

# An Evaluation of Michigan Education Corps (MEC): Math Corps

ANNUAL EVALUATION REPORT



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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.

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# Executive Summary

MEC Math Corps is an AmeriCorps program that provides schools with Interventionists to support math development for students in Grades 4 through 8. MEC Math Corps Interventionists are trained to provide research-based math support and to administer assessment protocols. MEC Math Corps Interventionists are supported by a multi-level coaching model that includes site-based and external coaches. Full-time Interventionists work with approximately 24 students for 90 each week. Intervention is provided through standard-protocol interventions and is complementary to the core math instruction provided at each school. The ultimate goal of Intervention is to raise individual students' math skills so that they are on track to meet or exceed state math proficiency standards.

## *A Note of Caution for Evaluation Results Interpretation*

It is critical to evaluate this year's MEC Math Corps outcomes with caution. Due to influences resulting from the COVID-19 pandemic, the MEC Math Corps program continued to be delivered with varying dosage and modalities during 2021-2022 across districts and schools. In many districts, Intervention was delayed or not offered when schools closed or students were absent as there was not school-level capacity for support largely due to staffing shortages and staff absence due to illness. Districts and MEC responded as quickly as possible to address these challenges and adapt to maximize service to kids. The continued, intermittent disruptions mean that results from this year must be interpreted with caution when comparing to results from prior years.

The Math Corps evaluation addresses these broad questions and requirements with data collected during the 2021-22 school year.

## **1. What is the scope of MEC Math Corps program?**

There were 23 MEC Math Corps Interventionists who served a total of 603 students across 22 schools. Black or African American and White were the largest racial/ethnic categories for participating students.

## **2. Was MEC Math Corps program implemented as intended?**

MEC Math Corps coaches observed Interventionists delivering interventions throughout the school year. These observations allow for coaches to build on the Interventionist's formal training and to help Interventionists improve their implementation of the MEC Math Corps model. The results of the observations show interventions were conducted with high levels of mean fidelity (>90% accuracy) and in accordance with their established evidence base.

On average, students received 59 minutes of Intervention per week across 15 weeks. White students tended to receive both more Intervention sessions and more minutes of Intervention per week than non-white students.

### **3. To what extent did participating students improve their math skills?**

MEC Math Corps Interventionists administered the STAR Math assessment – a measure of overall math proficiency – to identify eligible students and track student progress during intervention. Interventionists also administered a multi-skill math fluency assessment that includes basic addition, subtraction, multiplication, and division math facts.

Results from STAR Math indicated 44% of students exceeded their target growth. A greater percentage of white students exceeded target growth compared to non-white students. Overall, 73% of students made growth on the Fact Fluency measure.

When asked in a survey about the impact of the program on students, 100% of Interventionist respondents indicated their service in Math Corps had a positive impact on students and increased students' confidence in math.

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

Of the MEC Math Corps Interventionists who responded to an end-of-year survey, 92% indicated MEC Math Corps had a positive impact on them personally, and 100% of respondents said 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 MEC Math Corps likely makes a noteworthy contribution to the education career pipeline in the communities where Interventionists serve.

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

MEC provides SIP guidance to every participating school in the winter, and is updated regularly with consultation from School Improvement staff at Kent ISD. The guidance is language schools can use in the SIPs to document MEC Math Corps, and support the use of MEC Math Corps data in the school improvement planning process.

### **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.**

The most direct assessment of this outcome is through an annual survey sent to all participating school Principals/Administrators, Internal Coaches, and Classroom Teachers. Specific statements asking the degree to which these stakeholders agree MEC

Math Corps is an integral part of the school's MTSS framework are included. Responses are on a Likert scale of Strongly Disagree, Disagree, Neutral, Agree or Strongly Agree.

**Question 1: Our school uses MEC Math Corps data to inform and monitor our multi-tier system of supports (MTSS) implementation for math.**

Of Administrators who responded, 80% strongly agreed or agreed with this statement. Of Teachers who responded, 87% strongly agreed or agreed with this statement. Of Internal Coaches who responded, 82% strongly agreed or agreed with this statement.

**Question 2: MEC Math Corps is integrated into our MTSS for math at my school.**

Of Administrators, 71% strongly agreed or agreed that MEC Math Corps is an integral part of their school's MTSS framework. Of Teachers, 79% strongly agreed or agreed that MEC Math Corps is an integral part of their school's MTSS framework. Of Internal Coaches, 78% strongly agreed or agreed that MEC Math Corps is an integral part of their school's MTSS framework

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 around student outcomes, MEC Math Corps fidelity, and how MEC Math Corps is integrated in a school's overall MTSS math 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 18, 2022. Any item is available upon request by contacting Ms. Flaminio or Holly Windram, Executive Director, Hope Network's Michigan Education Corps at [hwindram@hopenetwork.org](mailto:hwindram@hopenetwork.org).

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

Trainings were provided throughout the 2021-2022 program year for all new and returning schools. Please see Appendix C for summary.

# Introduction

## MEC Math Corps Overview

MEC Math Corps is an AmeriCorps program that provides schools with Interventionists to support math development for students in Grades 4 through 8. MEC Math Corps Interventionists are trained to provide research-based math support and to administer assessment protocols.

The MEC Math Corps model aligns with Response-to-Intervention (RTI) or Multi-Tier System of Supports (MTSS), which are two descriptions of a framework for delivering educational services effectively and efficiently<sup>1</sup>. The key aspects of that alignment include the following:

- Data-driven screening decisions identify students who are at-risk for poor math outcomes
- Evidence-based interventions
- Formative assessment
- High quality training in program procedures, coaching, and observations to support fidelity of implementation

In the RTI and MTSS frameworks, data play the key roles of screening student eligibility for additional services and monitoring student progress toward achieving academic goals. Eligible students (defined as students below state proficiency expectations) are determined potential candidates to receive supplemental MEC Math Corps support often referred to as Tier 2.

Math Corps is focused on improving student skills in foundational math content areas focusing on numbers, numerical operations, and algebra—skills identified by the National Mathematics Advisory Panel (2008) as essential to overall math success.

Intervention is provided through standard-protocol interventions and is supplemental to the core math instruction provided at each school. The ultimate goal of Intervention is to raise individual students' math skills so that they are on track to meet or exceed MI math proficiency standards.



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<sup>1</sup> Burns et al., 2016

## Overview of the Evaluation

The MEC Math Corps evaluation addresses these questions and requirements. The evaluation report is organized around each of these questions using data that are collected throughout the school year and are recorded by the implementers of MEC Math Corps. MEC Program Staff collect data about Interventionists and schools, including survey responses.

Interventionists collect data about student dosage and math outcomes. Coaches collect specific details about Interventionist implementation of interventions. These data are used to address these questions and requirements:

1. What is the scope of the Math Corps program?
2. To what extent was the Math Corps program implemented as intended?
3. To what extent did participating students improve their math skills?
4. How did serving as an Interventionist impact skills and knowledge related to education and their future career goals?
5. MEC will work with participating schools to include aggregate program data in the school improvement planning process and applicable data sets.
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.
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.
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.
9. MEC will provide trainings for newly identified schools as the programs expand.

# 1. What is the scope of the MEC Math Corps program?

## Schools and Interventionists

Math Corps partners with schools and districts to implement the program. Math Corps program staff and participating schools recruit community members to serve as Math Corps Interventionists through AmeriCorps. Interventionists commit to serving a set number of hours per week (i.e. full-time AmeriCorps members commit to complete 1,200 hours of service). Interventionists receive a living allowance, benefits and are provided coaching by school staff and an MEC 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 schools, Coaching Specialists, and Interventionists that served during the 2021-22 program year.

**Table 1. Schools, Coaches, and Interventionists**

Schools	Coaching Specialists	Interventionists*
22	3	23

*\*Defined as having entered Intervention minutes for at least one student in the Math Corps data management system.*

Math Corps Interventionists receive training through an online Learning Management System (LMS). The intensive, information-filled courses on the LMS provide foundational training in

the research-based math interventions employed by Math Corps. Throughout the courses, Interventionists learn the skills, knowledge, and tools needed to serve as math interventionists.

Interventionists are provided with a detailed program manual 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 manual and online resources are intended to provide Interventionists with just-in-time support and opportunities for continued professional development and skill refinement. Additional training is provided throughout the Interventionists' year of service.

