivering intervention at least once, and most tutors were observed consistently throughout the year. Internal Coaches provided less consistent observations to some tutors.

Table 3. Assessment and Intervention Coaching Observations by Coach Role

Observation Type	Coaching Specialist		Coaching Specialist Internal Coac		al Coach
	Percent of Tutors Observed at Least Once	Percent of Tutors Observed in Accordance with Expectations*	Percent of Tutors Observed at Least Once	Percent of Tutors Observed in Accordance with Expectations*	
Assessment	100%	92%			
Intervention	92%	77%	69%	54%	

Note: Table includes tutors that served for a minimum of two months.

<sup>\*</sup>Coaches are expected to conduct assessment observations before each benchmark window and intervention observations each month.

#### **Tutor Fidelity**

During coaching sessions, coaches complete a fidelity checklist for each assessment or intervention they observe. Each checklist includes the important steps for accurate completion such as starting the timer immediately when child says the first word or letter during an assessment or the tutor using appropriate pacing during a vocabulary intervention. After completing each assessment or intervention fidelity observation, coaches enter the number of checklist items that the tutor delivered correctly into the online data management system. The percent fidelity is then calculated by dividing the number of items delivered correctly by the total number of items.

If tutors do not properly administer an assessment, coaches will provide targeted training and observe the tutor Tutors administer benchmark assessments in literacy and numeracy to identify students who are eligible for targeted tutoring. The tutor then works with their coaches to select which students will be tutored, called the tutor's "caseload." Each tutor is expected to have at least seven students on their caseload at any given time.

delivering the assessment again.
Ongoing observation and coaching continue until the tutor achieves at least 90% accuracy. This process helps to ensure assessment data are properly collected and that the results accurately measure each student's skills. Table 4 displays the total number of fidelity checks completed and the average fidelity from assessment and intervention observations.

Table 4. Assessment and Intervention Fidelity

Fidelity Type	Total Checks Collected	Average Fidelity
Assessment	242	98%
Intervention	129	97%
Total	371	98%

#### **Tutor Caseloads**

Table 5 shows the average number of students tutored per tutor and the percentage of tutors who met or exceeded their caseload expectations for at least 80% of the weeks they served in the program. On average, each tutor provided targeted tutoring to a total of 9 students, and 69% of tutors met the caseload expectation of seven students at least 80% of the time.

Table 5. Tutor Caseloads

Number of Tutors	Average Total Students Tutored per Tutor	Percentage of Tutors Meeting Caseload Expectation*
13	8.9	69%

<sup>\*</sup>Defined as actively tutoring seven or more students for at least 80% of their service term.

#### **Student Dosage**

Tutors serve students on their caseload in the preschool classroom every day for 5-15 minutes, depending on the intervention. Interventions focus on one of the program's targeted skills: vocabulary and oral language, phonological awareness, alphabet knowledge, or early numeracy. Tutoring can be delivered in small groups, pairs, or one-to-one. Tutors record each

student's daily minutes in the online data management system.

Table 6 shows the total number of tutoring sessions and the average number of sessions, weeks, and minutes per week students received. Students received a substantial number of tutoring sessions, with students averaging 36 sessions. White students tended to receive both more tutoring sessions than non-white students.

Table 6. Tutoring Dosage by Race

Student Race	Students Tutored	Total Tutoring Sessions	Average Tutoring Sessions per Student	Average Tutoring Weeks per Student	Average Tutoring Minutes per Week per Student
White	52	2,621	50.4	16.4	21.5
Non-White	52	1,354	26.0	10.3	21.4
Total	118	4,190	35.5	12.6	21.1

Note: The subtotals do not equal the totals as they exclude students with an Unknown race/ethnicity in the program database.

In addition to recording the number of tutoring minutes, tutors also record the reason a scheduled tutoring session was not delivered. Tutors are able to indicate if a session was missed for each of the following reasons: student absence from the site, tutor absence from the site, tutor absence from the site, tutor receiving training, tutor administering an assessment to the student instead of delivering an intervention, or other for any reason not provided.

Table 7 displays the percentage of days tutoring sessions were delivered along with the rate of each missed tutoring session reason for all students. The table also disaggregates the data for white and non-white students. Student and tutor absences were the most common reasons for missed sessions. White students had a greater percentage of sessions delivered than non-white students, with tutor absences having the greatest difference between the two groups.

