

Charlotte-Mecklenburg Board of Education
Progress Monitoring Report – Performance Summary (Math I – Grades 9-12)
March 2023

Introduction – What is Being Monitored

The focus of this progress monitoring summary is Math I in grades 9-12. The Board’s Math I goal is to increase the percentage of high school students who score at the College and Career (CCR) level -- Level 4 or 5 -- in Math I (grades 9-12) from <5% (4.5%) in October 2021 to 25% in October 2024.

Two (2) different metrics are shared in this monitoring report:

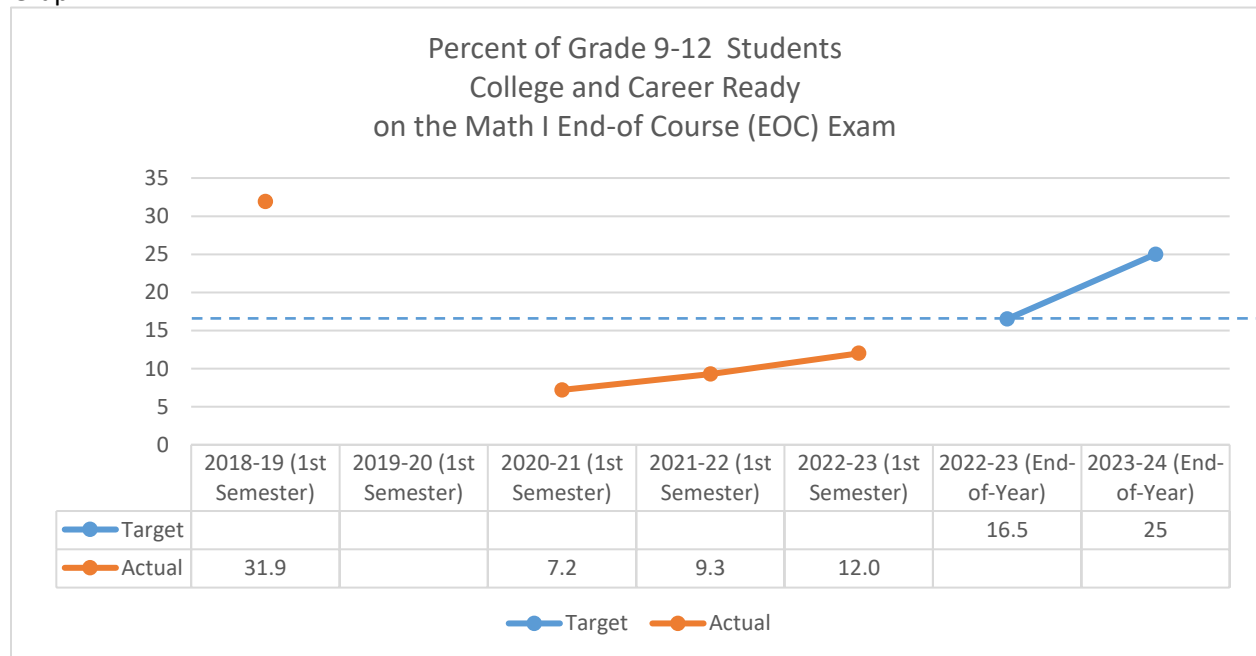
- Target End-of-Year College and Career Ready (CCR) Rates, and
- Actual First Semester College and Career Ready (CCR) Rates on the Math I End-of-Course (EOC) exam in grades 9-12.

Results reported here are for students in the aggregate (all students). It should be noted that results are not reported for the 2019-20 school year. End-of-Year testing across the country was canceled due to the pandemic. End-of-Course tests, though administered in 1st semester, were not administered 2nd semester. Nationally, these data went unreported. Consequently, there is a gap in reporting on Graph 1 below for the 2019-20 school year.

Evaluation of Current Performance

At the conclusion of 1st Semester in 2022-23 school year, **12.0%** of students that took the Math I End-of-Course (EOC) exam in grades 9-12 attained a score of Level 4 or 5 (College and Career Ready), a 2.7 percentage point increase from the prior school year. This current percentage places us **Below Target** at this time.

Graph 1.



Supporting Data

The public reporting of preliminary unofficial numbers is allowed, but is not customary. These first semester End-of-Course (EOC) figures are being shared as a temporary proxy, while a suitable leading indicator is established. In reviewing these first semester figures, 293 of 2,436 Math I EOC test takers in grades 9-12 scored a Level 4 or 5, which the state considers college and career ready (CCR). Another 551 Math I test takers (22.6%) scored a Level 3, just a few scale score points away from scoring CCR. This percentage of first semester Math I test takers scoring Level 3 is comparable to the past two school years – SY 2021-22 (21.7%) and SY202-21 (21.0%). Overall, 844 students (34.6%) scored a Level 3, 4 or 5. In short, we made progress toward our year-end target. A total of 9,526 students are currently enrolled in Math I in grades 9-12 in either first semester, second semester or the year-long course. If we test 95% of those students, 9,050, we'll need an additional 1,200 students to score a Level 4 or 5 to attain our annual target of 16.5%. Currently, a total of 6,871 students are enrolled in Semester 2 or the year-long Math I course in grades 9-12.

Four (4) schools stood out for their percentage of students in grades 9-12 scoring Level 4 or 5 on the Math I EOC in first semester: Ardrey Kell HS (47.7%), Providence HS (69.7%), Independence HS (24.3%) and Cochrane Collegiate Academy (38.1%). Ardrey Kell and Independence are both demonstration sites (see below). Again, these scores are preliminary and unofficial, and have not yet been validated by the state. Still, they give reason for optimism that the strategies outlined below may improve our second semester performance.

