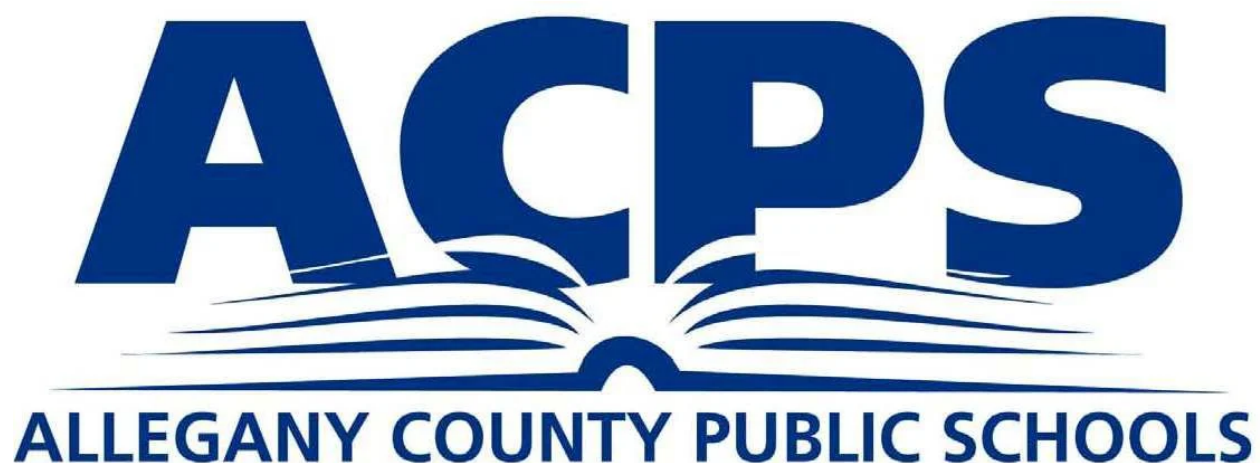




Comprehensive Mathematics Plan

PreK - 12

September 2025

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Narrative Overview

The Allegany County Public Schools (ACPS) Comprehensive Math Plan will provide a long-term pathway towards the implementation of a Pre-K through grade 12 program, ensuring that all ACPS students are prepared to meet College and Career Ready (CCR) requirements.

Through the initial Blueprint implementation work previously completed, the Comprehensive Math Plan for ACPS will prioritize:

- Multi-Tiered Systems of Support (MTSS)
- High Quality Instructional Materials (HQIM)
- Evidence-Based Instructional Strategies
- Professional Learning and Support

Over the past several school years, ACPS has been making a concerted effort to address student learning in mathematics, while being attentive to residual learning loss from COVID. One example of this has been to modify the middle school math experience for all students by redesigning the student schedule to provide a dedicated Math Lab time where all students receive intervention, remediation, or enrichment based on need. This is in addition to their core grade-level instruction. Diagnostic data collected from cohorts completing this model have shown that ACPS is increasing the percentage of students meeting grade level standards, while sharply reducing the number of students more than one year behind in mathematics as they progress through the middle school grades.

While the middle schools have been making progress with MTSS in mathematics, there remain challenges to providing comparable services in the elementary and high schools. Much of this challenge can be attributed to scheduling within the student day and the availability of staffing to provide needed services (i.e., Intervention programs and teachers). ACPS will be piloting a new schedule in one high school and one elementary school during SY 24-25 and SY 25-26 in an effort to open up periods of time for staff to provide Tier 2 and Tier 3 services within the school day, which will also include tutoring services. Additionally, ACPS is creating opportunities for students to receive high-quality school day tutoring in mathematics.

An area of strength for the ACPS mathematics program has been the use of HQIM. All core curricular materials from Pre-K through Algebra 2 align with Maryland standards and meet expectations from edReports. Additionally, our supplemental digital materials, including intervention programs, are supported by research to be effective. ACPS has and will continue to invest in these HQIM through regular district and school-based professional support to ensure that ACPS teachers are utilizing these materials with fidelity. Beyond the vendor provided materials, ACPS makes extensive use of MSDE MCAP documents to ensure that our curriculum closely adheres to the course level standard.

ACPS has been utilizing the evidence-based Gradual Release of Responsibility (GRR) instructional framework for eight years in all disciplines. The GRR framework, which incorporates Universal Design of Learning (UDL) principles throughout, is adapted to our core instructional resources. This framework blends direct instruction with student-centered learning, promoting collaboration and independent learning while the teacher facilitates the lesson. A continuing challenge facing ACPS is monitoring the implementation of the GRR framework within the mathematics classroom.

ACPS is committed to providing continuous professional learning and support to our teachers. Each year, teachers participate in vendor-based, district-based, and/or school-based professional learning specific to the mathematics program. ACPS annually contracts with multiple vendors to work with math teachers in individual schools to improve the student mathematics experience.

Providing school-based professional learning and support in mathematics using ACPS staff has been a challenge at all levels. Existing elementary specialists are assigned multiple schools and provide multi-tiered support, while some middle school specialists have classroom teaching responsibilities on top of being a specialist. At this time, there is no mathematics support staff in our high schools. Given our existing staffing constraints for mathematics support staff, ACPS has trained each of our specialists as coaches through Mathematics Quality of Instruction (MQI) in SY 24-25, with additional training planned. This will allow for added focus and attention given to the quality of the mathematics instruction that occurs in each classroom.

