

Project M3: Math, Mindset, and Mastery

Annual Program Evaluation (EOY2)

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Section 1: Background

Many military connected students arrive in the Coronado Unified School District with gaps in mathematics content area knowledge and skills. Subject to frequent relocations, these students often have significant credit deficiencies, low grades and test scores, and face higher than normal local expectations. Furthermore, for many of our military-connected students, the incongruity of the rigorous Common Core State Standards (CCSS) versus standards of their previous states of residence presents additional difficulties and pressure. The primary goal of M3 is to fill these gaps in mathematical understanding so students have the greatest number of post-secondary options.

Project Objectives and Activities

The main objectives of Project M3 are to integrate personalized learning with assessment methods. By assessing students when they arrive to the district, Project M3 can accurately identify students' strengths and weaknesses and develop a personalized learning path with them to move their learning forward. The project then re-assesses students in the spring to determine the extent to which its actions impacted the student's goals. While M3 relies on this spring administration for summative information, the Project Director (PD) and evaluator also collect bi-weekly data regarding (a) student's performance on high quality mathematics tasks and (b) grades in order to know, in a timelier manner, whether M3 actions are accomplishing their expectations. Additionally, for those students who show limited progress on assessments and/or low performance on math tasks or grades, the grant funds Tier II supports including before and after school tutoring, pull out math support with specialists, math lab, and double-dose math courses. All the aforementioned activities are monitored and evaluated. Below is a list of activities and their completion status.

Table 1. List of grant activities and completion status.

Activity	Status
Use NWEA MAP assessment to determine all military connected students' strengths and weaknesses	Completed pre-assessment in September 2016 and post-assessment May 2017
Determine the most vulnerable military connected students who are significantly behind	Completed in September 2016
Provide teacher-directed, one-on-one academic conferencing for each of these students	Ongoing through June 2017
Develop a Personalized Education Plan (PEP) that identifies student weaknesses and establishes an action plan to address these weaknesses	Ongoing through June 2017
Support student progress toward meeting the goals by providing both in-class (e.g., high quality math tasks with feedback) and technology-based supports (such as Odyssey Learning and ALEKS)	Ongoing 2016-2017

Significant developments or changes

One significant change from the planning year to date has been the adoption of interim measures at the high school. Instead of having no measures to monitor progress toward grant outcomes in grades 9 and 10, the evaluator and project director are now using data from the PSAT to benchmark whether students are on track to achieve proficiency on standards by grade 11. State assessments in California do not currently have measures for grades 9 and 10. In the planning year, the evaluator and project director had limited information about what was happening with regard to the grant's activities and outcomes from 8th grade to 11th grade. These new measures help fill that gap. For the current year, we established a target of 45% of students achieving a 400 or higher in grade 9 and 60% achieving a 440 or higher in grade 10. These benchmarks will allow us to know if students are on track to meet standards in grade 11.

Section 2: Evaluation Study Questions

Project Goals and Expected Outcomes

K-5 GOAL (ELEMENTARY)

The main goal of M3 for elementary students is to improve academic achievement for military-connected students in mathematics. Improving academic achievement occurs as a result from the following activities:

Activity 1: Track and monitor military connected students' mathematics progress using a personalized education plan (PEP).

Activity 2: Provide weekly high quality mathematics tasks (HQMTs) that address students' conceptual and procedural knowledge and feedback on the results to move students' learning forward.

Activity 3: Provide quality Tier II supports based on effective intervention principles to students who need additional mathematics assistance (including pull out support and before/after school tutoring in elementary and virtual tools such as Compass Learning).

Project M3 uses the following interim indicators to know whether it is meeting annual benchmarks:

- By June 2017, 70% of military connected students in grades 3-5 will meet proficiency on the Smarter Balanced Assessment in mathematics, an increase of 4% over 2015 baseline.

6-11 GOAL (SECONDARY)

The main goal of M3 for secondary students is to improve academic achievement for military-connected students in mathematics. This goal results from deploying the following activities:

Activity 1: Track and monitor military connected students' mathematics progress using a personalized education plan (PEP).

Activity 2: Provide weekly high quality mathematics tasks (HQMTs) that address students' conceptual and procedural knowledge and feedback on the results to move students' learning forward.