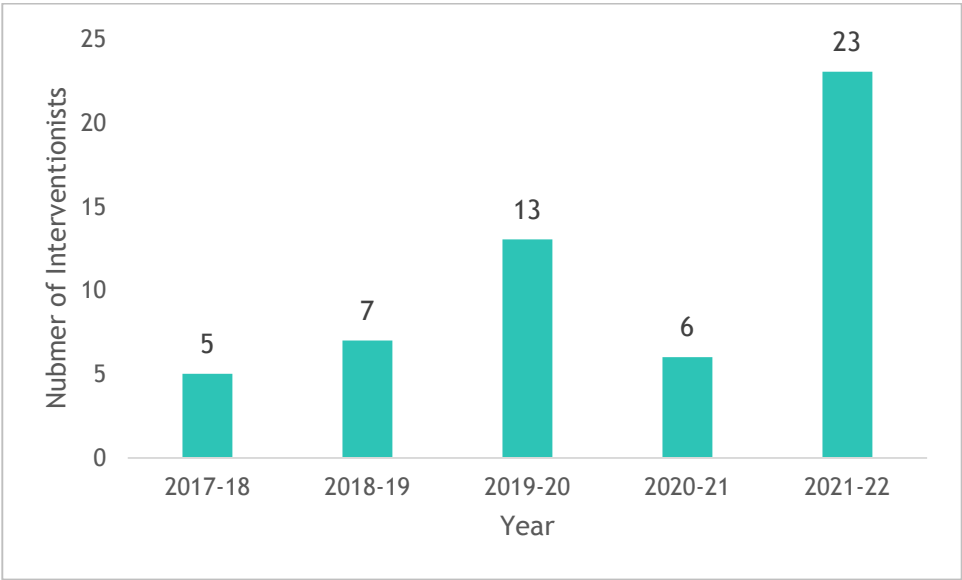
In addition to extensive training, MEC Math Corps provides Interventionists with multiple layers of supervision to ensure integrity of program implementation. Schools identify a staff member to serve as an Internal Coach, who is typically a math specialist, teacher, or curriculum director, to serve as immediate on-site supervisor, mentor, and advocate for Interventionists. The Internal Coach's role is to monitor Interventionists and provide guidance in the implementation of Math Corps's assessments and interventions. As the front-line supervisor, the Internal Coach is a critical component of the supervisory structure.

MEC Math Corps Coaching Specialists provide both Interventionists and Internal Coaches with expert support on math instruction and ensure implementation integrity of MEC Math

Corps program elements. In addition to these two coaching layers, a third layer consisting of AmeriCorps program support helps ensure a successful year of AmeriCorps service. Finally, MEC Program Staff provide administrative oversight for program implementation to schools participating in MEC Math Corps.

The number of Interventionists serving varies by program year based on a number of factors including Interventionist recruitment, Interventionist types (i.e. full-time or part-time Interventionists), school interest, Interventionist retention, and available public and private funding. Figure 1 displays the number of Interventionists who served each year of the program.

**Figure 1. Number of Interventionists by Year**

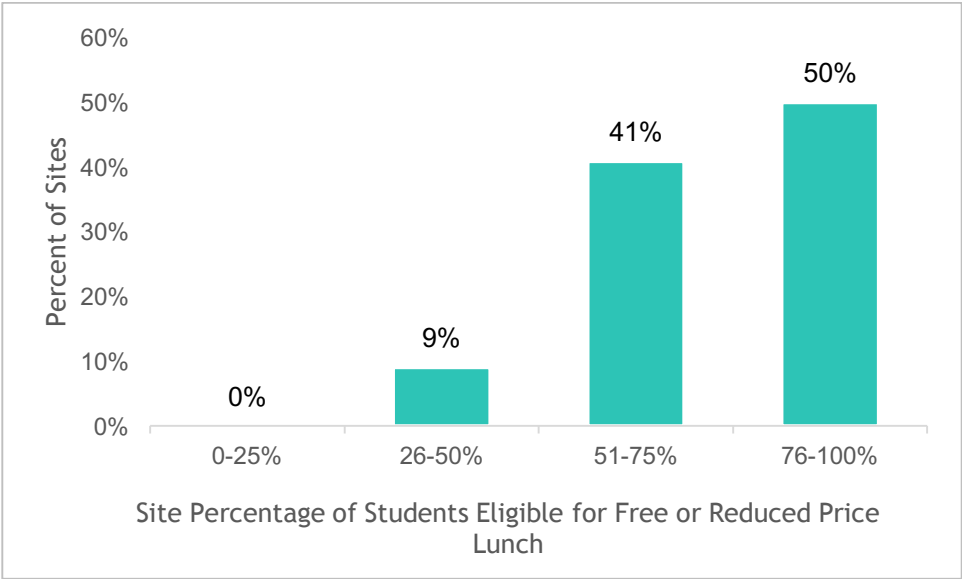


**School Characteristics**

MEC Math Corps strives to serve students and schools that would benefit the most from additional resources, for which the percentage of students at the school who are eligible for the federal free and reduced-price lunch (FRPL) program can be a useful indicator. Students from families with incomes at or below 185 percent of the Federal poverty level are

eligible for free or reduced-price meals. Figure 2 shows the distribution of MEC Math Corps schools based on their school level FRPL percentage. Over 50% of the students at 91% of participating schools are eligible for Free or Reduced Price-Lunch, indicating most Interventionists were placed in schools where access to other resources may be at least somewhat limited.

**Figure 2. Distribution of Schools by Student Eligibility for Free or Reduced Price-Lunch Program (FRPL)**



**Students Receiving Intervention**

Students are identified as good candidates for MEC Math Corps participation through a two-step process. First, teachers or other school staff recommend students for MEC Math Corps based on student performance or previous service. Second, Interventionists administer a benchmark assessment to recommended students. Students who score below benchmark targets that are linked to future academic success are eligible to receive MEC Math Corps Intervention (see Appendix A for the benchmark targets).

After identifying eligible students, the Interventionist works with their Internal Coach to select which students will be served, called the Interventionist's caseload. Coaches set the caseload using a number of factors such as the school's schedule and other services available to eligible students.

The number of students on a caseload depends on the Interventionist's service

commitment. Full-time Interventionists aim to serve 24 or more students at a time while part-time Interventionists serve 12 students. Interventions can be delivered to two or three students at the same time. Serving more students in groups of three increases the number of students served per Interventionist.

Table 2 displays the number of students served by grade across all schools. Most Interventionists were placed in elementary schools, leading to fourth and fifth grade having the greatest number of students served.

**Table 2. Number of Students Receiving Intervention**

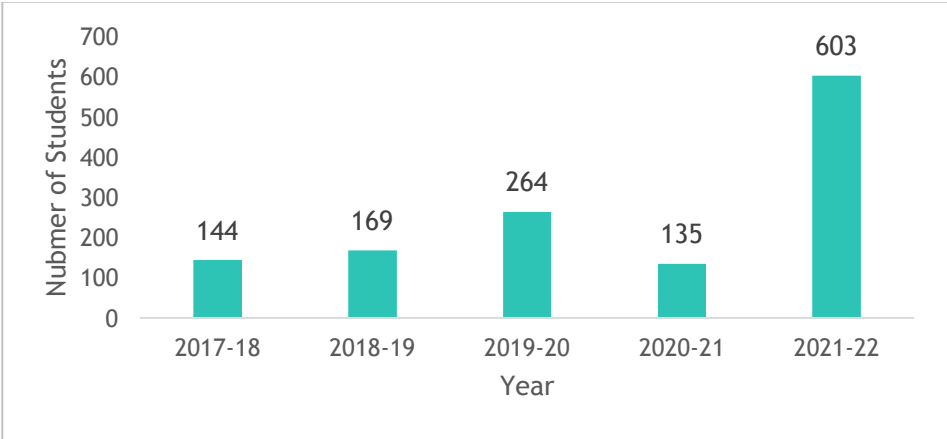
Grade	Number of Students
Fourth	227
Fifth	264
Sixth	63
Seventh	35
Eighth	14

<b>Total</b>	<b>603</b>
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The number of students served varies by program year based on many factors including Interventionist recruitment and retention, the types of Interventionists serving (i.e. full-time or part-time), whether students are receiving

intervention in pairs or triads, and the frequency of students who successfully exit from the program. Figure 3 displays the number of students who received intervention since 2017. Note the number of students served in 2019-20, 2020-21, and 2021-22 were significantly impacted by the COVID-19 pandemic.

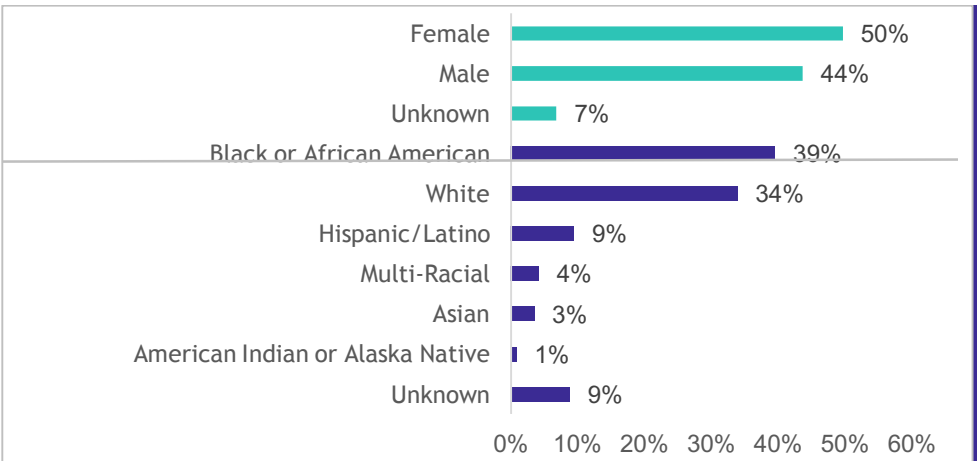
**Figure 3. Number of Students Receiving MEC Math Corps Intervention by Year**



MEC Math Corps Interventionists record demographic information of students they serve. This allows evaluators to disaggregate student outputs and outcomes by important demographics to ensure the program is having an

equitable impact, and describe the students participating in the program. Figure 4 shows Black or African American students were the largest racial/ethnic group participating.