A final piece related to professional learning and support is building and sustaining a collaborative professional math culture. ACPS has considerable room for growth in fostering a professional learning mathematics community within the schools. Much of the challenge in establishing this collaborative culture rests within restrictive school day schedules that do not provide for regular collaborative meetings. Elementary and middle schools are able to provide collaboration time within grade levels. However, only one high school in ACPS can do the same because of a creative schedule that is being piloted, which builds in a daily collaborative planning period for the math department. Thus, a challenge for ACPS is to make professional collaboration time a regular component of the teacher's schedule at all grade levels.

ACPS recognizes that we have established some foundational pieces addressing our priorities in mathematics within the Blueprint. MTSS is a district-wide focus that received immediate attention starting in SY 24-25. While we feel we are in a good place with HQIM, one challenge coming soon will be our ability to fund the continued use of these resources once the existing contracts expire. Another challenge is the effect that any upcoming MSDE decisions on CCR and post-CCR pathways will have on the high school curricular offerings. ACPS continually looks at optimal methodologies for presenting mathematics instruction that meets the needs of all students. Saying this, ACPS is committed to integrating practices that have been found to be highly effective in the teaching and learning of mathematics. Finally, while ACPS does well with bringing in outside resources for professional learning and teacher support, ACPS will work towards providing better opportunities for school-based professional learning in mathematics

using our specialists/coaches, along with giving teachers autonomy in the professional learning they seek, including through the use of regular school day professional collaboration.

ACPS MCAP data for 2025 shows that ACPS students match or exceed the state average in Mathematics with the exception of grade 6 and grade 8. Furthermore, ACPS has shown 2022-2025 upward performance trends in grade 3, grade 4, grade 6, grade 7, Geometry, and Algebra 2. Current areas of concern are with grade 6, grade 8, and Algebra 1, which are not consistently moving in an upward trend and/or not meeting the state average proficiency rate.

Across all assessed courses, ACPS is striving to show an increase in proficiency of 5% over the previous year.

Clear Vision

Allegany County Public Schools (ACPS) acknowledges that mathematical literacy is foundational for all students to become productive members of society. It is our vision that:

All students, upon graduation, will have developed mathematical numeracy skills through conceptual understanding and procedural knowledge which will enable them to be confident and capable mathematicians.

In order for ACPS to achieve this vision, a collaboration between all stakeholders is essential. District and school leaders, instructional specialists, teachers, students, families and community members must create a respectful, intentional, and purposeful mathematics environment in which:

- Educators deliver evidence-based, engaging mathematics instruction using high-quality instructional materials (HQIM) aligned to Maryland Mathematics Content and Career Ready Standards, application of [NCTM's Effective Mathematical Teaching Practices](#), and the [GRR Instructional Framework](#). An equitable and inclusive classroom culture is created where all students are valued and respected.
- Students are inquisitive, engaged, and active participants in their mathematics learning at all grade levels and at all tiers of instruction.
- School leaders, in partnership with classroom teachers and instructional specialists, work collaboratively to promote student success and drive instruction through a multi-tiered system of support (MTSS), supporting thorough data analysis which includes: MCAP data, universal screening data, diagnostic / progress monitoring data, district common assessment data, and classroom assessment data.
- District and school leaders provide systemic professional development focused on MTSS and effective mathematics teaching practices, with support from our vendor partners to provide continuous professional learning on the effective use of HQIM within the mathematics classroom.
- As ACPS is committed to using the i-Ready Classroom through grade 8, we are able to provide a consistent, coherent mathematics program that easily aligns and integrates mathematics instruction from grade to grade through uniform assessment, instructional design, and professional learning.
- ACPS strives to have families and community members support, reinforce, and foster a positive attitude toward mathematical learning. Upon final MSDE approval, the ACPS Comprehensive Mathematics Plan Pre-K - 12 will be published on the ACPS website. District and school administrative staff, along with school community coordinators and classroom teachers will be able to communicate the district's vision to parents and stakeholders when needed.

Despite challenges of inequality and academic achievement gaps, in collaboration with the above stakeholders, this vision will allow all students to achieve their highest potential within and beyond their Pre-K-12 experiences.

Successful attainment of the vision will be evidenced by continual improvement of ACPS students reaching proficiency on state assessments, ultimately resulting in an increased number of students earning College and Career Ready (CCR) status by the end of grade 10.

Goals and Metrics

MCAP GOALS

ACPS is setting a target of 5% annual increase in proficiency, using the 2024 MCAP results as a baseline. 2022-2023 data is included for the purpose of showing realized gains / losses from the 2023 and 2024 MCAP administrations. Actual 2025 MCAP results are included.

A secondary MCAP goal will focus on average student score, which we feel is more representative of the relative strength of the ACPS mathematics program as this measure is inclusive of all performance levels of students in each grade. We have established a 5 point increase in average student score as an annual goal for each grade.