Activity 3: Provide quality Tier II supports based on effective intervention principles to students who need additional mathematics assistance (including standalone support classes and virtual tools).

Project M3 uses the following interim indicators to know whether it is meeting annual benchmarks:

- By June 2017, 66% of military connected students in grades 6-8 will meet proficiency on the Smarter Balanced Assessment in mathematics, an increase of 4% over 2015 baseline.
- By June 2017, 45% of military connected students in grade 9 will have a PSAT score of 400 or higher.
- By June 2017, 60% of military connected students in grade 10 will have a PSAT score of 440 or higher.
- By June 2017, 54% of military connected students in grade 11 will meet proficiency on the Smarter Balanced Assessment in mathematics, an increase of 6% over 2015 baseline.

Evaluation Questions

FIDELITY QUESTION

Have all the M3 activities been implemented according to plan?

PROCESS MONITORING QUESTION

To what extent were the M3 activities operating the way they were supposed to operate?

INTERIM (OUTCOME) QUESTIONS

Did M3 accomplish its interim goals?

If so, to what extent did M3 strategies contribute to the accomplishment of the goals?

Section 3: Evaluation Methodology

Project M3 is a sophisticated and interconnected set of strategies, actions, and outcomes. To evaluate the project effectively, the PD and evaluator employed a case study approach. A case study approach allows them to collect both quantitative and qualitative, creating a more comprehensive picture of the work and the results of that work. The PD and evaluator collected data approximately every two weeks from August to June, compiled that data and generated findings in early fall, and reported to stakeholders.

Fidelity

For the fidelity of implementation, the PD and evaluator collected data to answer the question: "Are M3 activities reaching their intended audience and are students receiving the right amount of the activity?" While a true fidelity question is concerned primarily with the extent to which an intervention or program was delivered as intended, we answered this question in the process monitoring section. In this section, we answered the following questions:

Table 2. Fidelity questions and types of data collected.

Question	Types of data collected
<i>Reach</i> : How much of the intended target audience participated in the intervention or program activity?	Sign in sheets from before/after school tutoring Attendance logs from pull out support Reports from virtual tools such as Compass Learning Completed mathematics tasks
<i>Dosage Delivered</i> : How much of intervention (program activity) was delivered?	Frequency FTEs/hours for before/after school tutoring FTEs for pull out support Number of math tasks delivered
<i>Dosage Received</i> : How much of the intervention (program activity) was received?	Survey Satisfaction. Did participants get what they needed?

Process Monitoring

For process monitoring, the primary question was "To what extent were the M3 activities operating the way they were supposed to operate?"

Table 3. Process monitoring question and types of data collected.

Question	Types of data collected
<i>Fidelity</i> : To what extent was the intervention (program activity) delivered as planned?	Observations of before/after school tutoring Observations of math labs, double dose math classes, pull out support Observations of classrooms using Compass Learning Observations of high quality math tasks

Interim Outcomes

Finally, the interim measures asked and answered two fundamental questions:

Table 4. Interim outcome questions and types of data collected.

Question	Types of data collected
Did M3 accomplish its interim goals?	Smarter Balanced assessment data NWEA MAP assessment PSAT
If so, to what extent did M3 strategies contribute to the accomplishment of the goals?	Same data as above with different populations <ul style="list-style-type: none"> • M3 students vs. non-military connected students • Low performing M3 students vs. low performing non-military connected students

Analysis

Most of data collected for Project M3 are analyzed using evidence tables, or by comparing actual data to benchmark thresholds, and/or descriptively by comparing average performance of one group to another.

Section 4: Data Analysis and Findings

Study Demographics

In the 2016-2017 school year, approximately 3202 students enrolled in Coronado Unified School District (CUSD). Of those 3202, 1244 or 39% were enrolled in Coronado High School (CHS), 737 or 23% at Coronado Middle School (CMS), 355 or 11% at Strand Elementary, and 866 or 27% at Village Elementary. Student enrollment by grade level is arrayed in the table below.

Table 5. Total student enrollment by grade level.