**Figure 4. Student Demographics**



## 2. To what extent was the MEC Math Corps program implemented as intended?

### Coaching Observations

Ensuring accurate, effective implementation is a core principle of MEC Math Corps. Both types of coaches—Internal Coaches and Coaching Specialists— provide Interventionists with expert support on math instruction and ensure implementation integrity of the MEC Math Corps program elements through ongoing monitoring and observation.

During coaching sessions MEC Math Corps Coaching Specialists and Internal Coaches discuss student selection for service, track student progress for data-based decisions, and observe Interventionists delivering interventions. The observations allow coaches to build on an Interventionist's formal training and to help Interventionists improve their

implementation of the MEC Math Corps model. Coaches are expected to observe Interventionists delivering interventions at least every other month to ensure fidelity to the interventions effective instructional processes.

Table 3 displays the percent of Coaching Specialists and Internal Coaches who observed Interventionists delivering interventions at least one time during the school year. The table also shows the percentage of coaches who met the program's expectation for observations throughout the school year. All Coaching Specialists and 90% of Internal Coaches met program expectations for observations, demonstrating coaches provided ongoing support to Interventionists.

**Table 3. Intervention Coaching Observations by Coach Role**

Coaching Specialist		Internal Coach	
Percent of Interventionists Observed at Least Once	Percent of Interventionists Observed in Accordance with Expectations*	Percent of Interventionists Observed at Least Once	Percent of Interventionists Observed in Accordance with Expectations*
100%	100%	90%	90%

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

*\*Coaches are expected to conduct intervention observations at least once every other month.*

### Interventionist Fidelity

During coaching sessions, coaches complete a fidelity checklist for each intervention they observe. The checklist includes the important steps for accurate completion such as introducing the lesson and modeling how to complete problems.

After completing observation coaches enter the number of checklist items that the Interventionist delivered correctly into the online Math Corps Data Management System. The percent fidelity is then calculated by dividing the number of items delivered correctly by

the total number of items. Table 4 displays the total number of fidelity checks completed and the average intervention fidelity.

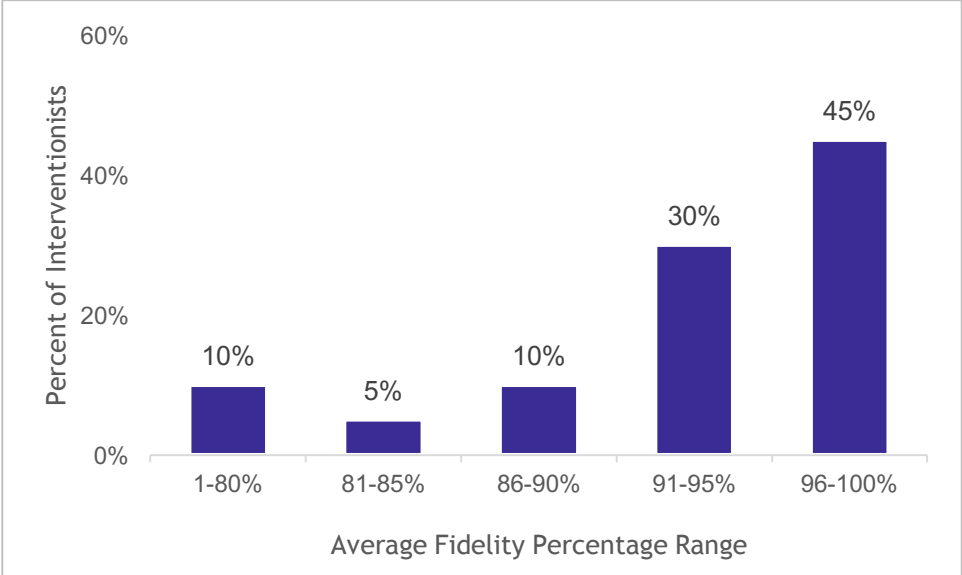
**Table 4. Intervention Fidelity**

Total Checks Collected	Average Fidelity
133	93.0%

For each Interventionist, all observations are combined to calculate their overall

intervention fidelity. An Interventionist's average fidelity can vary throughout the year, with lower scores being more common at the beginning of the year. Figure 5 shows the distribution of Interventionists by their average fidelity. 25% of Interventionists had an average fidelity at 90% or less, suggesting a subset of Interventionists may benefit from additional training and coaching to ensure they accurately implement key program interventions.

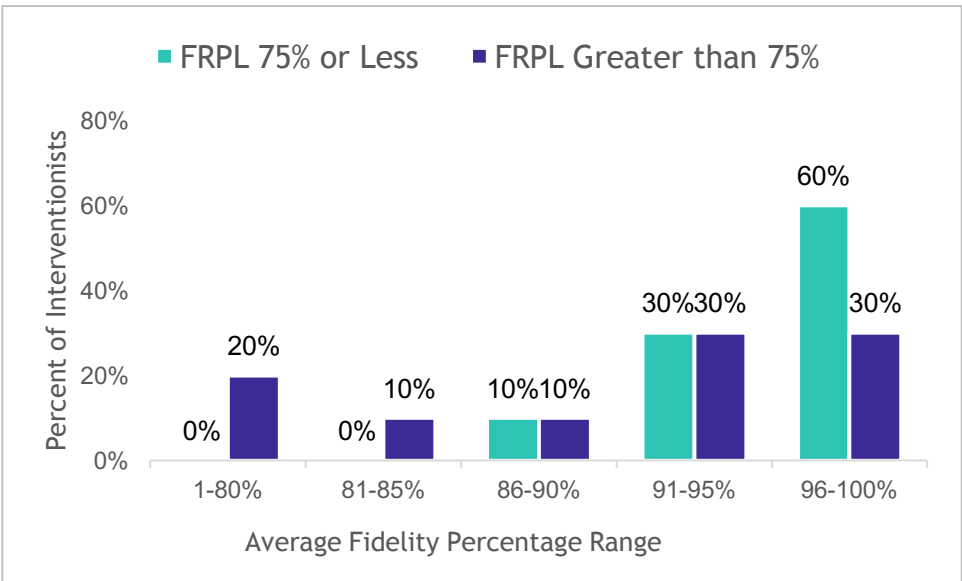
**Figure 5. Distribution of Interventionists by Intervention Fidelity Range**



Figures 6 also shows the distribution of Interventionists by their intervention average fidelity, but the data are disaggregated between Interventionists at schools where 75% or fewer students are eligible for the FRPL program and Interventionists at schools with 76% or

more students eligible. The intervention fidelity data is lower at schools with a high percentage of students eligible for FRPL, indicating Interventionists at these schools may need greater support delivering interventions in this context.

**Figure 6. Distribution of Interventionist Fidelity by Percentage of Students Eligible for Free-Reduced Price Lunch**



**Interventionist Caseloads**

Coaches determine which students MEC Math Corps Interventionists will serve based on student eligibility, teacher recommendations, other services offered at the school, and general school priorities for students to serve.

Table 5 shows the average number of students served per Interventionist based on their minimum caseload expectation.

The last column of the table shows the percentage of Interventionists who met or exceeded their caseload expectations for at least 80% of the weeks they served in the program. All Interventionists with a caseload goal of 12 students were able to meet this expectation while 87% of Interventionists with a caseload goal of 24 students met this expectation 80% of the time.

**Table 5. Interventionist Caseloads**

Minimum Caseload Expectation	Number of Interventionists	Average Total Students Served per Interventionist	Percentage of Interventionists Meeting Caseload Expectation
12 students	8	21.0	100%
24 students	15	33.1	87%

**Student Dosage**

Interventionists strive to work with each student on their caseload for 90 minutes per week. Intervention is delivered in pairs or triads. Interventionists record each student's daily minutes in the

online Math Corps Data Management System. Table 6 shows the total number of Intervention sessions and the average number of sessions, weeks, and minutes per week students received in each grade. The table also disaggregates the

data for white and non-white students. Students received a substantial number of Intervention sessions with about an hour of Intervention each week across

multiple months. White students tended to receive both more Intervention sessions and more minutes of Intervention per week.