MCAP Proficiency Targets for All Students				
	22-23	23-24	24-25	25-26
Grade 3	41%	45%	46%	51%
Grade 4	36%	39%	40%	45%
Grade 5	32%	31%	36%	41%
Grade 6	22%	22%	20%	25%
Grade 7	22%	23%	25%	30%
Grade 8	6%	6%	4%	9%
Algebra I	25%	17%	22%	27%

MCAP Average Score Targets for All Students				
	22-23	23-24	24-25	25-26
Grade 3	746	746	747	752
Grade 4	742	745	743	748
Grade 5	742	742	743	748
Grade 6	734	735	736	741
Grade 7	728	733	735	740

Grade 8	724	728	727	732
Algebra I	732	733	737	742

MCAP proficiency tables for grades 3 - Algebra 1 are listed in [Appendix A](#)

ACPS DIAGNOSTIC GROWTH GOALS

ACPS administers diagnostic assessments at the beginning, middle, and end of the year for students in grades K through Algebra 1. Grades 3-8 use the i-Ready diagnostics, which are embedded in the i-Ready curriculum used with those grades. Beginning with the 2024-2025 school year, Algebra 1 students began using the NWEA MAP testing platform for diagnostic assessments.

ACPS uses the data from diagnostic assessments to inform mathematics instruction within the MTSS framework. For several years, ACPS has used end-of-year diagnostic data to inform student placement decisions in their next mathematics class. At the beginning of the subsequent school year, the beginning-of-year diagnostic is used to ensure that students are placed appropriately in their courses. Along with student placement in their core mathematics class, the diagnostic data also identifies students who would be best served by having enrichment, remediation, or intervention support as a component of their core math learning. This placement is fluid as students may move in and out of their support based on subsequent diagnostic results and core class performance. ACPS utilizes i-Ready recommended intervention entrance criteria based on [national percentile rankings](#).

The i-Ready diagnostics naturally integrate with the i-Ready Core curriculum used in grades K-8, while the NWEA MAP diagnostic integrates into our McGraw Hill Reveal Algebra 1 platform through a data sharing agreement. While grade-level Tier 1 instruction is not significantly altered by diagnostic data, Tier 2 and Tier 3 instruction is substantially guided by the previously mentioned student diagnostic data embedded within our core instructional materials. Within each course, Tier 2 instruction is geared towards enrichment, remediation, or intervention based on student needs as guided by the diagnostic data in conjunction with in-class formative assessment. This ensures that student needs within and beyond the grade-level course standards are met. Tier 3 instruction for those students whose needs are not met through Tier 2 instruction can occur outside of the classroom with an intervention teacher or specialist. Instructional strategies used with Tier 2 & 3 instruction may include but are not limited to: intentional small groupings, use of the CRA model, UDL, Gradual Release of Responsibility (GRR).

During the school year, elementary students receive 60 minutes of Tier 1 instruction daily along with 30 minutes of Tier 2 / 3 instruction utilizing i-Ready resources. Tier 2 and 3 placement is decided by beginning and middle of the year i-Ready scores, along with informal teacher observations. Tier 2 instruction is structured with manageable group sizes (no more than 6 students) and students in Tier 3 are supported in small groups or one-on-one. Both tiers utilize teacher led supplemental instruction.

Middle school students receive daily 41 minutes of Tier 1 instruction, along with 41 minutes of Tier 2 instruction utilizing i-Ready resources. Tier 2 placement is informed by diagnostics and progress monitoring aligned to Tier 1 instruction as the course progresses through the school

year. Tier 2 instruction is enhanced with targeted small group teaching for remediation of skills taught in Tier 1, prerequisite skills for future lessons, or enrichment for acceleration. Students in algebra and geometry receive enrichment through Reveal Algebra, Reveal Geometry and ALEKS. Evaluation of student placement in Tier 3 intervention is updated at the beginning of year and through frequent progress monitoring to inform if continued Tier 3 support is warranted.

High school students receive 45-50 minutes of math instruction daily (90 minutes for one high school). Math instruction during this time consists of Tier 1 instruction, with Tier 2 instruction included as needed. Tier 3 instruction will be provided during available non-instructional time. Tier 2 and 3 instruction will utilize Reveal Algebra and ALEKS resources for remediation, intervention, enrichment, and progress monitoring. Student placement in Tier 2 and 3 will be determined by the MAP diagnostic and classroom assessment.

Course-level teams meet quarterly to review diagnostic results, common assessments, MCAP performance, curricular needs, and student concerns. These collaborative meetings typically drive student placements. Specialists regularly dive into MCAP performance data and consistently communicate areas for improvement to math staff. Student placement into high-dosage school day tutoring will also be determined via the collaborative team meetings. This analysis of MCAP and diagnostic data is continually used to plan future instruction focused on raising student assessment performance.

Diagnostic data tables for K - Algebra 1 are listed in [Appendix B](#)

Numeracy Development

ACPS will construct actionable goals involving numeracy development upon final approval and release of the MSDE Numeracy Development framework. A plan for implementation of numeracy development, including professional learning, will be created following MSDE guidance.