Grade	Number of Students Enrolled	Percent of Students Enrolled
TK	37	1.2%
KN	171	5.3%
1	190	5.9%
2	178	5.6%
3	198	6.2%
4	233	7.3%
5	214	6.7%
6	235	7.3%
7	255	8.0%
8	247	7.7%
9	301	9.4%
10	321	10.0%
11	326	10.2%
12	296	9.2%

Of the 3202 students enrolled in CUSD, 1113 or 34.8% are military connected students. Of those 1113, 252 or 23% were enrolled at CHS, 264 or 24% at CMS, 256 or 23% at Strand Elementary, and 341 or 31% at Village Elementary. Student enrollment by grade level is arrayed in the table below. Furthermore, about 12% of CUSD student's transition in and out of Coronado during the school year. Approximately, 387 of the 3202 students exited CUSD in 2016-2017. About 198 students or 51% of those exiting were military connected.

Table 6. Military-connected student enrollment by grade level.

Grade	Number of Students Enrolled	Percent of Students Enrolled
TK	22	1.9%
KN	90	8.0%
1	93	8.3%
2	91	8.1%
3	88	7.9%
4	110	9.8%
5	103	9.2%
6	76	6.8%
7	100	9.0%
8	88	7.9%
9	54	4.9%
10	69	6.2%
11	56	5.0%
12	73	6.6%

*Elementary*FIDELITY OF IMPLEMENTATION (*Who is getting what and how much?*)

For fidelity data, the PD and evaluator answered the question of whether or not grant activities were delivered to the target audience in the necessary amount and whether the target audience received what they needed. It is important to note that some of these activities below apply to all 597 military connected students in elementary such as high quality math tasks and small group instruction. Other activities apply specifically to M3 students, or students who struggle in mathematics. Of all the M3 students (143), some are military connected (69) others are not (74). For this reason, the total number of military connected students may differ according to the program activity.

Definitions:

- **M3.** Students who struggle in mathematics. These students are identified as being below the 50th percentile in mathematics on the MAP assessment and not meeting standard on SBAC mathematics.
- **M3 Military-connected.** A subset of M3 students. These students struggle in mathematics, meet the identification criteria above, AND are military connected.

Table 7. Elementary project activities by reach and dosage.

Project Activity		Reach	Dose Delivered	Dose Received
		% students participating	Frequency of activity	Activity received
Personalized Education Plans (PEPs)	M3 (143)	47/143 (38%)	3 conferences per year	100%
	Military-connected M3 (69)	47/69 (68%)	3 conferences per year	100%
High Quality Mathematics Tasks	All (1821)	1821/1821 (100%)	18 per year	*
	Military-connected (597)	597/597 (100%)	18 per year	*
Tier II Support				
Before/After Tutoring (Strand)	M3 (44)	17/44 (39%)	163 hours	58 hours (36%)
	Military-connected M3 (34)	12/34 (35%)	163 hours	60 hours (37%)
Small group instruction (Strand)	M3 (44)	44/44 (100%)	180 hours	180 hours
	Military-connected M3 (34)	34/34 (100%)	180 hours	180 hours

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Math lab (Village)	M3 (99)	46/99 (46%)	90 hours	**
	Military- connected M3 (30)	12/35 (34%)	90 hours	**

*We are moving to a *math task tracker* document that will more clearly tell us whether students are completing the 18 tasks.

**We have developed a method for tracking student attendance in the math lab this year to determine how much of the intervention students actually receive.

PROCESS MONITORING OF ONGOING IMPLEMENTATION:

Activity 1: Personalized Education Plan (PEP)

Ongoing classroom observations and record reviews provided most of the process data for activity one. We observed students' PEP documents in the classroom as well as collecting these documents at the end of the year. We requested PEP documents on virtually every student identified as both military connected and struggling in mathematics. Some teachers, unfortunately, has discarded the documents at the end of the year, so we were unable to collect PEPs for every student. Several important recommendations for improvements were made when we had the PEP documents in hand. First, many of these documents vary by grade level and even by teacher within grade level. *Greater consistency needs to exist in these documents since the goal is for PEPs to follow the student throughout his or her education in CUSD.* Having 4 or 5 of these documents may prevent teachers from providing the best possible support to struggling students. In an effort to improve upon this issue, we developed a common PEP document for teachers to use for the 2017-2018 school year. This document will allow us to better understand how PEPs are supporting military connected students who struggle in mathematics. Furthermore, we developed a process that involves teachers updating PEP documents at least three times a year. Currently, we do not know how many conferences teachers have with students using the PEP. In the current year, we are tracking this information so that we know whether students are receiving enough of this support and whether they need more in order for this activity to be effective.