Lastly, in first semester we had 100 Math I students across 21 high schools score Level 4 or 5 that SAS' Educator Value Added Assessment System (EVAAS) projected would score Not Proficient. Additionally, 402 Math I students across 25 high schools scored Level 3 that SAS' EVAAS projected would score Not Proficient. These students (502 total) and their teachers beat the odds.

Actions Planned and Underway

Four (4) primary strategies are being applied to attain this year's target. They are the following:

- *Strengthening Math I Core Instruction.* Charlotte-Mecklenburg Schools staff collaborated with nationally recognized math experts to create a curriculum (based on the highly rated Illustrative Math) that is aligned to North Carolina's standards. Last year was the first year of implementation. Lessons from year 1 have been applied to improve support for schools. Additionally, during this school year a set of teacher and student focus groups are being conducted to stand alongside classroom observations, which can provide further insight as to the promise and challenges with implementing the curriculum to inform Summer 2023 PD and next year's implementation support.
- *Integrating Math I Interventions and Core Instruction.* For the first time, a year-long Math I course has been offered across the district in high schools. The model utilizes both A-Day and B-Day to maximize the entire school year, as opposed to a single semester. One day is used for the provision of the provided curriculum. The other day is utilized to provide just in-time interventions based on what will be taught (pre-teaching) or what was just taught (re-looping). Short formative assessments are administered daily to inform core instruction and intervention needs. Lastly, NWEA's MAP assessments have been expanded to Math I, beginning with a first administration mid-year at the beginning of second semester. Over 100 Math I teachers

attended training on how to use those data to support classroom practice and provide targeted support based on students' individual needs and assets.

- *Delivery of Professional Development.* Targeted in-person professional development has been provided quarterly to Math 1 Instructional Leaders and twice for Math 1 teachers this school year, informed by the lessons learned from year 1 implementation of the new Math 1 curriculum. An emphasis has been placed on unpacking the curriculum for appropriate implementation. Strategic data use has also been an emphasis. Participation rates in centrally provided professional development consistently exceeded 90% in the second quarter. To provide teachers with models of effective instruction of the Math I curriculum, a set of demonstration sites have been identified and are established for school teams to visit. Again, two of our four highest performing schools in this area first semester, - Ardrey Kell and Independence High Schools – are demonstration sites.
- *Ramping Up in Grade 8 Math.* With an eye on the 2023-24 school year, strategies and tactics have been applied in middle schools to raise Grade 8 math students' performance this year to reach 2023-24 targets. Eighth grade math tenets in the Open Up curriculum have been reinforced and prioritized to prepare students for the Math 1 Curriculum and standards. Targeted in-person professional development has been provided quarterly to Math 8 Instructional Leaders and twice for all Math 8 teachers this school year. An emphasis has been placed on unpacking the curriculum for appropriate implementation. Strategic data use has also been an emphasis. To provide teachers with models of effective instruction of the Math 8 curriculum, a set of demonstration sites have been identified and are established for school teams to visit. Additionally, an increased investment to support middle grades math interventions has been made using Elementary and Secondary School Emergency Relief (ESSER) funds. Specifically, sixteen (16) Multi-Tiered System of Support (MTSS) facilitators were deployed to high need middle schools to support the full implementation of tiered supports, focusing on mathematics. In addition to MTSS facilitators, twenty (20) math interventionists were deployed to ten (10) targeted middle schools to further invest in the accelerated recovery of Grade 8 students in math. Their work will continue throughout the second semester.
- *Providing Summer Professional Development.* Professional development is in the process of being planned for Summer 2023 in alignment to Goal 2. Middle school teachers at Title I schools will have the opportunity to engage in Open Up Curriculum professional development. All math teachers who teach the CMS HS Math Curriculum will have the opportunity to engage in professional development that is differentiated based on the teacher's prior experience with the curriculum. Teachers new to the curriculum will take a Level 1 course that provides an introduction to the curriculum accompanied by implementation guidance. Teachers who have experience with the curriculum will take a Level 2 course that provides an in-depth look at the curriculum, including key features within the curriculum that support teachers in meeting the learning needs of students.
- *Implementing School Based Support for Middle and High Schools.* School-based educators who are in master teacher roles or receiving differential pay for work as an instructional leader recently completed a Quarter 2 reflection form to reflect on and share their impact as instructional leaders in alignment with the Elementary and Secondary School Emergency Relief (ESSER) funded school-based support initiative. All 190 employees who are associated with this

initiative completed the form. Respondents reported they supported their schools as instructional leaders in the following areas:

- Collaborating with school leaders to support teachers,
- Leading Professional Learning Communities (PLCs) in the implementation of the curriculum (unpacking, lesson planning, community building),
- Leading PLCs and/or teachers through data analysis,
- Direct coaching of teachers, and
- Modeling the curriculum.

Requests of the Board

Three requests are being made of the Board:

1. Encourage timely student enrollment in school and supplemental programs such as Extended Day, and both out-of-school and in-school tutoring programs;
2. Advocate for programs and messaging in the community that encourage student attendance on a daily basis, reminding stakeholders that attendance requirements have been reinstated this school year; and
3. Advocate with North Carolina Department of Public Instruction (NCDPI) staff and state legislators for the removal of human resource barriers to Charlotte-Mecklenburg Schools' ability to staff schools with skilled teachers.

Staff believe these actions can positively impact our ability to reach our annual targets in this area.