**Table 6. Intervention Dosage by Grade and Race**

Student Race	Students Interventionisted	Total Interventionisting Sessions	Average Interventionisting Sessions per Student	Average Interventionisting Weeks per Student	Average Interventionisting Minutes per Week per Student
<b>Grade 4</b>	<b>161</b>	<b>6,436</b>	<b>40.0</b>	<b>12.3</b>	<b>62.2</b>
White	62	2,624	42.3	13.2	62.1
Non-White	83	3,354	40.4	12.1	62.8
<b>Grade 5</b>	<b>264</b>	<b>6,813</b>	<b>25.8</b>	<b>13.4</b>	<b>55.2</b>
White	82	2,812	34.3	16.1	60.3
Non-White	140	3,551	25.4	13.6	54.2
<b>Grade 6</b>	<b>63</b>	<b>1,445</b>	<b>22.9</b>	<b>12.5</b>	<b>66.5</b>
White	13	327	25.2	14.2	63.0
Non-White	50	1,118	22.4	12.1	67.5
<b>Grade 7</b>	<b>35</b>	<b>844</b>	<b>24.1</b>	<b>12.5</b>	<b>63.3</b>
White	13	419	32.2	16.9	62.2
Non-White	22	425	19.3	9.9	64.5
<b>Grade 8</b>	<b>14</b>	<b>475</b>	<b>33.9</b>	<b>18.5</b>	<b>63.6</b>
White	8	373	46.6	24.6	61.6
Non-White	6	102	17.0	10.3	70.0
<b>Total</b>	<b>603</b>	<b>17,773</b>	<b>29.5</b>	<b>14.5</b>	<b>59.1</b>
White	204	7,642	37.5	17.0	61.6
Non-White	346	9,610	27.8	14.3	58.6

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

In addition to recording the number of Intervention minutes, Interventionists also record the reason a scheduled Intervention session was not delivered. Interventionists are able to indicate if a session was missed for each of the following reasons: student absence from school, Interventionist absence from school, Interventionist receiving training, Interventionist 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 Intervention sessions were delivered along with the rate of each missed Intervention session reason. The table also disaggregates the data for white and non-white students. Student and Interventionist absences and “other” were the most common reasons for missed sessions. White students had a greater percentage of sessions delivered than non-white students, with non-white students more likely to miss sessions for Interventionist and/or student absences and “other” reasons.

**Table 7. Intervention Attendance by Grade and Race**

Student Race	Session Attended	Interventionist Absent	Student Absent	Assessing Student	Interventionist Training	Other
<b>Grade 4</b>	<b>62%</b>	<b>8%</b>	<b>9%</b>	<b>6%</b>	<b>3%</b>	<b>13%</b>
White	63%	8%	8%	6%	4%	12%
Non-White	61%	7%	9%	7%	2%	14%
<b>Grade 5</b>	<b>51%</b>	<b>13%</b>	<b>11%</b>	<b>7%</b>	<b>2%</b>	<b>15%</b>
White	60%	8%	8%	5%	4%	14%
Non-White	50%	11%	11%	8%	2%	17%
<b>Grade 6</b>	<b>60%</b>	<b>13%</b>	<b>8%</b>	<b>10%</b>	<b>2%</b>	<b>6%</b>
White	63%	12%	8%	11%	2%	4%
Non-White	60%	14%	8%	10%	1%	7%
<b>Grade 7</b>	<b>73%</b>	<b>10%</b>	<b>7%</b>	<b>5%</b>	<b>1%</b>	<b>4%</b>
White	66%	11%	11%	7%	1%	4%
Non-White	77%	10%	5%	4%	0%	4%
<b>Grade 8</b>	<b>70%</b>	<b>11%</b>	<b>14%</b>	<b>4%</b>	<b>1%</b>	<b>0%</b>
White	68%	7%	17%	7%	2%	0%
Non-White	72%	16%	9%	1%	1%	1%
<b>Total</b>	<b>58%</b>	<b>11%</b>	<b>10%</b>	<b>7%</b>	<b>2%</b>	<b>13%</b>
White	62%	8%	9%	6%	3%	11%
Non-White	58%	10%	9%	8%	2%	13%

Table 8 displays the percentage of days Intervention sessions were delivered along with the rate of each missed Intervention session reason disaggregated by site level FRPL rate. Students at sites with a lower

percentage of students eligible for FRPL had a greater percentage of sessions delivered. Students at sites with the greatest percentage of students eligible for FRPL tended to have more missed sessions due to student absences.

**Table 8. Intervention Attendance by Grade and Site FRPL**

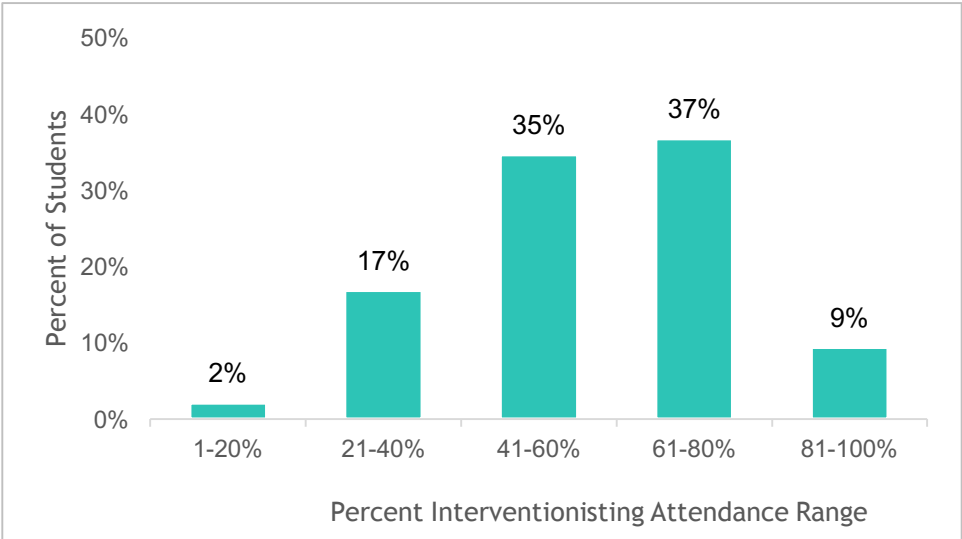
Site FRPL Percent	Session Attended	Interventionist Absent	Student Absent	Assessing Student	Interventionist Training	Other
<b>Grade 4</b>	<b>62%</b>	<b>8%</b>	<b>9%</b>	<b>6%</b>	<b>3%</b>	<b>13%</b>
26-50%	62%	0%	8%	5%	2%	22%
51-75%	65%	8%	8%	6%	3%	10%
76-100%	57%	9%	10%	7%	2%	15%
<b>Grade 5</b>	<b>51%</b>	<b>13%</b>	<b>11%</b>	<b>7%</b>	<b>2%</b>	<b>15%</b>
26-50%	60%	0%	11%	6%	2%	22%
51-75%	55%	15%	9%	7%	2%	12%
76-100%	47%	13%	12%	7%	2%	18%
<b>Total</b>	<b>56%</b>	<b>11%</b>	<b>10%</b>	<b>7%</b>	<b>2%</b>	<b>14%</b>
26-50%	61%	0%	10%	5%	2%	22%
51-75%	59%	12%	9%	6%	3%	11%
76-100%	51%	11%	11%	7%	2%	17%

Note: Grade 6, Grade 7, and Grade 8 not included due to small sample sizes for disaggregated results.

MEC Math Corps tracks Intervention attendance for each student throughout the school year using a 'percent Intervention' metric. A student's percent Intervention is equal to the number of Intervention sessions delivered divided by the number of days Intervention was scheduled to happen (i.e. the metric ignores days there is not school). The program also tracks an Interventionist's percent Intervention by combining all of their individual student's percent Intervention into an

Interventionist average. The program strives for each student and Interventionist to achieve at least 80% Intervention. Interventionists falling below this target are provided extra support to improve the frequency of Intervention delivery wherever possible. Figure 7 displays the distribution of students by their percent Intervention range. 72% of students received Intervention between 41-80% of their scheduled days, indicating a growth opportunity for the program.

**Figure 7. Distribution of Students by Percent Intervention Range**



**Lesson Completion**

MEC Math Corps delivers intervention in the form of instructional lessons which vary in number from 20 in eighth grade to 39 in sixth grade. Each lesson focuses on a particular skill (ex. Multiplication Concepts & Strategies) and content builds across the lessons (ex. addition lessons come before multiplication lessons). See Appendix B for the MEC Math Corps lesson research base.

Students are required to demonstrate mastery—defined as 85% correct on a

brief informal assessment of lesson content—before advancing to the next lesson. Progression through the lessons is essential for students to receive instruction in and reach mastery of each concept.

Table 9 displays the average number of lessons students completed in each grade and the average number of weeks students spent on each lesson. Eighth grade students completed the most lessons while sixth grade students

completed lessons the fastest. Overall students completed less than half the

lessons, indicating a growth area for the program.