Activity 2: High Quality Math Task

In elementary, most teachers administer high quality math tasks once or twice a week to all students in grades K-5. Some of the teachers are administering them less frequently (2-3 times a month), but every teacher is providing approximately 18 high quality mathematics tasks per year in elementary settings. To date, the PD and evaluator collected 1269 math tasks from M3 students, 769 were developing or higher (61%). Approximately, 559 tasks were collected M3 military connected students and 375 of those tasks were developing or higher (67%). Currently, we are developing and implementing a high quality math task tracker that students complete. This document will allow us to have a better understanding of who actually completes the tasks, which is information beyond whether they are given the task. This year, we should have a better understanding of how many tasks students are completing as well as how they are performing on them.

Activity 3: Tier II Support

Tutoring is a primary strategy used by Silver Strand Elementary. Silver Strand is located inside military housing, so the environment is more conducive to before/after school tutoring. This year approximately 12 M3 military-connected students attended tutoring regularly. Of those 12, students worked on a combination of reading, vocabulary and mathematics for about 60 total hours, or $\frac{1}{2}$ hour per week, throughout the 2016-17 school year. These twelve students represent approximately 35% of the military connected M3 student population. Additionally, approximately 37 non struggling math students attended tutoring. This is a finding that we must continually monitor because, as we have learned, some students struggle with a concept or are absent from school, and they attend tutoring. Initially tutoring was specifically for students who did not meet our success criteria, but this definition is too narrow. Other students need support. Furthermore, of those students who are struggling in mathematics (according to our criteria), they are only taking advantage of about $\frac{1}{3}$ of the time they could be in tutoring. We also need to determine why the neediest students are not getting more of this particular support.

At Village Elementary, military connected students who struggle in mathematics participate in a Math Lab. This year approximately 12 military connected students attended Math Lab regularly. Of those 12, students worked on a combination of reading, vocabulary and mathematics. Unfortunately, we do not have information about how much of the math lab these students get.

We need a way to better identify which students are getting what and how much. We also need to figure out why the other 2/3rds of student who need the lab are not attending.

Pull out support (or small group instruction) at Silver Strand also presents a similar challenge as math lab. Because all students receive this support, it is difficult to know how effectively it works. Determining the effect of an initiative requires a comparison group and in this case one does not exist since all student receive the same support.

Another Tier II strategy is the use of Compass Learning. Approximately 302 military connected students used Compass Learning at the elementary level. The 302 students spent over 4771 hours on Compass, or 15 hours per student. These students practiced on average 113 math activities. Students averaged 78% correct on these activities.

Interim Goals

As depicted in the table, the Smarter Balanced assessments in mathematics were administered to 578 students in grades 3-5. Of the 578 students, 259 were military connected and 319 were not. The Smarter Balanced assessments in mathematics has four cut points: Not Meeting Standards, Nearly Meeting Standards, Meeting Standards, and Exceeding Standards. We examined the performance of students performing at the Meeting and Exceeding Standards thresholds. Of the 259 military connected students assessed, 174 (or 67%) met or exceeded standards in 2017. Our June 2017 goal was 70%. We did not meet our goal but military connected students did perform 1% over our 2015 baseline (66%). Also, military connected students outperformed non-military connected students by 4 percent.

Table 8. Military connected and non-military connected student performance on SBAC.

Students	N	% Meeting/Exceeding	Target	Met (Yes/No)
Military-connected	259	67.2%	70%	No
Nonmilitary-connected	319	63.3%	70%	
Total	578	65.1%	70%	

The next table indicates the results of the NWEA Measures of Academic Progress (MAP) assessment in grades 3-5. To determine growth, the PD and evaluator matched spring scores to

students' fall MAP scores. Essentially, a growth score is the difference between the spring and fall performance on MAP. The MAP assessment provides an "Expected Growth Goal" for every student based on his/her fall MAP performance. For example, a student who scored a 187 in the fall might be expected to grow 5 points by the spring. After the spring performance, we can compare the difference between the two scores and determine if that difference is 5 points or more. If it is, then we consider this student to have met his/her expected growth for the year. Every student has his or her own personalized growth goal based on prior performance.