Integrated Algebra 1 & 2 Goal Revision Timeline

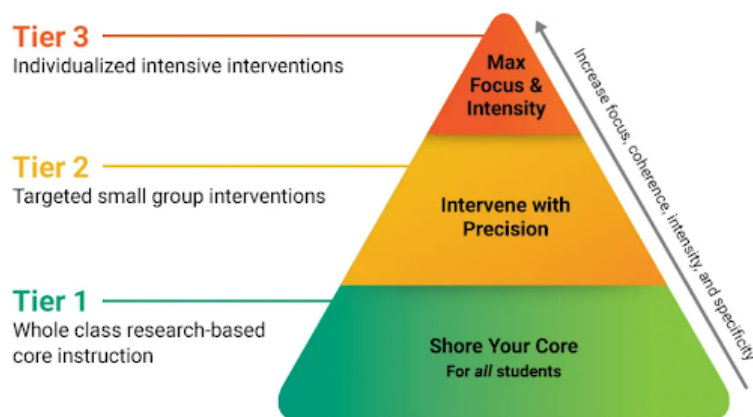
School Year	Intermediate Algebra Goals	Timeline
2025-2026	- Continuation of AGA - Introduction of new course standards with professional learning beginning - MCAP Algebra 1 with 5% increase in proficiency goal	Spring 26 through Summer 27

2026-2027	• Continuation of AGA • Continuation of Integrated Algebra 1 professional learning. • Begin Integrated Algebra 2 professional learning • Final MCAP Algebra 1 with 5% increase in proficiency goal	Fall 26 through Summer 27
2027-2028	• Discontinue Algebra 1. Offer Geometry and Algebra 2 • Implement Integrated Algebra 1. Continuation of Integrated Algebra 2 professional learning	Fall 27 through Summer 28
2028-2029	• Discontinue Geometry. Offer Algebra 2 • Implement Integrated Algebra 2. First MCAP for Integrated Algebra • Establish baseline for MCAP Integrated Algebra proficiency	Fall 28 through Spring 29
2029-2030	• Full Implementation of Integrated Algebra 1 and 2. • All prior AGA courses discontinued • Set 5% increase in proficiency goal for MCAP Integrated Algebra	

Student Support Process Planning

ACPS mathematics program supports all students in developing a positive identity as mathematical learners and seeing themselves as mathematically skilled, supporting them as they use mathematics to make sense of the world, and enable them to make critical decisions based on mathematically sound principles.

Tier 1 instruction prepares students to persevere through productive struggle, encourages proficiency in mathematics, develops and maintains a positive growth mindset, communicates while working collaboratively and becomes a lifelong problem solver.



All core curricular materials for Tier 1 instruction from Pre-K through Algebra 3 are HQIM, aligned with current Maryland College and Career Readiness Standards in Mathematics and meet expectations from edReports. Additionally, our supplemental digital materials, including intervention programs, are supported by research to be

effective.

ACPS mathematics program helps students become strong, independent mathematical thinkers. The ACPS mathematics program focuses on learning through problem solving. The use of daily embedded learning routines allow teachers to guide students through discourse-based instruction as they strengthen their conceptual understanding of mathematics. These routines assist students in developing the problem-solving skills needed to become independent and confident mathematical thinkers. Mathematics instruction in ACPS is rooted in NCTM's Effective Mathematics Teaching Practices which expand upon the Standards of Mathematical Practice by providing observable teacher and student actions which are indicators of a high quality mathematics classroom learning environment.

Attending to the Positive Math Mindset of Students

ACPS will utilize best practices for the diagnostic including:

- Prepare in advance - Presentation prior to diagnostic 1, set student expectations (by design 50% correct)
- Set a schedule - testing window, short periods of time over several days, plan for slow finishers

- Set up a healthy test environment - quiet, privacy screens, provide scratch paper and pencil or dry erase, set positive tone about assessment, prep quiet activity for early finishers
- Motivate students to do their best - set goals (i.e. 0 students rushing, etc.), actively proctor, remind to show work, give breaks and encouragement
- Communicate with families - Send letter home prior, include information in Back to School Night presentation, share data with families
- Follow up with students - use certificates, conduct data chats, use grouping reports

ACPS will utilize best practices for lessons and personalized instruction including:

- Prepare in advance - use iReady presentation, set expectations to help learn, establish positive routines (show your work)
- Set a schedule - Maintain high percent of lessons passed, schedule small group time
- Actively monitor student progress and respond - monitor lesson alerts, assign lessons at instructional level to avoid frustration
- Motivate students to do their best - set achievable goals, students monitor lesson time on task, data / lesson chats, create incentives
- Communicate with families - Introduce at Back to School night, send family letter regarding personalized instruction, set clear guidelines on lessons to be completed at home
- Follow up with students - reteach a specific skill in whole class instruction, pull small groups for teacher-led instruction, conduct data chats, celebrate successes.

ACPS will use the MSDE Math Student Support Guidance document to further develop strategies and resources which are conducive to fostering a positive mathematics identity for all students.

Elementary Mathematics Tiered Supports and Interventions

MTSS provides students with equitable access to grade level instruction and content with tiered supports to target identified skill deficits. ACPS' Tier 1 program provides high quality grade level instruction for all students, designed to meet the demands of the rigorous College and Career Readiness Standards.