Table 7. Tutorina Attendance by Race

Student Race	Session Attended	Tutor Absent	Student Absent	Assessing Student	Tutor Training	Other
White	79%	8%	8%	2%	0%	3%
Non-White	54%	24%	12%	6%	1%	3%
Total	64%	17%	10%	4%	0%	3%

Early Learning Corps tracks tutoring attendance for each student throughout the school year using a 'percent tutoring' metric. A student's percent tutoring is equal to the number of tutoring sessions delivered divided by the number of days tutoring was scheduled to happen (i.e. the metric ignores non-school days) The program also tracks a tutor's percent tutoring by combining all of their individual student's percent tutoring into a tutor average.

The program strives for each student and tutor to achieve at least 80% tutoring. Tutors falling below this target are provided extra support to improve the frequency of tutoring delivery.

Figure 5 displays the distribution of students by their percent tutoring range. 50% students received tutoring 60% or less of their scheduled days, indicating a growth opportunity for the program.

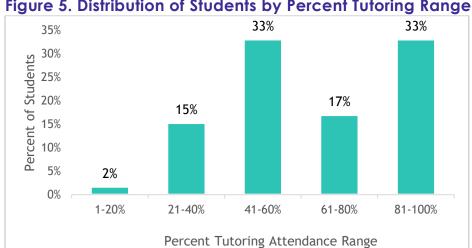


Figure 5. Distribution of Students by Percent Tutoring Range

## 3. To what extent did participating students improve their literacy and numeracy skills?

#### Measures of Early Literacy and Numeracy

Data for academic outcomes are reported from student performance on measures of early literacy and numeracy. The literacy measure corresponds to important early literacy skills including phonemic awareness, phonics, and early vocabulary and language skills. The numeracy measure corresponds to important early

numeracy skills including subitizing, object counting, making comparisons, and decomposing and composing numbers. The specific measures are listed below:

The Preschool Early Literacy Indicators (PELI)

- Vocabulary and Oral Language
- o Comprehension
- o Phonological Awareness
- Alphabet Knowledge
- Early Math Inventory (EMI)

The PELI 4measures are also combined into two composite scores: the PELI Language Index, which is a combined score that includes the Vocabulary-Oral Language and Comprehension subtests, and the PELI Composite Score, which is a combination of all of the PELI subtest scores and provides the best estimate of overall early literacy performance. Tutors individually administer the measures to all students in their classroom during each screening period or "benchmark window" (fall, winter, and spring). Student scores are then compared to research-based seasonal targets that serve as predictors of performance on future Kindergarten assessments. Students, teachers, and coaches use the benchmark scores to develop plans for supporting all students and for selecting students to receive targeted intervention.

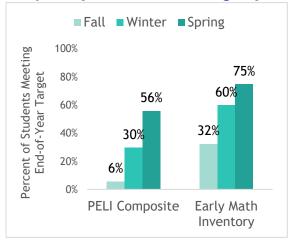
See Appendix A for further information regarding the timing of data collection and target scores indicating proficiency; see Appendix B for the research base for these assessments.

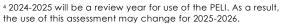
#### **Student Performance**

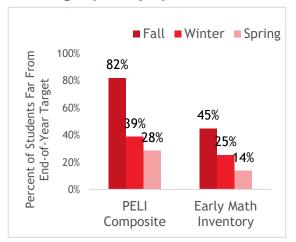
For each measure, student scores can be compared to either the seasonal target (PELI only) or the end of year spring target. Based on the scores and targets used, students are classified as being at or above target ("in the green"), close to target ("in the yellow"), or far from target ("in the red").

Figure 6 shows the percentage of students who met the end-of-year target for each benchmark season on the PELI Composite and the Early Math Inventory (left panel) and the percentage of students who were far from the end-of-year target on these measures (right panel). At the end of the year, 56% of students met the PELI Composite target and 75% met the Early Math Inventory target. The percentage of students scoring far from the target substantially decreased for both measures from fall to spring.

Figure 6. Percentage of Students Meeting End-of-Year Target ("in the Green" – left panel) and Far from Target ("in the Red" – right panel) by Season





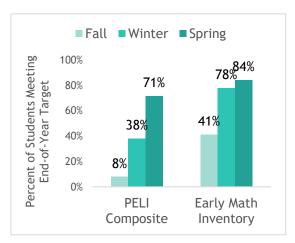


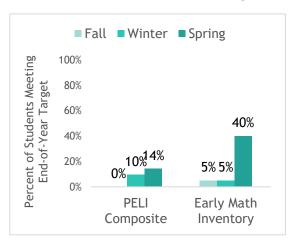
Note: Data displayed for students with assessment scores in all three windows.