Of the 301 military connected students assessed in the spring of 2016, 54 (18%) did not have a spring score so growth cannot be determined for these students. Once removed, the analysis left approximately 243 students with matched scores. Of the 247, 124 students or 50% met their expected growth goal in 2016-2017. However, 123 students, or roughly 50% did not meet their expected growth goal. We set our target at 100%, so we are well below that target currently. Also, military connected students performed similarly to non-military connected students.

Table 9. Military connected and non-military connected student growth on MAP.

Students	N	# Matched	% Making Growth	Target	Met (Yes/No)
Military-connected	301	247	50.2%	100%	No
Nonmilitary-connected	342	310	50.7%	N/A	N/A
Total	643	557	50.5%		

Secondary

FIDELITY OF IMPLEMENTATION (Who is getting what and how much?)

For fidelity data, the PD and evaluator answered the questions of whether or not grant activities were delivered to the target audience in the necessary amount and whether the target audience was satisfied with what they received.

Table 10. Secondary project activities, reach, and dosage.

Project Activity		Reach	Dose Delivered	Dose Received
		% of students participating	Frequency of activity	Activity received
Personalized Education Plans (PEPs)	M3 (178)	38/178 (21%)	3 per year	*
	Military-connected (47)	38/47 (81%)	3 per year	*
High Quality Mathematics Tasks	All (1685)	1685/1685 (100%)	18 per year	100%
	Military-connected (443)	443/443 (100%)	18 per year	100%
Tier II Support				
Double-dose Math class	M3 (178)	47/178 (26%)	180 hours	175 (97%)
	Military-connected (47)	8/47 (17%)	180 hours	175 (97%)

*We are moving toward a common PEP document that will allow us to know if students are getting the activity 3 times a year.

PROCESS MONITORING OF ONGOING IMPLEMENTATION:

Activity 1: Personalized Education Plan (PEP)

Ongoing classroom observations and record reviews provided most of the process data for activity one. At the middle school, we observed students' PEP documents and the ways students used them. Most middle school students who take a double-dip math class develop a PEP as soon as they get their Fall MAP scores. These documents are then kept with the student throughout the year, and they share them with us during our observations. While the basic document exists, the PEP is not functioning optimally as a goal setting and monitoring tool at the middle school. It exists more like a report with some general information about what students can do to improve their math performance (e.g., completing homework, etc.). The intent of a PEP is to develop self-regulation in students, to make them feel more in charge of their learning, and take more ownership of that learning. Currently, the PEP simply documents a few test scores.

In high school, PEPs are virtually non-existent. The high school has struggled with what to use as a diagnostic tool for determining what students know and do not know. The tools they have in place are used to make placement decisions. That is to say, they are used to determine the type of math class a student should take. Currently, even students in a double-dip math class are not using any type of goal setting or tools to monitor of their performance.

Activity 2: High Quality Math Task

Instead of developing math tasks like elementary teachers, the middle and high school teachers adopted a curriculum with embedded high quality math tasks.

Over the course of the year, the PD and evaluator observed eight classrooms to validate the use of the CPM curriculum along with the use of quality mathematics tasks. In middle and high school, teachers administered quality math tasks almost daily to all project students. These tasks are part and parcel to the CPM curriculum. One important observation about the use of these math tasks was that struggling students (especially M3 students) appear to struggle more than others to demonstrate mastery on these challenging tasks. The grant needs to develop ways of more closely monitoring student progress and achievement on these tasks and whether these students are getting the necessary supports in order to successfully demonstrate mastery in mathematics.

Activity 3: Tier II Support

Double-dip math classes is a primary strategy used by both the middle and high school to address the needs of struggling students in mathematics. The struggling students are identified using criteria from the grant and students are placed in a double dose math class in order to remediate their needs. Multiple observations of these classrooms, however, have yielded highly variable models. For example, the middle school students may work on homework, or preview a chapter, or use one of the virtual learning tools. The high school classroom is much smaller 5-8 students, and the teacher typically re-teaches content with which the students struggled. All of our observations led us to develop some guiding principles for effective math remediation. We introduced those principles in the spring so that sites could refine these classes with those principles in mind. The principles focus on explicit instruction along with other important research-based concepts, and we are currently in the process of observing them in use.