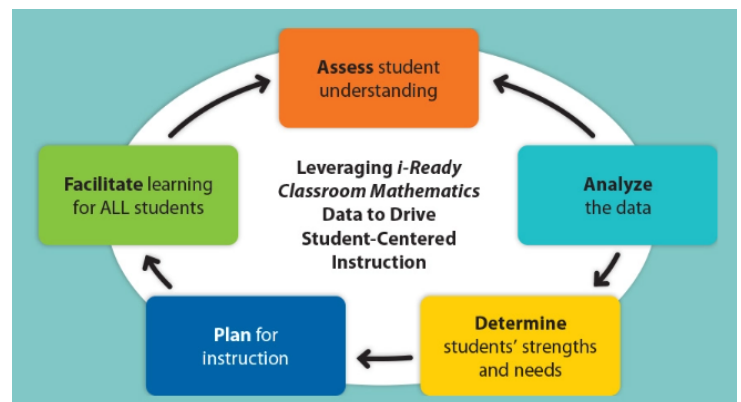
Each elementary school's Leadership Team serves to reinforce and monitor implementation of a multi-tiered system of support for mathematics aligned to the district's Comprehensive Math Plan and the MSDE Mathematics Policy. The Leadership Teams, composed of the math coach, classroom teachers, administrators, and special educators, participate in a district adopted needs assessment to develop school improvement action plans. The Leadership Teams meet at least monthly to examine mathematics data and monitor progress on identified action steps.

The chart below summarizes the materials and structures used at each tier level. Core instruction is provided by certified elementary teachers. Tier 2 supports involve the teacher, the coach, and possibly a trained paraprofessional, and Tier 3 instruction is led by the classroom teacher.

Grade Level	Tier 1	Tier 2	Tier 3
PK	FrogStreet Mathematics and district created standards based enhancement lessons	Small group, teacher led instruction	Personalized instruction 1:1 or 2:1
K-5	iReady Classroom (60 minutes)	Small group instruction: (20-30 minutes 3-5 times per week) i-Ready Teacher Assigned Lessons/ Interactive Practice Math Center Activities Fluency & Skills Practice Cumulative Practice	Personalized Instruction: Individualized Pathways (20-30 minutes 3-5 times per week) Re-teaching: Tools for Instruction Prerequisite Lessons

Determining Supplemental Instruction

Based on student performance on the universal screener, those who are not performing at grade level expectations receive instruction to target identified skill deficits and reinforce critical prerequisite concepts.. Collaborative planning involving data analysis occurs with teachers and instructional leaders to guide intervention implementation and plan for progress monitoring.



Determine Targeted Instruction, Tier 2 and Tier 3 Supports and Interventions

When a student is identified in need of a Tier 2 or 3 intervention, grade level teachers and instructional leaders will utilize the core program resources along with teacher observation and data driven assessments to develop a plan of action. This takes place prior to the implementation

of the intervention. Lesson quizzes and comprehension checks are completed weekly, at minimum, as progress monitoring measures for students receiving Tier 2 and Tier 3 supports.

Tier 2 Targeted Instruction

Tier 2 instruction supports students' mathematical skills for those close to or slightly below grade level. Following Tier 1 classroom instruction, students work in small groups during the allotted intervention time within the math block. Utilizing the CRA model (concrete, representational, abstract), these small groups focus on targeted skills and are facilitated through a collaboration of classroom teachers, math specialists, and special educators using the recommended resources (see chart above).

Tier 3 Targeted Instruction

In addition to Tier 1 instruction and Tier 2 support, Tier 3 provides intensive intervention for students performing significantly below grade level through individualized instruction of targeted skills designed to close instructional gaps. These skills are taught through a combination of tutoring by teachers, math specialists, and special educators in conjunction with the student's individualized learning pathway. Tier 3 instruction occurs three to five times per week during a modified block of time.

Math Specialist Collaboration

Math specialists collaborate with teachers during coaching cycles in areas of curriculum, resources, strategies, instruction, planning, student discourse, data analysis and facilitate goal setting with teacher self reflection.

Intervention Duration

Tier 2 interventions run five days a week during the thirty minute intervention block for a minimum of four weeks with progress monitoring occurring weekly. Tier 3 interventions run five days a week anytime through the school day for a minimum of nine weeks with progress monitoring occurring weekly.

Tiered Placement and Progress Monitoring

At the beginning of each school year, students in prekindergarten participate in a district-created mathematics assessment as an initial screening tool. Kindergarten students participate in Star Math as the initial screener and iReady for the MOY and EOY screening measure. Students in grades 1-5 take the i-Ready diagnostic at the start of the school year, followed by an MOY and EOY diagnostic. The results of the screening tool, taken in conjunction with the students' historical progress monitoring data, identifies those students who qualify for Tier 2 and/or Tier 3 support. The following criteria will be used to identify students for Tier 2 and 3 support based

on the grade level identified screeners. Throughout the year, data is analyzed in collaborative teams to determine students in need of intervention, adjust current interventions, and / or dismiss from interventions.