Figure 7 disaggregates the above "meeting target" outcome data into white and non-white students in order to better understand program impact across key demographic considerations. For both the PELI Composite and Early Math Inventory, a greater percentage of white students met the end-of-year target at spring compared to non-white students. The differences between the two groups was 57 percentage points on the PELI Composite and 44 percentage

points on the Early Math Inventory. Rigorous comparative research shows that students from various backgrounds make marked improvements during Early Learning Corps tutoring, as compared to randomly identified peers who do not access the program (Markovitz, et al., 2015), but Figure 7 highlights a need to ensure students across demographic backgrounds benefit to the greatest possible extent.

Figure 7. Percentage of Students Meeting End-of-Year Target ("in the Green") by Season for White Students (left panel) and Non-White Students (right panel)



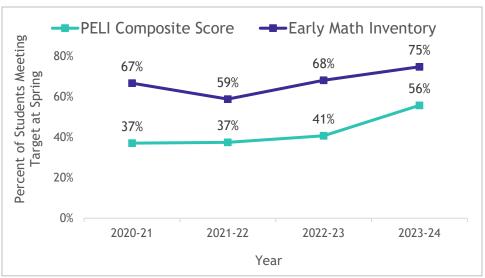


Note: Data displayed for students with assessment scores in all three windows.

Comparing the percentage of students meeting the spring target across program years is an effective way to track overall program effectiveness and identify potential needs for program improvement. Figure 8 displays the percentage of students meeting the

spring target on the PELI Composite Score and Early Math Inventory for the previous four years. The percentage of students meeting the spring target in 2023-24 was greater than each of the three previous years for both measures.

Figure 8. Percentage of Students Meeting Target ("in the Green") at Spring, by Year



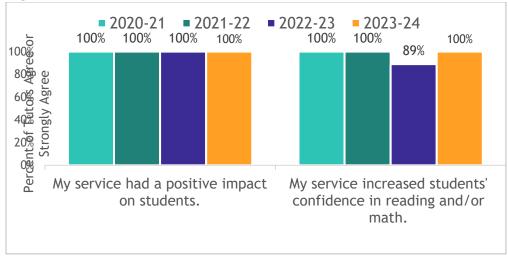
Note: Use caution when comparing outcome data across years as the program was significantly disrupted by the COVID-19 pandemic.

# Tutor Perception of Student Performance

In the spring of each program year, Early Learning Corps evaluators distribute an online survey to tutors. The survey asks a wide-range of questions regarding their service in Early Learning Corps and potential impact of the program.

Figure 9 displays the percentage of tutors who indicated they agreed or strongly agreed that their service in Early Learning Corps had a positive impact on students and increased students' confidence in reading and/or math. The results from these survey questions are presented for each of the previous four program years. The survey results are notably positive with 100% of respondents in 2023-24 indicating their service in Early Learning Corps had a positive impact on students and 100% of respondents indicating their service increased students' confidence in reading and/or math

Figure 9. Tutor Survey Results on Student Impact



# 4. How did serving as a tutor impact their skills and knowledge related to education and their future career goals?

While supporting student literacy and numeracy growth is the primary goal for the program, Early Learning Corps also strives to provide tutors with an overall positive experience and prepare them for any future career they might pursue, especially careers in the education field. As previously described, Early Learning Corps evaluators distribute a survey to tutors in the spring of each program year. The survey asks tutors a series of questions on their experience in Early Learning Corps and the impact the program had on them, their students, and their school. Survey results are also used to evaluate the program's impact on the tutors themselves.

#### Service Experience

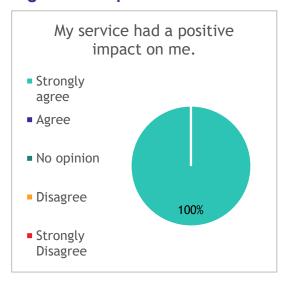
A common practice in surveys is to ask the respondent if they would recommend the program to others, as one's willingness or unwillingness to recommend encompasses the overall experience of serving.

Figure 10 shows that 83% of tutors would definitely recommend serving as a member of Early Learning Corps, with another 17% saying they would probably recommend serving. The survey also asked tutors if serving in Early Learning Corps had a positive impact on them personally. Figure 11 shows that 100% of tutors agree or strongly agree service had a positive impact on them, demonstrating the positive personal impact of serving.