**Table 9. Lessons Completed per Student**

Grade	Average Lessons Completed	Average Weeks per Lesson
Grade 4	8.3	2.7
Grade 5	6.0	3.5
Grade 6	9.4	1.9
Grade 7	8.4	2.5
Grade 8	11.7	2.1
<b>Total</b>	<b>7.6</b>	<b>2.8</b>

### 3. To what extent did participating students improve their math skills?

#### Measures of Math Skills

MEC Math Corps Interventionists administer STAR Math, a computer adaptive assessment of students' overall math proficiency. Interventionists use STAR Math to determine which students are eligible for MEC Math Corps, to monitor student progress, and to inform when students no longer need Math Corps support. Active MEC Math Corps students are assessed every two months (up to five times per year) while prospective and previous MEC Math

Corps students are assessed during three seasonal benchmark windows.

Interventionists also administer a fact fluency assessment – a one-minute multi-skill probe includes basic addition, subtraction, multiplication, and division math facts. Students who score below the benchmark of 30 problems correct per minute receive math fact practice during at least one Intervention session each week. See Appendix A for assessment procedures and research base.

#### Student Performance on STAR Math

Table 10 displays STAR Math assessment data for participating students who received 12 or more weeks of Math Corps Intervention. The average student had positive weekly growth, indicating an increase in math skills over the course of the program year. Each student's average weekly growth is compared to an individual target growth. Overall, 44%

of students exceeded their target growth. These percentages, though modest, may reflect relatively strong results given the inherently at-risk population of students served by MEC Math Corps. Further, they reflect only within-student growth relative to computer-generated growth targets. Causal comparison studies of MEC Math

Corps demonstrate that the program consistently accelerates growth beyond

what students experience without the program<sup>2</sup>.

**Table 10. STAR Math Average Weekly Growth for Participating Students**

Grade	Number of Students	Average Weekly Growth (Standard Deviation)	Percentage of Students Exceeding Target Growth
Grade 4	148	1.87 (1.77)	48.6%
Grade 5	127	0.88 (2.17)	38.6%
Grade 6	34	1.01 (2.48)	50.0%
Grade 7	17	1.26 (3.36)	52.9%
Grade 8	10	0.49 (1.22)	20.0%
<b>Total</b>	<b>336</b>	<b>1.33 (2.14)</b>	<b>44.3%</b>

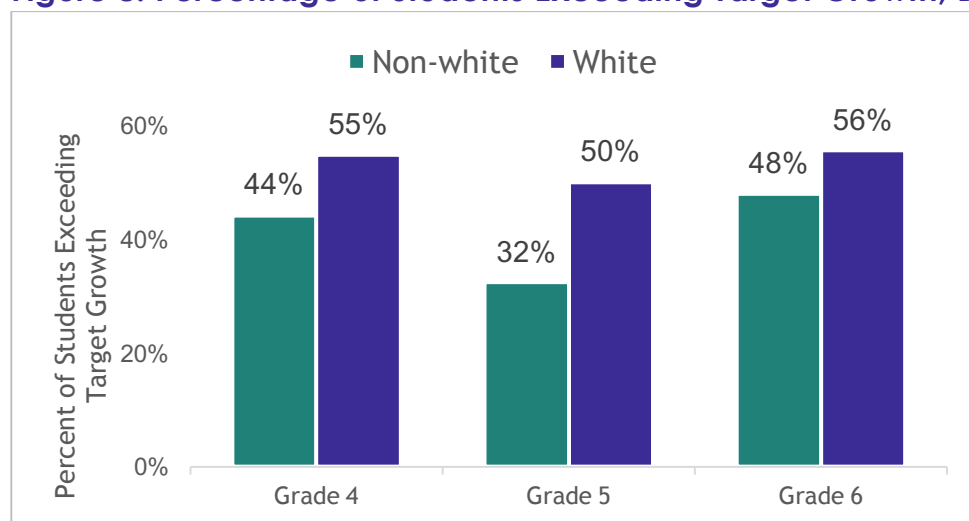
*Note: Includes students with at least two STAR Math scores and 12 or more weeks of Intervention..*

Figure 8 disaggregates the above student outcome data into non-white and white students to better understand program impact across key demographic considerations. Across all three grades and measures, a greater percentage of white students exceeded target growth compared to non-white students. The differences between the two groups ranged from 8 percentage points to 18 percentage points.

Similarly, Figure 9 disaggregates student outcome data by the school level

percentage of students eligible for the FRPL In Grade 4, students at schools with the greater percentage of students eligible for the FRPL program had a greater percentage of students exceeding target growth than students at schools with the lowest percentage of students eligible for the FRPL program. These results were reversed in Grade 5 with students at schools with the greater percentage of students eligible for the FRPL program having a lower percentage of students exceeding target growth.

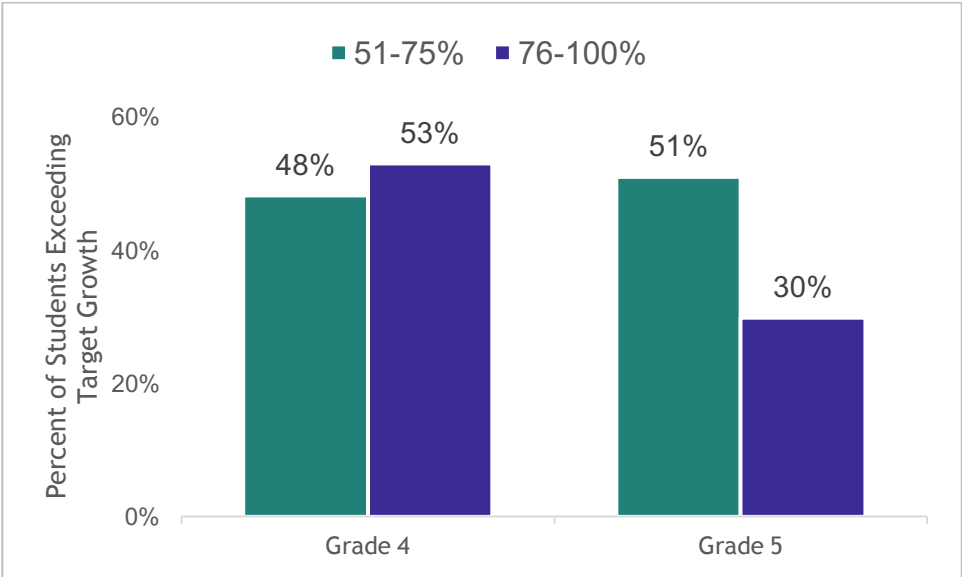
**Figure 8. Percentage of Students Exceeding Target Growth, By Race**



*Note: Grade 7 and Grade 8 not included due to small sample sizes for disaggregated results.*

<sup>2</sup> Codding et al., 2022; Parker et al., 2019

**Figure 9. Percentage of Students Exceeding Target Growth by School FRPL**

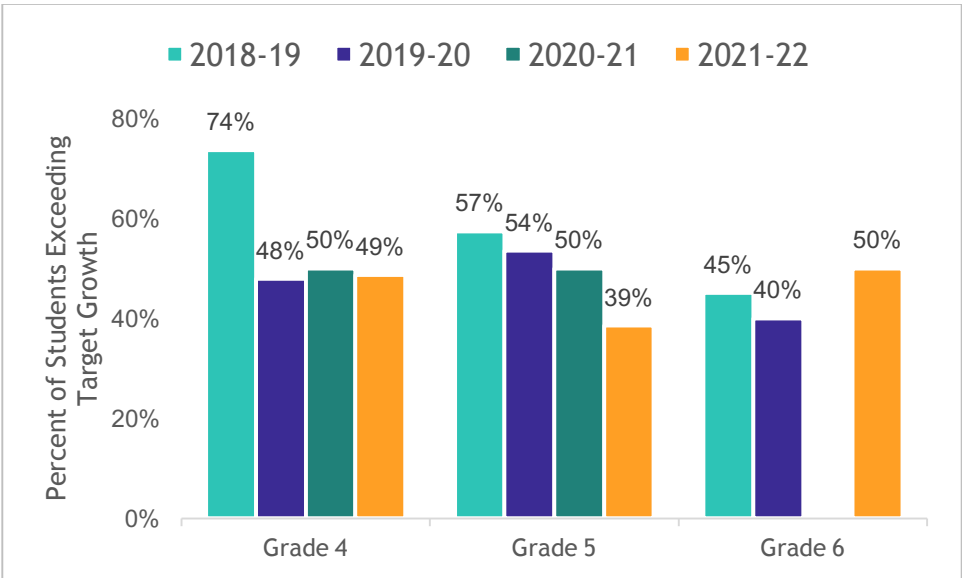


Note: Grade 6, Grade 7, and Grade 8 not included due to small sample sizes for disaggregated results.

Comparing the percentage of students exceeding target growth across program years is an effective way to track overall program effectiveness and identify potential needs for program improvement. Figure 10 displays the percentage of students above target

growth for the past four years. Grade 4 performance has been relatively consistent the previous three years. Grade 5 had a substantial decrease in the percentage of students exceeding target growth in 2021-22 and Grade 6 had a substantial increase

**Figure 10. Percentage of Students Exceeding Target Growth, by Year**



Note: Use caution when comparing outcome data across years as the program was significantly disrupted by the COVID-19 pandemic. Limited student numbers for Grade 6 in 2020-21 and Grades 7 and 8 in all years.