Level	Tier 1 only	Tier 2	Tier 3
Pre-K	On Level	Below Level	Well Below Level
K (Star Math)	Demonstrating	Approaching	Emerging
K-5 (i-Ready)	On grade level or within 1 year of grade level	Two grade levels below	Three or more grade levels below

Note - Students scoring > 90th percentile on the initial screener will receive tiered supports that advance their mathematical learning of grade level content and be considered for acceleration based on MSDE recommendations. Students in 6-8 performing 1 or more years above grade level will be provided appropriate enrichment opportunities through Tier 2 instruction.

Progress Monitoring

Progress Monitoring is a continuous process where data points are recorded in a county-wide template. A variety of data points that are collected include but are not limited to formal assessments, teacher observations, exit slips, other classroom data and informal assessments.

Determining Progress

The progress monitoring results from above will determine student achievement with current intervention. The team will review student progress during monthly collaborative planning. If the student has achieved sufficient progress, the student is to be removed from the intervention. If the student does not achieve sufficient progress, instruction will be adapted, duration increased and the student will remain in the intervention.

Secondary Mathematics Tiered Supports and Interventions

MTSS enhances our implementation of evidence-based strategies to provide students with equitable access to grade level instruction and content through supports that are differentiated to meet the academic, behavioral, and emotional needs of all students. ACPS' high quality Tier 1 instruction provides grade level instruction to all students by utilizing best practices to meet the demands of the Maryland College and Career Readiness Standards.

The following high quality instructional materials provide the foundation to support in developing strong mathematical learners.

Grade Level	Tier 1	Tier 2	Tier 3
6-8	i-Ready	Targeted small group (up to 8) instruction using: i-Ready teacher assigned lessons i-Ready Personalized Individual Pathways Math 180 (Select Schools) School21 Enrichment/Acceleration for students who have demonstrated advanced mastery of Tier 1 instruction	Targeted intensive individual or small group (up to 3) instruction using: Prerequisite lessons Re-Teaching: Tools for Instruction i-Ready Personalized Individual Pathways Tutoring
9-12	Reveal AGA Multiple primary resources for elective courses, including AP ACM course resources for Dual Enrollment	ALEKS Individual Pathways - All courses except AP and Dual Enrollment IXL (Select Schools) Small group instruction Reveal AGA Reteaching Lessons	ALEKS Individual Pathways - All courses except AP and Dual Enrollment Targeted Intensive individual or small group (up to 3) instruction using Reveal supplementary instructional resources Tutoring

Secondary Mathematics Staffing for MTSS

Grade Level	Tier 1	Tier 2	Tier 3
6-8	Classroom Teacher (may include 1 or more Sp. Ed. teachers)	Classroom Teacher Special Educator Math Intervention Teacher Math Specialist Instructional Assistant	Classroom Teacher (may not be the same as the Tier 1 and Tier 2 teacher) Special Educator Math Intervention Teacher Tutor
9-12	Classroom Teacher (may include 1 or more Sp. Ed. teachers)	Classroom Teacher Special Educator Instructional Assistant	Classroom Teacher May not be the same as the Tier 1 and Tier 2 teacher) Special Educator Tutor

Note: If future staffing for 9-12 includes a math intervention teacher and/or a math specialist, those positions would have a role in Tier 2 and Tier 3 instruction.

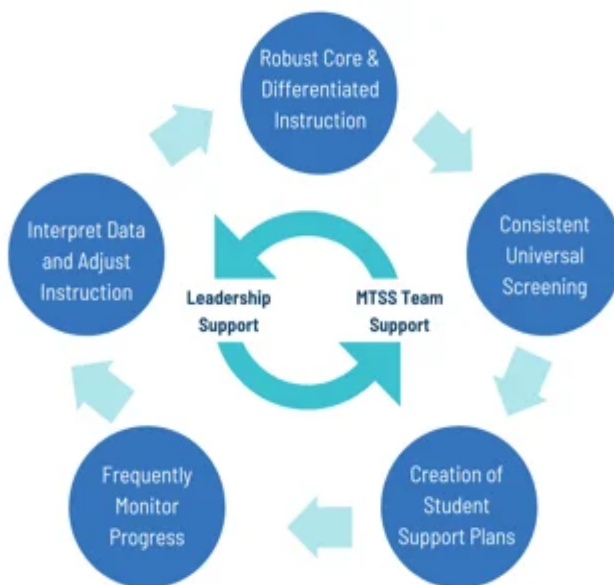
MTSS Teams

Each school will establish an MTSS team for Mathematics. The MTSS team will be a subset of the mathematics collaborative team within each school. Additional school staff that will be a member of the MTSS team will include: Special Educator(s), Math Specialist, school administrator and/or counselor. MTSS teams will meet twice monthly during the school year.

Determining Supplemental Instruction

Based on student performance on the universal screener (i-Ready for 6-8; NWEA Map for Algebra 1), those who are not performing at grade level expectations receive Tier 2/3 instruction through strategically selected resources and critical prerequisite skills. Both secondary mathematics screeners provide direct alignment to the Tier 1 primary instructional resource,

enabling the teacher to identify areas of weakness in student learning, including deficiency in prerequisite skills. This student learning data informs collaborative planning with teachers and



instructional leaders to identify the strengths and needs of students and help to determine student support plans. All students receiving supplemental instruction continue to receive grade level instruction.