Figure 10. Tutor Satisfaction



Figure 11. Impact on Tutors



# Skill Development and Future Careers

Early Learning Corps strives to support tutor professional development through the training, coaching, service experience, and other professional development support provided by the program. In particular, Early Learning Corps aims to increase the teacher and school staff pipeline in communities through its tutors pursuing careers in education after their service. To evaluate these outcomes in the short term, the spring survey asks tutors to respond to questions related to their increased knowledge and skills as well as any potential plans to pursue a career in education.

# Figure 12. Tutor Increased Knowledge and Skills

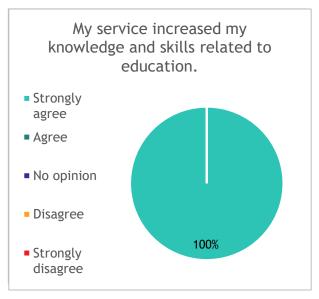
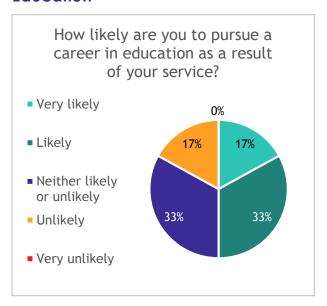


Figure 12 shows that 100% of respondents agree or strongly agree that their service increased their knowledge and skills related to education, demonstrating the program is having a positive impact on tutors in this area. Figure 13 displays tutor responses related to the likelihood they will pursue a career in education as a result of their service in Early Learning Corps. 17% of respondents answered that they are very likely to pursue a career in education as a result of their service and 33% responded that they are likely to do so.

Figure 13. Tutors Pursuing Careers in Education



MEC will work with participating schools to include aggregate program data in the school improvement planning process and applicable data sets.

This is not applicable for preschool programming.

MEC will work with participating schools to include MEC program data in the school's multi-tiered system of supports (MTSS) implementation and monitoring data sets; and, MEC program staff will work with school districts, intermediate school districts, and MDE staff to refine the role of the MEC program within overall MTSS processes.

To respond to these, MEC used survey results and the number of opportunities MEC staff had meetings or discussions with stakeholders specific to the role of MEC within overall MTSS processes.

#### **Survey Results**

The most direct assessment of this outcome is through the annual survey. The annual survey is sent electronically to all school Principals/Administrators, Internal Coaches, and Classroom Teachers who have students who participated in ELC. The survey includes specific statements asking the degree to which these stakeholders agree MEC ELC is an integral part of the school's MTSS. Responses are on a Likert scale of Strongly Disagree, Disagree, No Opinion Agree or Strongly Agree.

## Question 1: My site uses Early Learning Corps data to inform and monitor our multi-tier system of supports (MTSS) implementation for reading and/or numeracy.

Of Administrators and Teachers 100% strongly agreed or agreed with this statement.

Of Internal Coaches who responded, 60% strongly agreed or agreed with this statement, and 40% indicated no opinion.

#### Question 2: Early Learning Corps is integrated into our MTSS at my site.

Of Administrators and Teachers 100% strongly agreed or agreed with this statement.

Of Internal Coaches who responded, 60% strongly agreed or agreed with this statement, and 40% indicated no opinion.

We are quite pleased to see that Administrators and Teachers are well aligned in their responses, and that sites are using data for making decisions. While there's not a significant discrepancy in responses from Internal Coaches, it's interesting that some indicated no opinion given they are most closely involved with MEC program implementation. This may be due to a lack of common language or shared understanding for implementing MTSS in early childhood programming. Interestingly, there appears to be a discrepancy between using the data to inform and monitor aspects of MTSS implementation – presumably tier 2 intervention effectiveness - and MEC ELC being fully integrated into a schools total MTSS framework. For all respondents there was a decrease in agreement with these statements. MEC staff will need to continuing working with partner sites to ensure there is clear, shared understanding on what a comprehensive definition of MTSS implementation fully entails in which data use is a necessary but not sufficient for full MTSS implementation.

#### **Coaching Sessions & Other Touchpoints**

There are numerous touchpoints with multiple stakeholders throughout the program year. The individuals involved vary based on the purpose for the meeting; however, the majority of conversations center on student outcomes, ELC fidelity, and integrating ELC to supplement core curricula. For example, Coaching Specialists and Internal Coaches meet with MEC Interventionists about every six weeks to review each progress-monitoring graph for students receiving a small group or individual intervention in the classroom. They identify strengths and concerns, analyze the reasons for success or lack thereof, develop a plan (may include maintaining the intervention, making an intervention change, or adding an additional intervention), discuss fidelity data, and determine a timeline for next steps. This process is referred to as problem-solving. Further, coaches discuss the impact of core literacy and numeracy instruction on all students. Coaches also discuss factors impacting ELC progress such as attendance and behavior, which may require different, additional intervention.