## Student Performance on Fact Fluency

As previously stated, Interventionists administer a one-minute fact fluency assessment to track student progress on basic math fact skills and determine if students should receive fact fluency support during Intervention. Table 11 displays the average fact fluency score collected before Intervention begins

and the final score of the program year. The average student in all grades increased their performance on the fact fluency assessment. Grade 8 students made the most growth with 90% of students increasing their score with an average growth of 6.9 items correct.

**Table 11. Fact Fluency Average Growth**

Grade	Number of Students with Two Scores	Average Initial Score	Average Final Score	Average Growth	Percent Making Growth
Grade 4	148	5.0	9.2	4.2	77.7%
Grade 5	127	8.3	11.8	3.5	69.3%
Grade 6	33	8.2	9.3	0.9	57.6%
Grade 7	17	8.9	13.8	4.9	70.6%
Grade 8	10	10.6	15.9	5.3	90.0%
<b>Total</b>	<b>335</b>	<b>7.0</b>	<b>10.6</b>	<b>3.7</b>	<b>72.5%</b>

*Note: Includes students with at least two fact fluency scores and 12 or more weeks of Intervention.*

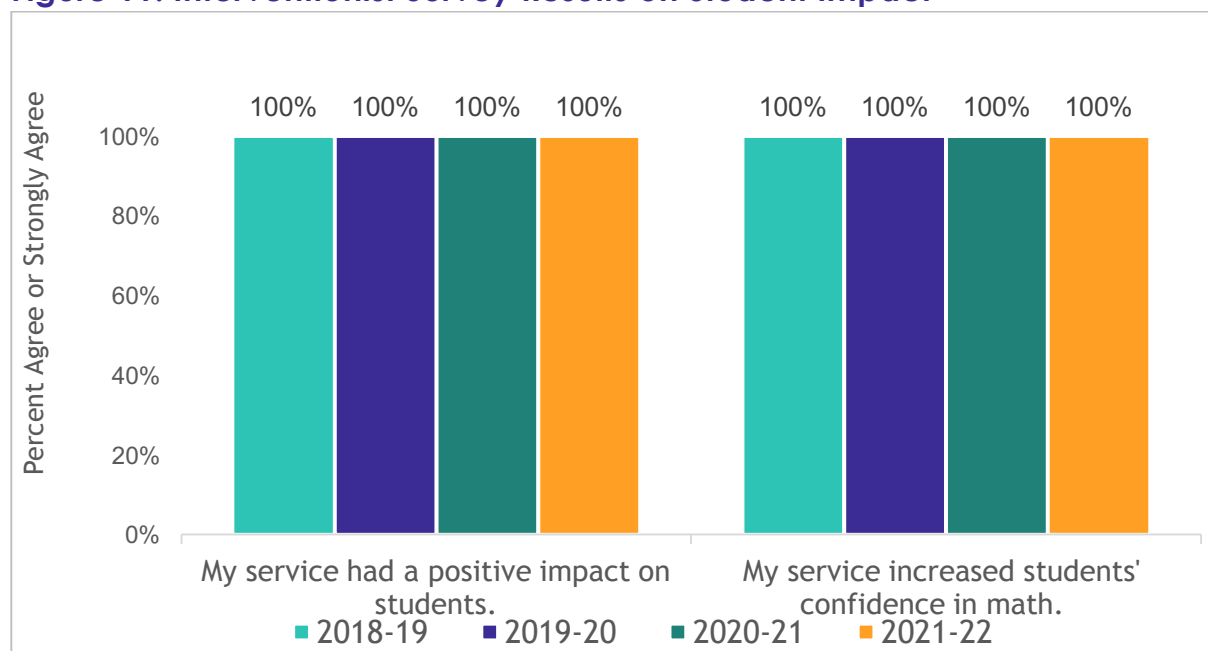
## Interventionist Perception of Student Performance

In the spring of each program year, MEC distributes an online survey to Interventionists. The survey asks a wide-range of questions regarding their service in MEC Math Corps and potential impact of the program. Figure 11 displays the percentage of Interventionists who indicated they agreed or strongly agreed that their service in MEC Math Corps had a positive impact on students and

increased students' confidence in 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 each year indicating their service in MEC Math Corps had a positive impact on students and increased students' confidence in math.

**Figure 11. Interventionist Survey Results on Student Impact**



## 4. How did serving as an MEC Math Corps Interventionist impact skills and knowledge related to education and their future career goals?

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

program's impact on the Interventionists 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 in MEC Math Corps. Figure 12 shows that 92% of Interventionists would recommend serving as a member of MEC Math Corps, with half of the respondents indicating they would definitely recommend the program. These results highlight the highly positive experience

Interventionists had serving in the MEC Math Corps. The survey also asked Interventionists if serving in MEC Math Corps had a positive impact on them

personally. Figure 13 shows that 92% of Interventionists agree or strongly agree service had a positive impact on them.

Figure 12. Interventionist Satisfaction

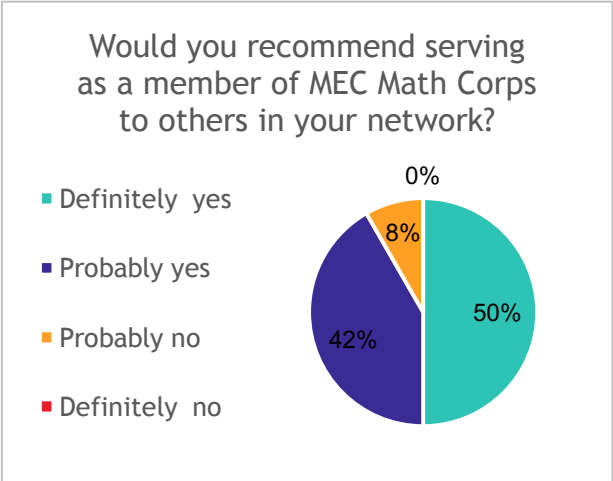
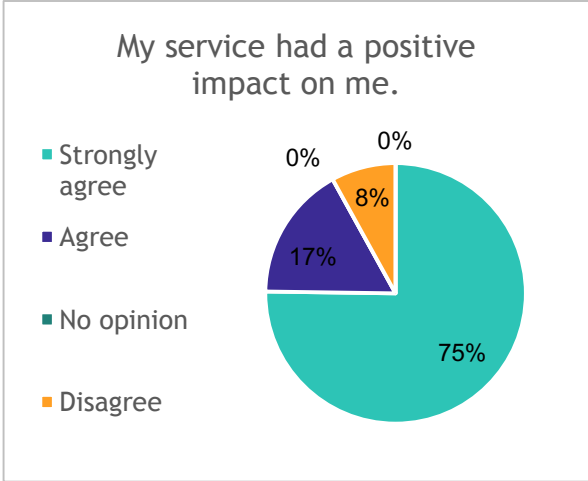


Figure 13. Impact on Interventionists

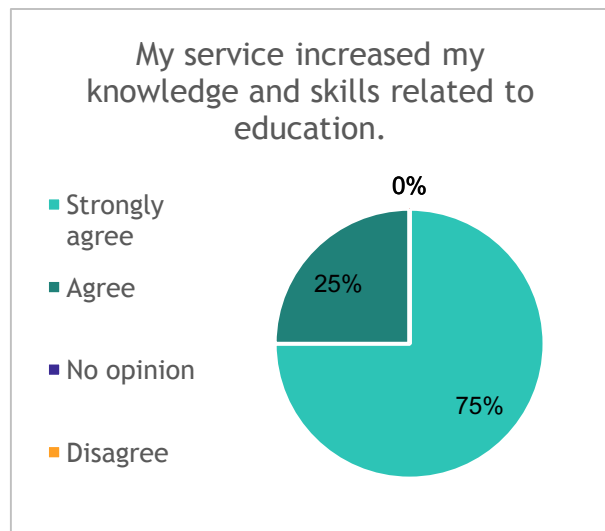


Skill Development and Future Careers

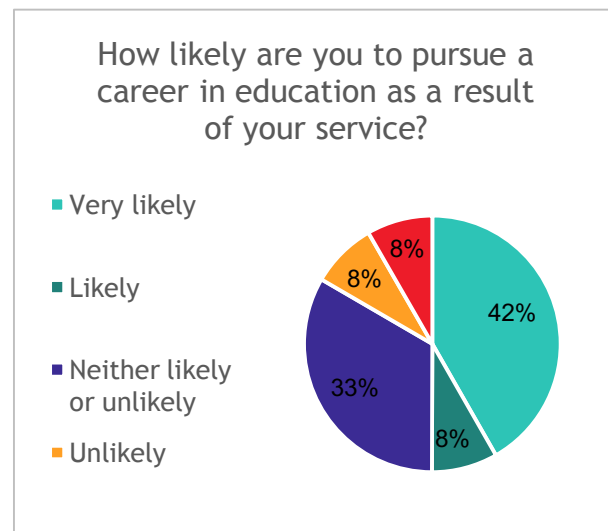
MEC Math Corps strives to support Interventionist professional development through the training, coaching, service experience, and other professional development support provided by the program. In particular, MEC Math Corps aims to increase the teacher and school staff pipeline in communities through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

Figure 14 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 Interventionists in this area. Figure 15 displays Interventionist responses related to the likelihood they will pursue a career in education as a result of their service in Math Corps. 42% of respondents answered that they are very likely to pursue a career in education as a result of their service and 8% responded that they are likely to do so. These results indicate Math Corps likely makes a noteworthy contribution to the education career pipeline in the communities where Interventionists serve.