Scheduling Tiered Instruction - Secondary

Level	Tier 1	Tier 2	Tier 3
6-8	41 minutes daily	41 minutes daily	60-90 minutes weekly
9-12	45-50 minutes daily	60 minutes weekly	60-90 minutes weekly

Determine Targeted Instruction, Tier 2 and Tier 3 Supports and Interventions

Following implementation of the diagnostic, administration, specialists and classroom teachers will analyze the data to determine which students are in need of a Tier 2 or 3 intervention. Subsequently, this information will be shared with the Leadership Team to develop a targeted school wide action plan to address student needs.

When the student is identified in need of a Tier 2 or 3 intervention, grade level teachers, instructional leaders, and specialists will utilize the existing Tier 1, Tier 2 and Tier 3 resources along with teacher observation and data driven assessments to develop a plan of action. This takes place prior to the implementation of the Tier 2 and Tier 3 instruction.

Tier 2 Targeted Instruction

Tier 2 instruction supports students' mathematical skills for those whose needs are not met by Tier 1 instruction alone. Following Tier 1 classroom instruction, students work in small groups during the Math Lab (middle only) or within the regular classroom instructional time (high school). Utilizing appropriate resources and strategies, these small groups focus on targeted skills and are facilitated through a collaboration of classroom teachers, math specialists, and special educators.

Tier 3 Intensive Targeted Instruction

In addition to Tier 1 instruction and Tier 2 support, Tier 3 provides intensive intervention for students performing significantly below grade level through use of the online learning individualized instruction (i-Ready, ALEKS) to target skills which are preventing the student from being successful in Tier 1 and Tier 2 instruction. These skills are taught through a combination of tutoring by teachers, math specialists, and special educators in conjunction with the student's individualized learning pathway. Additionally, Tier 3 instruction will most often occur beyond the students' regular daily math instructional time during their co-curricular class.

Math Specialist Collaboration

Math specialists (6-8) are responsible for overseeing initial student screening, along with periodic schoolwide diagnostic and progressing monitoring assessments. Additionally, specialists have access to historical state assessment and prior grades diagnostic data to further inform school teams on long term student performance in mathematics which is a critical element in identifying appropriate Tier 2 and Tier 3 needs and placements. All middle school specialists are trained as coaches using the Mathematics Quality of Instruction (MQI) program. This enables the specialists to collaborate with teachers during coaching cycles in areas of curriculum, resources, strategies, instruction, planning, student discourse, data analysis and facilitate goal setting with teacher self reflection.

Intervention Duration

In middle school, Tier 2 instruction will occur daily during the 41 minute Math Lab time for all students with progress monitoring occurring regularly to evaluate Tier 2 effectiveness and to inform the placement of the student in subsequent tiered instruction. Tier 3 instruction will occur daily during the co-curricular scheduled class with progress monitoring occurring bi-weekly to inform the duration of the Tier 3 instruction required to meet student needs.

In high school, Tier 3 instruction will occur during available time within the class period which will not interfere with Tier 1 instruction. The frequency of Tier 3 instruction is fluid, with a target of 60 minutes per week, accompanied by regular progress monitoring. Tier 3 instruction will be during available time within the student schedule which does not remove the student from credit bearing coursework. This can include time before and after the school day, along with identified

opportunities during the day. Progress monitoring for Tier 3 will occur weekly, with continued placement in Tier 3 determined by student progress monitoring performance.

Tiered Placement and Progress Monitoring

At the beginning of each school year, students in 6-8 take the i-Ready initial diagnostic, while students in Algebra 1 take the NWEA MAP Growth: Algebra 1. The results of these initial screening tools, taken in conjunction with the students' most recent MCAP performance and historical progress monitoring data identify those students who qualify for Tier 2 and/or Tier 3 support at the start of the school year. The following criteria will be used to identify students for Tier 2 and 3 support based on the initial i-Ready and NWEA Screener

Level	Tier 1 only	Tier 1 and Tier 2	Tier 1, Tier 2, and Tier 3
6-8 (i-Ready)	On grade level on within 1 year of grade level	Two grade levels below	Three or more grade levels below
9-12 (NWEA MAP)	225 or above (40th percentile or >)	215 to 224 (20th to 39th percentile)	214 and below (< 20th percentile)

Note - Students scoring > 90th percentile on the initial screener will receive tiered supports that advance their mathematical learning of grade level content and be considered for acceleration based on MSDE recommendations. Students in 6-8 performing 1 or more years above grade level will be provided appropriate enrichment opportunities through Tier 2 instruction.

The HQIM used in both K-8 and 9-12 utilize initial diagnostic data to identify student content knowledge areas of concern and suggest appropriate HQIM embedded resources to help teachers provide Tier 2 support on prerequisite skills that are essential for students to master grade level standards. Furthermore, both HQIM diagnostics identify initial groupings of students in need of similar Tier 2 support. These enable the classroom teacher and support staff to provide targeted, in-time assistance to students that will allow Tier instruction to be accessible for all students.