MEC program staff provide summary progress reports with in-person meetings specifically targeted to school Principals/Administrators to better engage them in program effectiveness within their MTSS literacy frameworks in the fall and winter. The reports include program outcomes including Internal Coach involvement, and a SMART goal set in the fall by Coaching Specialists and Internal Coaches for on-going

strengthening of program implementation. Most goals focus on conducting fidelity checks and increasing dosage.

All MEC staff have regularly scheduled, in-person visits to schools occurring multiple times throughout the school year. As a result, there is usually an MEC staff person at the school site at least 1-2 times per month in addition to the ELC Coaching Specialist. Depending on the purpose of the visit, staff connect with the Administrator, the Internal Coach, and tutors. They often observe tutoring.

All tutors are required to have a mid-vear evaluation conducted by the AmeriCorps Program Director or Program Coordinator. This person not only collects detailed survey information from Internal Coaches and Tutors, but also has a lengthy in-person site visit to review the information and discuss any concerns. Tutors also participate in in-person "huddles" with peers and MEC program staff 2-3 times per year.

MEC staff are frequently asked to present to administrative teams, ISDs, and other large audiences who are not current partners but are interested in implementing MEC programs. It is emphasized that ELC is a tier 1 supplement intervention, as well as providing tier 2/3. ELC programming meets the definition of an evidence-based intervention, and supports the implementation of GELN Essential School-wide and Center-wide Practices in Literacy. By starting the conversation of partnership with schools early and emphasizing what ELC does and does not do (e.g., doesn't supplant core instruction), we significantly increase the likelihood of fidelity and effective integration of ELC into site MTSS literacy and numeracy frameworks.

## MEC will provide a statement of work, which includes a timeline of the project, and budget summary, and a budget detail for progress monitoring and continuous improvement of program implementation.

This information was provided to Kellie Flaminio, Department Analyst/Early Literacy Grant Coordinator, Office of Educational Supports, on September 8, 2023.

## MEC will provide trainings for newly identified schools as the programs expand.

Please see Appendix D for MEC ELC Trainings for all participating schools.

### References

Burns, K.M., Jimerson, S.R. VanDerHeyden, A. M., & Deno, S.L., (2016). Toward a unified Response-to-Intervention model: Multi-tiered systems of support. In S.R. Jimerson, M.K.

Burns, & A. VanDerHeyden (Eds.), Handbook of Response to Intervention, 2<sup>nd</sup> Ed. (pp. 719-732). New York: Springer.

Markovitz, C.; Hernandez, M.; Hedberg, E.; Silberglitt, B. (2015). Outcome Evaluation of the Minnesota Reading Corps PreK Program. NORC at the University of Chicago: Chicago, IL

National Early Literacy Panel. (2008). Developing early literacy: Report of the National Early Literacy Panel. Washington, DC: National Institute for Literacy. Available at http://www.nifl.gov/earlychildhood/NELP/ NELPreport.html

Watts, T. W.; Duncan, G. J.; Clements, D. H.; Sarama, J. (2018). What is the long-run impact of learning mathematics during preschool?. *Child Development*, 89(2), 539-555.

# Appendix A: Assessment Measures and Procedures

Students are assessed in all measures during three seasonal benchmark windows. Each assessment tool has empirically derived, criterion-referenced seasonal benchmark goals and cut points for risk that represent adequate early literacy progress for children in preschool. A benchmark goal indicates a level of skill where the child is likely to achieve the next benchmark goal or early literacy outcome. Benchmark goals are based on research that examines the predictive validity of a score on a measure at a particular point in time, compared to later measures and compared to external outcome assessments. If a child achieves a benchmark goal, then the odds are in favor of that child achieving later early literacy outcomes if he/she receives generally effective instructional support and learning opportunities.

The cut points for risk indicate a level of skill below which a child is unlikely to achieve subsequent early literacy goals without receiving additional, targeted instructional support. Children with scores below the cut point for risk are identified as likely to need intensive support. Intensive support refers to interventions that incorporate something more or something different from the core curriculum or supplemental support.

The benchmark goals differ based on student age at the beginning of the school year.