**Figure 14. Interventionist Increased Knowledge and Skills**



**Figure 15. Interventionists Pursuing Careers in Education**



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

MEC staff work closely with a variety of stakeholders to develop specific guidance for schools on how to include MEC Math Corps in their annual School Improvement Plans (SIPs). These stakeholders included ISD School Improvement Consultants, the Michigan Department of Education, and building administrators. Guidance is provided to every school and updated regularly. MEC will continue to revise and share guidance with participating schools to support MEC Math Corps documentation in partner schools' School Improvement Plans, and that MEC Math Corps data are used in the school improvement planning process. The MEC Executive Director will meet with the KISD Continuous Improvement Consultant in fall of 2022 to begin revising/updating guidance for schools for their 2023-2024 SIPs.

## **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 three information sources: survey results, the School Improvement Plan Guidance, 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 MEC Math Corps. The survey includes specific statements asking the degree to which these stakeholders agree MEC Math Corps is an integral part of the school's MTSS. Responses are on a Likert scale of Strongly Disagree, Disagree, Neutral, Agree or Strongly Agree.

#### ***Question 1: Our school uses MEC Math Corps data to inform and monitor our multi-tier system of supports (MTSS) implementation for math.***

Of Administrators who responded, 80% strongly agreed or agreed with this statement. Of Teachers who responded, 87% strongly agreed or agreed with this statement. Of Internal Coaches who responded, 82% strongly agreed or agreed with this statement.

#### ***Question 2: MEC Math Corps is integrated into our MTSS for math at my school.***

Of Administrators, 71% strongly agreed or agreed that MEC Math Corps is an integral part of their school's MTSS framework. Of Teachers, 79% strongly agreed or agreed that MEC Math Corps is an integral part of their school's MTSS framework. Of Internal Coaches, 78% strongly agreed or agreed that MEC Math Corps is an integral part of their school's MTSS framework

We are quite pleased to see that Administrators, Internal Coaches, and Teachers are well-aligned in their responses to both items. This shows that efforts to cascade communication about MEC programming and student progress from Administrators and Internal Coaches to Teachers has had success. We do note this will be a place for on-going work to continue ensuring shared understanding across school staff, particularly teachers, of how MEC Math Corps is explicitly part of a school's overall MTSS framework.

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 Math Corps being fully integrated into a school's total MTSS framework. For all respondents, there was a decrease in agreement with these statements. MEC staff will need to continue 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.

### **School Improvement Plan Guidance**

Please see response on page 25.

### **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 around student outcomes, MEC Math Corps fidelity, and how MEC Math Corps is being integrated in a school's overall MTSS math framework. For example, Coaching Specialists and Internal Coaches meet with MEC Interventionists monthly to review MEC Math Corps progress monitoring data for each student. 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 instruction on new, exiting, and returning students, and which students will be referred for intervention. Coaches also discuss factors impacting MEC Math Corps progress such as attendance and behavior, which may require different, additional intervention.

In 2017-2018, MEC program staff began providing summary progress reports specifically targeted to school Principals to better engage them in MEC program effectiveness within their MTSS frameworks: November, February, and April. 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 MEC Math Corps Coaching Specialist. Depending on the purpose of the visit, staff connect with the Administrator, the Internal Coach, and Interventionists. They often observe intervention.

All Interventionists are required to have a mid-year evaluation conducted by the AmeriCorps Program Director or Program Coordinator. This person not only collects detailed survey information from Internal Coaches and Interventionists, but also has a lengthy in-person site visit to review the information and discuss any concerns.

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 MEC Math Corps is a tier 2 supplemental intervention. MEC Math Corps programming meets the definition of an evidence-based intervention. By starting the conversation of partnership with schools early and emphasizing what

MEC Math Corps does and does not do (e.g., doesn't supplant core instruction), we significantly increase the likelihood of fidelity and effective integration of MEC Math Corps into site MTSS Math frameworks.

## **8. 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 18, 2022.

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

Please see Appendix C for a 2021-2022 calendar of MEC trainings for all participating schools.

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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.

Codding, R. Nelson, P. M., Parker, D. C., Edmunds, R., & Klafft, J. (2022). Evaluation of a math Interventionisting program implemented with community support: A systematic replication & extension. *Journal of School Psychology*.

The National Mathematics Advisory Panel. (2008). Reports of the task groups and Subcommittees. Washington, DC: U.S. Department of Education

Parker, D. C., Nelson, P. M., Zaslofsky, A., Foegen, A., Kaiser, P., Kanive, R, & Heistad, D. (2019). Evaluation of a Math Intervention Program Implemented with Community Support. *Journal of Research on Educational Effectiveness*.

# Appendix A: Assessment Procedures and Research Base

MEC Math Corps uses two assessments to track student progress throughout the year – STAR Math and Fact Fluency. STAR Math is a computer adaptive assessment of students' overall math proficiency. STAR Math questions adjust in difficulty on how students respond. Interventionists use STAR Math to determine which students are eligible for Math Corps, to monitor student progress, and to inform when students no longer need Math Corps support. The publisher for STAR Math provides benchmarks for performance that were derived using diagnostic accuracy analyses to state proficiency as the criterion. Math Corps uses the benchmarks to identify students as on-track for proficiency or below proficiency.

Student progress on math facts is assessed using multi-skill Fact Fluency assessments that include basic addition, subtraction, multiplication, and division math facts. The Fact Fluency assessments are short duration, timed tests; students are given one minute to work through problems. Interventionists score the Fact Fluency assessments by determining the total number of problems correct within the one-minute time limit and compare the number correct to the MEC Math Corps benchmark of 30 problems correct in one minute.

## STAR Math and Fact Fluency Administration Schedule

September	November	January	March	May
Benchmark All Students	Progress Check Active Students	Benchmark All Students	Progress Check Active Students	Benchmark All Students

### Selection of Research for STAR Math Assessment

- Renaissance Learning (2013). STAR Math: Technical manual. Wisconsin Rapids, WI: Author.
- The National Center on Intensive Intervention gave STAR Math the highest possible ratings for technical standards (<https://charts.intensiveintervention.org/chart/academic-screening>).

### Selection of Research for Fact Fluency Assessment

- Foegen, A. (2000). Technical adequacy of general outcome measures for middle school mathematics. *Diagnostic*, 25, 175–203.
- Foegen, A., & Deno, S. L. (2001). Identifying growth indicators for low-achieving students in middle school mathematics. *Journal of Special Education*, 35, 4–16.

# Appendix B: Intervention Research Base

MEC Math Corps delivers intervention in the form of instructional lessons which vary in number from 20 in eighth grade to 39 in sixth grade. Lessons use one of several intervention components to improve targeted subskills required to work effectively with whole and rational numbers. The first component includes conceptual-based instruction using the Concrete, Representational, Abstract (CRA) approach. The second component focuses on procedural accuracy and includes direct instruction followed by supervised practice with Cover, Copy, and Compare (CCC). The third component uses Cognitive Strategy Instruction (CSI) to support development of the skill for word problem solving.

Intervention components were applied in a sequence for each skill. For example, in 5th grade students first receive CRA to better develop the conceptual basis for adding and subtracting fractions with dissimilar denominators; then receive CCC to become efficient at accurately applying the corresponding computational strategies; and then receive CSI to be able to solve word problems involving fractions with unlike denominators. Students are required to demonstrate mastery—defined as 85% correct on a brief informal assessment of intervention content—before advancing among the intervention components. Students also receive short duration fact fluency practice using Explicit Timing weekly to improve the use and selection of efficient strategies that students already know to encourage automaticity.

For each intervention component sources of empirical evidence for intervention effectiveness are listed below.

## Selection of Research in Support of Conceptual-Based Intervention

- Agrawal, J., & Morin, L. L. (2016). Evidence-based practices: Applications of concrete representational abstract framework across math concepts for students with mathematics disabilities. *Learning Disabilities Research & Practice*, 31(1), 34-44.
- Witzel, B. S., Mercer, C. D., & Miller, M. D. (2003). Teaching algebra to students with learning difficulties: An investigation of an explicit instruction model. *Learning Disabilities Research & Practice*, 18(2), 121-131.
- Flores, M. M. (2010). Using the concrete-representational-abstract sequence to teach subtraction with regrouping to students at risk for failure. *Remedial and Special Education*, 31(3), 195-207.
- Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. (2009). *Assisting Students Struggling with Mathematics: Response to Intervention (RTI) for Elementary and Middle Schools*. NCEE 2009-4060. What Works Clearinghouse.
- Carbonneau, K. J., Marley, S. C., & Selig, J. P. (2013). A meta-analysis of the efficacy of teaching mathematics with concrete manipulatives. *Journal of Educational Psychology*, 105(2), 380.