Interim Goals

GRADES 6-8

In grades 6-8, the Smarter Balanced assessments in mathematics were administered to 684 students. Of the 680 students, 235 were military connected and 445 were not. The performance of students at the Meeting and Exceeding Standards thresholds indicated that, of the 235 military dependent students, 177 (75%) met or exceeded standards in 2017 and 58 did not. The June 2017 goal was 66%. Project M3 surpassed the goal in grades 6-8 by 9%. Furthermore, military connected students also outperformed non-military connected students by 7%.

Table 11. Military-connected (secondary) and non-military connected student performance by SBAC.

Students	N	% Meeting/Exceeding	Target	Met (Yes/No)
Military-connected	235	75%	66%	Yes
Nonmilitary-connected	445	68%		
Total	680	70%		

For the mathematics growth, the PD and evaluator examined the results of the 199 military connected students assessed on the MAP Spring of 2017 in grades 6-8, 65 students or 24% did not have both a Fall and Spring score. Nearly, 71% (or 141 students) made expected growth during the year, while 29% were unable to meet expected growth.

Table 12. Military connected (secondary) and non-military connected student growth on MAP.

Students	N	# Matched	% Making Growth	Target	Met (Yes/No)
Military-connected	264	199	71%	100%	No
Nonmilitary-connected	468	382	70%		
Total	732	581	70%		

GRADES 9-10

In grades 9-10, the Smarter Balanced assessments in mathematics are not administered so we have no data for these students. Instead, we examined the performance of 9th and 10th grade

students using the PSAT. The PSAT provides a benchmark for knowing whether students are college-career ready (similarly to SBAC in grade 11). Students scoring above a 400 in 9th grade or above a 440 in 10th are considered on track for college and career readiness and mastering rigorous state standards.

Of the 301 9th grade students assessed on the PSAT, 54 students were military connected and 245 were not. Nearly 39% (or 21 students) of the military connected students were considered "on track," while 52% or 28 were not. The goal for this year was 70%.

Table 13. Military connected (grade 9) and non-military connected student performance on PSAT.

Students	N	% Meeting Target	Target	Met (Yes/No)
Military-connected	54	39%	45%	No
Nonmilitary-connected	245	43%		
Total	301	46%		

Of the 321 10th grade students assessed on the PSAT, 41 were military connected while 143 were not. Nearly, 60% (or 25 students) of the military connected students were considered "on track," while 40% or 16 were not. The goal for this year was 69%.

Table 14. Military connected (grade 10) and non-military connected student performance on PSAT.

Students	N	% Meeting Target	Target	Met (Yes/No)
Military-connected	41	60%	60%	Yes
Nonmilitary-connected	143	57%		
Total	184	57%		

GRADE 11

The PD and evaluator examined the Smarter Balanced assessment results in mathematics for students in grade 11. Of the 287 total students, 51 were military connected and 248 were not. Of the military connected students, approximately 59% (30 students) met or exceeded standards, while 41% (or 21) did not. In year two, CUSD exceeded its 2017 summative goal by 4.8%.

Table 15. Military connected (grade 11) and non-military connected student performance on SBAC.

Students	N	% Meeting/Exceeding	Target	Met (Yes/No)
Military-connected	51	58.8%	54%	Yes
Nonmilitary-connected	248	60.0%		
Total	287	59.7%		

Section 5 & 6: Conclusions and Recommendations

Overall, implementation of M3 activities suggests a high degree of variability. For example, virtually every student is being assessed using MAP and SBAC assessments. The grant has excellent outcome measures and participation in these measures. In addition to excellent outcome measures, the vast majority of students are engaged in high quality mathematics tasks regularly. These tasks serve as one of the primary levers for improving instructional practice in the district as well as closing the gap in students' mathematics performance. However, with regard to the two other grant activities: personalized education plans and Tier II support, extensive variation exists in the way these activities are implemented. At some sites, these activities are well coordinated, but at other sites there is limited coherence between goal setting and support and what happens in math classes.