Benchmark Goals and Cut Points for Risk for Age 4 and Age 5

Subtest	Benchmark Goal and Cut Points for Risk	Fall August 15 – September 30	Winter January 2 – February 3	Spring April 24 – May 26
Composite Score	Green Yellow Red	159+ 115-158 0-114	201+ 160-200 0-159	231+ 195-230 0-194
Language Index	Green Yellow Red	114+ 88-113 0-87	132+ 111-131 0-110	143+ 124-142 0-123
Vocabulary/Oral Language	Green Yellow Red	18+ 13-17 0-12	21+ 16-20 0-15	23+ 19-22 0-18
Comprehension	Green Yellow Red	13+ 10-12 0-9	16+ 12-15 0-11	17+ 14-16 0-13
Phonological Awareness	Green Yellow Red	4+ 1-3 0	10+ 4-9 0-3	13+ 9-12 0-8
Alphabet Knowledge	Green Yellow Red	6+ 2-5 0-1	17+ 8-16 0-7	23+ 14-22 0-13
Early Math Inventory	Green Yellow Red	13+ 7-12 0-6	13+ 7-12 0-6	13+ 7-12 0-6

#### Benchmark Goals and Cut Points for Risk for Age 3

Subtest	Benchmark Goal and Cut Points for Risk	Fall August 15 – September 30	Winter January 2 – February 3	Spring April 24 – May 26
Composite Score	Green Yellow Red	68+ 35-67 0-34	101+ 59-100 0-58	128+ 85-127 0-84
Language Index	Green Yellow Red	62+ 33-61 0-32	87+ 50-86 0-49	100+ 59-99 0-58
Vocabulary/Oral Language	Green Yellow Red	8+ 4-7 0-3	12+ 6-11 0-5	14+ 8-13 0-7
Comprehension	Green Yellow Red	6+ 2-5 0-1	10+ 5-9 0-4	11+ 7-10 0-6
Phonological Awareness	Green Yellow Red	- - -	1+ 0 -	2+ 0-1 -
Alphabet Knowledge	Green Yellow Red	1+ O -	3+ 1-2 0	5+ 2-4 0-1
Early Math Inventory	Green Yellow Red	9+ 5-8 0-4	9+ 5-8 0-4	9+ 5-8 0-4

## Appendix B: Assessment Research Base

Assessment tools were selected for use in Early Learning Corps because of their well-established statistical reliability and validity for screening and progress monitoring purposes. The Preschool Early Literacy Indicators (PELI) is designed to identify children who may be experiencing difficulties acquiring early literacy skills and to inform instructional support for those children in order to improve future reading outcomes. The reliability, validity, and decision utility of the PELI have been investigated in a series of studies from 2009 to 2017.

The information that follows summarizes empirical findings related to the statistical reliability and validity of the measures used in Early Learning Corps.

#### **Preschool Early Literacy Indicators:**

- Alternate form reliability of the PELI Composite Score ranges from .85 to .92.
- Alternate form reliability of the PELI subtests ranges from .66 to .95
- Inter-rater reliability of the PELI ranges from .90 to .98.
- Concurrent criterion-related validity of language subtests and the PELI Language Index with the Peabody Picture Vocabulary Test ranges from .62 to .72.
- Concurrent criterion-related validity of Alphabet Knowledge and Phonological Awareness subtests with the Acadience™ Reading K–6 Composite Score (beginning of kindergarten measures administered at the end of Pre-K) ranges from .66 to .74.
- Sensitivity and specificity of the PELI Composite Score end-of-year benchmark goal with the Peabody Picture Vocabulary Test as the criterion measure = .61 and .81 respectively (CA = .74; AUC = .81).
- Sensitivity and specificity of the PELI Composite Score end-of-year benchmark goal with the Acadience Reading Kindergarten beginning-of-year benchmark goal as the criterion are .77 and .88 respectively (CA = .77; AUC = .87)

#### Sources:

• Kaminski, R.A., Abbott, M., Bravo Aguayo, K., Latimer, R., & Good, R.H. (2014). The Preschool Early Literacy Indicators: validity and benchmark goals, Topics in Early Childhood Special Education, 34(2), 71-82.

## **Appendix C: Intervention Research Base**

The interventions used in the Early Learning Corps program are designed to provide additional practice that is supplemental to the core reading instructional program offered by the local school site. The interventions target automaticity and fluency of important reading skills that have been introduced by local classroom teachers. It is important to note that Early Learning Corps participation is in addition to, not in replacement of, a comprehensive core reading instructional program, and that the Early Learning Corps program should in no way be viewed as a substitute for high quality core instruction.

A unique feature of Early Learning Corps is the consistent use of research-based intervention protocols with participating students to provide this additional support. Site-based Internal Coaches select from a menu of research-based supplemental reading interventions for use with participating students as listed below. For each intervention protocol sources of empirical evidence for intervention effectiveness are listed.