### **Selection of Research in Support of Cover, Copy, Compare**

- Skinner, C. H., Turco, T. L., Beatty, K. L., & Rasavage, C. (1989). Cover, copy, and compare: A method for increasing multiplication performance. *School Psychology Review*.
- Poncy, B. C., Skinner, C. H., & Jaspers, K. E. (2007). Evaluating and comparing interventions designed to enhance math fact accuracy and fluency: Cover, copy, and compare versus taped problems. *Journal of Behavioral Education*, 16(1), 27-37.
- Coddington, R. S., Eckert, T. L., Fanning, E., Shiyko, M., & Solomon, E. (2007). Comparing mathematics interventions: The effects of cover-copy-compare alone and combined with performance feedback on digits correct and incorrect. *Journal of Behavioral Education*, 16(2), 125-141.
- Skinner, C. H., McLaughlin, T. F., & Logan, P. (1997). Cover, copy, and compare: A self-managed academic intervention effective across skills, students, and settings. *Journal of Behavioral Education*, 7(3), 295-306.
- Stocker Jr, J. D., & Kubina Jr, R. M. (2017). Impact of Cover, Copy, and Compare on fluency outcomes for students with disabilities and math deficits: A review of the literature. *Preventing School Failure: Alternative Education for Children and Youth*, 61(1), 56-68.
- Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. (2009). Assisting Students Struggling with Mathematics: Response to Intervention (RTI) for Elementary and Middle Schools. -4060. What Works Clearinghouse.

### **Selection of Research in Support of Cognitive Strategy Instruction**

- Montague, M. (1997). Cognitive strategy instruction in mathematics for students with learning disabilities. *Journal of learning disabilities*, 30(2), 164-177.
- Hutchinson, N. L. (1993). Effects of cognitive strategy instruction on algebra problem solving of adolescents with learning disabilities. *Learning Disability Quarterly*, 16(1), 34-63.
- Montague, M., & Dietz, S. (2009). Evaluating the evidence base for cognitive strategy instruction and mathematical problem solving. *Exceptional Children*, 75(3), 285-302.
- Gersten, R., Beckmann, S., Clarke, B., Foegen, A., Marsh, L., Star, J. R., & Witzel, B. (2009). Assisting Students Struggling with Mathematics: Response to Intervention (RTI) for Elementary and Middle Schools. NCEE 2009-4060. What Works Clearinghouse.
- Carr, Martha, Gita Taasobshirazi, Rena Stroud, and James M. Royer. "Combined fluency and cognitive strategies instruction improves mathematics achievement in early elementary school." *Contemporary Educational Psychology* 36, no. 4 (2011): 323-333.

### **Selection of Research in Support of Fact Fluency Practice**

- Nelson, P. M., Burns, M. K., Kanive, R., & Ysseldyke, J. E. (2013). Comparison of a math fact rehearsal and a mnemonic strategy approach for improving math fact fluency. *Journal of School Psychology, 51*(6), 659-667.
- Nelson, P. M., Parker, D. C., & Zaslofsky, A. (2016). The relative value of growth in math fact skills across late elementary and middle school. *Assessment for Effective Intervention, 41*, 184-192.
- Van Houten, R., & Thomas, C. (1976). The effects of explicit timing on math performance. *Journal of Applied Behavior Analysis,*

# Appendix C: MEC Training Calendar 2021-2022

Trainings for MEC Math Corps are indicated as "MC" and highlighted in blue. AmeriCorps events are attended by all MEC Interventionists program-wide.

WN	JULY							WN	AUGUST							WN	SEPTEMBER							21	
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S		
26					1	2	3	31	1	2	3	4	5	6	7	35									4
27	4	5	6	7	8	9	10	32	8	9	10	11	12	13	14	36	5	6							11
28	11	12	13	14	15	16	17	33	15	R3 Institute 1					21	37	12	13	PreK & MC Institute 2			18			
29	18	19	20	21	22	23	24	34	22	23	24	25	26	27	28	38	19	20	21	22	23	24	25		
30	25	26	27	28	29	30	31	35	29	PreK & MC 1						39	26	27	28	29	30				
WN	OCTOBER							WN	NOVEMBER							WN	DECEMBER							22	
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S		
39						1	2	44		1	2	3	4	5	6	48				1	2	3	4		
40	3	4	5	6	7	8	9	45	7	PreK & MC Institute 3				13	49	5	6	7	8	9	10	11			
41	10	11	12	13	14	15	16	46	14	15	16	17	18	19	20	50	12	13	14	15	16	17	18		
42	17	18	19	20	21	22	23	47	21	22	23	24	25	26	27	51	19	20	21	22	23	24	25		
43	24	R3 Institute 3					30	48	28	29	30					52	26	27	28	29	30	31			
44	31																								
WN	JANUARY							WN	FEBRUARY							WN	MARCH							22	
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S		
52							1	5		1	2	3	4	5	9			1	2	3	4	5			
1	2	R3 Institute 4					8	6	6	7	8	9	10	11	12	10	6	7	8	9	10	11	12		
2	9	10	11	12	13	14	15	7	13	14	15	16	17	18	19	11	13	14	15	16	17	18	19		
3	16	MC Institute 4					22	8	20	21	22	23	24	25	26	12	20	21	22	23	24	25	26		
4	23	24	25	26	27	28	29	9	27	28						13	27	28	29	30	31				
5	30	31																							
WN	APRIL							WN	MAY							WN	JUNE							22	
	S	M	T	W	T	F	S		S	M	T	W	T	F	S		S	M	T	W	T	F	S		
13						1	2	18	1	2	3	4	5	6	7	22				1	2	3	4		
14	3	4	5	6	7	8	9	19	8	9	10	11	12	13	14	23	5	6	7	8	9	10	11		
15	10	11	12	13	14	15	16	20	15	16	17	18	19	20	21	24	12	13	14	15	16	17	18		
16	17	18	19	20	21	22	23	21	22	23	24	25	26	27	28	25	19	20	21	22	23	24	25		
17	24	25	26	27	28	29	30	22	29	30	31					26	26	27	28	29	30				

K3 LMS Release by number of weeks after institute					K3 Fundamental Dates					Fundamental 1 Programs Can't Be Together				
	5	8	11	14		1	2	3	4	Start Date->	Aug	Sep	Oct/Nov	Jan
Aug 16	9.20	10.11	11.1	11.22	Aug 16	10.15.21	12.10.21			K3	10.15.21		12.3.21	2.11.22
Sep 7	10.11	11.1	11.22	12.13	Sep 7				3.18.22	PK	11.5.21		1.14.22	x
Oct 25	11.29	12.20	1.10	1.31	Oct 25	12.3.21	4.8.22			MC	10.22.21		1.28.22	2.25.22
Jan 3	2.7	2.28	3.21	4.11	Jan 3	2.11.22								
PK LMS Release by number of weeks after institute					PK Fundamental Dates					Fundamental 2 & 3 Programs Can Be Together				
	5	8	11	14		1	2	3	4	Start Date->	Aug	Sep	Oct/Nov	Jan
Aug 30	9.27	10.25	11.15	12.13	Aug 30	11.5.21	12.10.21			K3				
Sep 13	10.18	11.8	11.29	12.20	Sep 13				3.18.22	PK	12.10.21		4.8.22	
Nov 8	12.13	1.3	1.24	2.14	Nov 8	1.14.22	4.8.22			MC				
Math LMS Release by number of weeks after institute					Math Fundamental Dates					Fundamental 4 Programs Can Be Together				
	5	8	11	14		1	2	3	4	Start Date->	Aug	Sep	Oct/Nov	Jan
Aug 30	9.27	10.25	11.15	12.13	Aug 30	10.22.21	12.10.21			K3				
Sep 13	10.18	11.8	11.29	12.20	Sep 13				3.18.22	PK				
Nov 8	12.13	1.3	1.24	2.14	Nov 8	1.28.22	4.8.22			MC				
Jan 16	2.21	3.14	4.4	4.25	Jan 16	2.25.22								
AmeriCorps Events					AmeriCorps Events									
Sep 11	National Day of Service and Remembrance				Jan 17	Dr. Martin Luther King, Jr. Day of Service								
Oct 7	MEC Member Town Hall				Mar 3	MEC Member Town Hall								
Nov 18	Michigan's AC Member Celebration				Apr 29	Global Youth Service Day								
Dec 2	Michigan's AC LeaderCorps Orientation				May 20	Regional Russ Mawby Signature Service Projects								
Dec 30	MEC Member Town Hall				May 26	MEC Member Town Hall								
					Jun 4	End of MEC Service Year								