Even with inconsistent implementation, we are seeing some meaningful changes in student performance in mathematics (see Table 16), especially in the military-connected population. As implementation of all grant activities continues to tighten up and improve, it is my conclusion that mathematics performance will continue to improve.

Figure 16. District-wide performance on interim measures over time.

	2015-2016			2016-2017		
	Result	Goal	% Achieved	Result	Total	% Achieved
Military-connected student in grades 3-5 meet standards	69%	68%	102%	67%	70%	95%
Military-connected students in grades 6-8 meet standards	65%	64%	102%	75%	66%	114%
Military connected students in grade 11 meet standards	62%	60%	103%	59%	54%	109%

Specific Elementary Conclusions and Recommendations

Based on the findings and our current challenges, it is apparent that too few students have PEPs and actually engage in updating those PEPs regularly. To date, PEP documentation varies greatly across schools and classrooms. We have developed a common PEP tool that should reduce the variability in the future. For PEPs to have an impact on student learning, students must use them to track and monitor their progress toward their math goals and teachers must use them to help students achieve those goals. *It is my recommendation that CUSD adopt this common PEP template along with a process for using it that allows students to engage in monitoring progress toward achieving math goals at least 3 times per year.* It is also my recommendation that *PEP documents be used with ALL students struggling in mathematics*, which would include all military connected students struggling in math in grades K-5. Currently, more students in grades 3-5 complete them.

With regard to high quality math tasks, it is also my conclusion that teachers are addressing students' conceptual and procedural understanding of mathematics by providing high quality mathematics task at least twice a month. These tasks allow students to engage in mathematics both procedurally and conceptually while also providing a context in which they dialogue about their mathematical understandings. While we know that teachers are providing these opportunities, we know less about the dosage. That is to say, we do not really know what percentage of students are engaged in and completing these tasks successfully. We have developed a math task tracker for students to use this year so that we can become more familiar

with whether students are completing these tasks, which may allow us to know more about the effects of these tasks on student achievement. It is my recommendation that *the math task tracker be used in all elementary classrooms so that we have a better understanding of the students who are completing these tasks and the how well students are performing on them*. It is important for CUSD teachers to recognize the through line between these tasks and student achievement on standardized assessments. Seeing student performance on these tasks more regularly may help to facilitate this understanding.

Additionally, it is my conclusion that too few students who need the Tier II support are receiving it. Currently less than half the students who are military connected and who struggle in mathematics receive supplementary mathematics support. It is my recommendation *that staff examine who is getting and not getting support and develop a structure or protocol that allows those in most need to get the extra support they need*. Currently, students who do not appear to need math support are being placed in it while students who need it are not.

Greater consistency in implementation of program activities will translate into improvements in interim measures, which were not realized this year. However, many students are growing in their mathematical understanding and this is a promising development.

Secondary Conclusions and Recommendations

It is my conclusion that too few students are engaged in developing a PEP, although PEPs are being used extensively with military-connected students.. Currently, the 38 students with PEPs are middle school students. Furthermore, the PEPs are mostly a way for students to document their Fall MAP score. Students make some general goal oriented statements, but these are not specific enough to be used as goals. It is my recommendation that *the middle and high school adopt a common PEP document and a process that allows teachers and students to engage in goal setting and monitoring of goal setting at least three times a year* and puts the student at the heart of the process in order to further develop his/her ownership of learning.

Additionally, I can conclude that middle and high school students are getting regular access to high quality mathematics tasks. Similar to elementary school, it is my recommendation *that sites adopt a method of tracking student performance on these tasks and monitor their progress, so all parties (teachers, students, and administrators) have a greater understanding of how students are performing on them*. Additionally, struggling students need *more formative feedback on these tasks so gaps in their understanding close rather than widen*.

Furthermore, it is my conclusion that math support classes are operating more like a homework support course in middle school, and support courses in the high school are used for re-teaching rather than remediation. It is my recommendation *that all CUSD sites (especially the middle and high school) adopt a research-based model for providing mathematics support*. This model should emphasize explicit teaching, vocabulary, deliberate practice, review, and feedback. Both the middle and high school should adhere to this model along with regularly monitoring the performance of students in these courses. Furthermore, more students need to access Tier II support. Currently students do not access Tier II services because they conflict with elective classes that are more appealing. Better master schedule planning may prevent this issue from occurring in the future.