#### Letter Sound Identification

- Adams, M.J. (1990). Beginning to read: Thinking and learning about print.
   Cambridge, MA: MIT Press.
- Adams, M.J. (2001). Alphabetic anxiety and explicit, systematic phonics instruction: A cognitive science perspective. In S.B. Neuman & D.K. Dickinson (eds.), Handbook of Early Literacy Research (pp. 66-80). New York: Guilford Press.
- Chard, D.J., & Osborn, J. (1999). Word Recognition: Paving the road to successful reading. Intervention in school and clinic, 34(5), 271-277.

#### **Phonological Awareness Interventions**

- Bus, A. G., & van IJzendoorn, M. H. (1999). Phonological awareness and early reading: A meta-analysis of experimental training studies. Journal of Educational Psychology, 91(3), 403.
- Hatcher, P. J., & Hulme, C. (1999). Phonemes, rhymes, and intelligence as predictors of children's responsiveness to remedial reading instruction: Evidence from a longitudinal intervention study. Journal of experimental child psychology, 72(2), 130-153.

#### Phoneme Blending

- Adams, M.J. (1990). Beginning to read: Thinking and learning about print.
   Cambridge, MA: MIT Press.
- o Bos, C.D., & Vaughn, S. (2002). Strategies for teaching students with learning and behavioral problems (5<sup>th</sup> Ed.). Boston: Allyn & Bacon.

- Ehri, L.C., Nunees, S.R., & Willows, D.M. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. Reading Research Quarterly, 36(3). 250-287.
- Elkonin, D.B. (1973). U.S.S.R. In J. Downing (Ed.), Comparative Reading (pp.551-579). New York: MacMillan.
- National Reading Panel. (2000). Teaching children to read: An evidencebased assessment of the scientific research literature on reading and its implications for reading instruction. Bethesda, MA: National Institutes of Health.
- Santi, K.L., Menchetti, B.M., & Edwards, B.J. (2004). A comparison of eight kindergarten phonemic awareness programs based on empirically validated instructional principals. Remedial and Special Education, Vol 25(3) 189-196.
- o Smith, C.R. (1998). From gibberish to phonemic awareness: Effective decoding instruction. Exceptional Children, Vol 30(6) 20-25.
- Smith, S.B., Simmons, D.C., & Kame'enui, E, J. (1998). Phonological Awareness: Research bases. In D.C. Simmons & E.J. Kame'enui (Eds.), What Reading research tells us about children with diverse learning needs: Bases and basics. Mahwah, NJ: Lawrence Erlbaum Associates.
- o Snider, V. E. (1995). A primer on phonemic awareness: What it is, why it is important, and how to teach it. School Psychology Review, 24, 443–455.

#### Phoneme Segmentation

- Adams, M.J. (1990). Beginning to read: Thinking and learning about print.
   Cambridge, MA: MIT Press.
- o Blachman, B. A. (1991). Early intervention for children's reading problems: Clinical applications of the research on phonological awareness. *Topics in Language Disorders*, 12, 51–65.
- o Bos, C.D., & Vaughn, S. (2002). Strategies for teaching students with learning and behavioral problems (5<sup>th</sup> Ed.). Boston: Allyn & Bacon.
- Ehri, L.C., Nunees, S.R., & Willows, D.M. (2001). Phonemic awareness instruction helps children learn to read: Evidence from the National Reading Panel's meta-analysis. Reading Research Quarterly, 36(3). 250-287.
- National Reading Panel. (2000). Teaching children to read: An evidencebased assessment of the scientific research literature on reading and its implications for reading instruction. Bethesda, MA: National Institutes of Health.
- Santi, K.L., Menchetti, B.M., & Edwards, B.J. (2004). A comparison of eight kindergarten phonemic awareness programs based on empirically validated instructional principals. Remedial and Special Education, Vol 25(3) 189-196.

- o Smith, C.R. (1998). From gibberish to phonemic awareness: Effective decoding instruction. Exceptional Children, Vol 30(6) 20-25.
- Smith, S.B., Simmons, D.C., & Kame'enui, E, J. (1998). Phonological Awareness: Research bases. In D.C. Simmons & E.J. Kame'enui (Eds.), What Reading research tells us about children with diverse learning needs: Bases and basics. Mahwah, NJ: Lawrence Erlbaum Associates.
- o Snider, V. E. (1995). A primer on phonemic awareness: What it is, why it is important, and how to teach it. School Psychology Review, 24, 443–455.

#### Repeated Read Aloud

- Lonigan, C. J., Anthony, J. L., Bloomield, B. G., Dyer, S. M., & Samwel, C. S. (1999). Effects of two shared-reading interventions on emergent literacy skills of at-risk preschoolers. Journal of Early Intervention, 22(4), 306–322.
- Marulis, L. M., & Neuman, S. B. (2010). The Effects of Vocabulary Intervention on Young Children's Word Learning A Meta-Analysis. Review of educational research, 80(3), 300-335.
- McGee, Lea M., & Schickedanz, Judith A. (2007). Repeated interactive readalouds in preschool and kindergarten. The Reading Teacher. 60(8), 742-751.
- Whitehurst, G. J., Arnold, D. S., Epstein, J. N., Angell, A. L., Smith, M., & Fischel, J. E. (1994). A picture book reading intervention in day care and home for children from low-income families. Developmental Psychology, 30(5), 679–689.
- Whitehurst, G. J., Epstein, J. N., Angell, A. L., Payne, A. C., Crone, D. A., & Fischel, J. E. (1994). Outcomes of an emergent literacy intervention in Head Start. Journal of Educational Psychology, 86(4), 542–555.

## **Appendix D: MEC ELC Internal Coach Empower Hour and All Trainings**



## Empower Hour CORPS Monthly Call Calendar **Empower Hour**

Date	Time	Topiqs)*
August 16th and 30th	9:00 AM - 11:00 AM	MEC Kick-off Training and program year expectations
September 20, 2023	7:45 AM – 8:45 AM 3:00 PM - 4:00 PM	Assessment data, intervention selection, teacher buy-in
October 18, 2023	7:45 AM – 8:45 AM 3:00 PM - 4:00 PM	Member support and monthly observations
November 14, 2023** (MEMBERS JOIN CALL)	7:45 AM – 8:45 AM 3:00 PM - 4:00 PM	Looking at data and student growth; barriers
December 2023	NO MEETING	NO MEETING
January 17, 2024	7:45 AM – 8:45 AM 3:00 PM - 4:00 PM	Looking at fidelity and fit
February 21, 2024	7:45 AM – 8:45 AM 3:00 PM - 4:00 PM	Program Alignment
March 20, 2024	7:45 AM – 8:45 AM (only option)	Remaining Diligent
April 2024	NO MEETING	NO MEETING
May 15, 2024 (MEMBERSJOIN CALL)	7:45 AM – 8:45 AM 3:00 PM - 4:00 PM	EOY Wrap-Up

<sup>\*</sup>Topics subject to change

<sup>\*\*</sup>November call will occur on Tuesday, November 14 due to many schools closed on Wednesday, November 15

Dates	ELC Training	
	Cohort 1	
8/14/23	AC Training/SKO/LMS Modules	Zoom/LMS
	Zoom/LMS Modules/in-person social gathering	
	In-person practice day	Radisson Hotel Lansing
	Zoom/LMS Modules	Zoom at school site/LMS
	Zoom/LMS Modules	Zoom at school site/LMS
	Zoom/LMS/Corps Day	Zoom at school site/LMS
8/22/23	Members report to school	School Site
	Cabarra 2	
0/00/00	Cohort 2	7 // 2.40
8/28/23	AC Training/SKO/LMS Modules	Zoom/LMS
9/20/22	Zoom/LMS Modules/in-person social gathering	Zoom / I MS / Padisson Hotal Lansing
	In-person practice day	Radisson Hotel Lansing
	Zoom/LMS Modules	Zoom at school site/LMS
	Zoom/ LMS Modules	Zoom at school site/LMS
	Zoom/LMS/Corps Day	Zoom at school site/LMS
9/6/23	Members report to school	School Site
	Cohort 3	
10/23/23	AC Training/SKO/LMS Modules	Zoom/LMS
10/24/23	Zoom/LMS Modules	Zoom at school site/LMS
	Practice day	School Site
	Zoom/ LMS Modules	Zoom at school site/LMS
	Zoom/LMS/Corps Day	Zoom at school site/LMS
	Zoom/LMS Modules	Zoom at school site/LMS
	Members in classrooms	School Site
	Cohort 4	
1/15/24	AC Training/SKO/LMS Modules	Zoom/LMS
1/16/24	Zoom/LMS Modules	Zoom at school site/LMS
1/17/24	Zoom/LMS Modules	Zoom at school site/LMS
1/18/24	Practice Day at School	School Site
1/19/24	Zoom/LMS/Corps Day	Zoom at school site/LMS
1/22/24	Members in classrooms	School Site