As students progress through the school year, the use of common summative assessments will inform the classroom teacher of which students need to be re-taught specific Tier 1 skills. Student assignment within tiered instruction will be reviewed at the midway point and end of each instructional unit. Progress monitoring of Tier 2 and Tier 3 instruction will be a continuous process involving the teachers providing the tiered instruction, along with available support, through the use of a uniform district based student learning evaluation tool (to be developed).

Multiple data points that are collected may include: formal & informal assessments, teacher observations, and student work samples.

Determining Progress

The MTSS team will review student progress during collaborative planning. Student placement in Tier 2 and/or Tier 3 instruction will be evaluated based on collected data and observation of student performance during tiered instruction. Recommendations for continued placement within existing tiered instruction or to adjust student placement will be made during this time.

Professional Learning on MTSS in Mathematics

ACPS is in the process of creating a systemwide MTSS plan. Professional learning related to the full implementation of a robust MTSS program is still being developed. Once ACPS has finalized the district plan for MTSS, the professional learning component of MTSS for Mathematics will be developed and added to the comprehensive math plan. Initial training for Elementary administrators on implementing MTSS in elementary mathematics will begin during the 2025-2026 school year. Similar training for secondary administrators is under development.

ACPS MTSS Implementation Timeline

Level	SY 25-26	SY 26-27	SY 27-28 & beyond
PK-5	• Focus on strengthening Tier 1. • Ongoing professional learning on MTSS processes and structures.	• Full implementation of a robust MTSS plan for mathematics. • Ongoing professional learning on MTSS processes and structures.	• Evaluate effectiveness of the SY 26-27 MTSS plan in mathematics. • Identify areas of concern and refine plan to improve those areas. • Ongoing professional learning on MTSS processes and structures.
6-8	• Focus on strengthening Tier 1. • Ongoing professional learning on MTSS processes and structures. • Continue use of	• Full implementation of a robust MTSS plan for mathematics. • Ongoing professional learning on MTSS processes and structures.	• Evaluate effectiveness of the SY 26-27 MTSS plan in mathematics. • Identify areas of concern and refine plan to improve those areas. • Ongoing

	the Lab model to provide Tier 2 support as part of the regular schedule. • Develop a plan to provide Tier 3 support within the existing school schedule, using existing staff. • Using the pilot middle school, develop a model for providing Tier 3 instruction that can be implemented at all ACPS middle schools.		professional learning on MTSS processes and structures.
9-12	• Focus on strengthening Tier 1. • Implement Tiers 2 and 3 in non-pilot schools within existing scheduling and staffing constraints. • Develop a working Tier 2 and Tier 3 plan in the pilot school as a model for ACPS high schools.	• Full implementation of a robust MTSS plan for mathematics. • Ongoing professional learning on MTSS processes and structures.	• Evaluate effectiveness of the SY 26-27 MTSS plan in mathematics. • Identify areas of concern and refine plan to improve those areas. • Ongoing professional learning on MTSS processes and structures.

Action Items for All

Comprehensive Mathematics Plan Implementation Strategies

2025-2026 Implementation Focus

In order to bring our vision to life in ACPS mathematics classrooms, we will commit to the following in the coming school year:

- **Communication & Investment:** The Comprehensive Plan for Mathematics will be completed by the district-level Mathematics Leadership Team (elementary/secondary mathematics supervisors and instructional specialists). The Mathematics Leadership Team will develop/implement the comprehensive mathematics plan and establish structures for collaboration and information sharing across the ACPS community.
- **MTSS:** ACPS will focus professional development on establishing a functioning MTSS program in mathematics. District and school leadership will concentrate on developing system and school structures that will enable MTSS to be fully implemented for the 2026-2027 school year.
- **Professional Learning & Coaching:** We will take a multi-pronged approach to professional learning:
 - o School leaders, instructional specialists, and teachers will engage in professional learning about how the district's mathematics vision is embedded in their curricular materials.
 - o New elementary and secondary mathematics teachers will receive support in unpacking and utilizing their curricular materials.
 - o Elementary and secondary mathematics teachers will receive coaching to support their everyday use of the curricular materials.
 - o Vendor-provided professional learning occurs yearly.
- **Internalization of High-Quality Instructional Materials:** Elementary and secondary mathematics teachers will engage in regular planning routines (unit and lesson internalization) with district instructional materials, so they are prepared to deliver ACPS mathematics instruction.
- **Progress Monitoring:** The district will reflect on progress towards goals throughout the year and engage in routines to review implementation strategies.
 - o School-based administrators, through collaboration with instructional specialists, will capture trends in instruction through learning walks across math classrooms throughout the year, with the goal of informing and adjusting mathematical efforts.

2025-26 Implementation Goals

Goal	Metrics: How will we measure progress?
Commitment: By the end of 2025-26 school year, central office leaders across academic teams, school leaders, specialists, and elementary/secondary math teachers will	70% of central office academic staff (e.g. teams that report to the CAO), school leaders, specialists, and teachers will be familiar with the district's mathematics vision.

advocate on behalf of the district's mathematics vision and strategy.	70% of central office academic staff, school leaders, specialists, and teachers will agree that Allegany County's mathematics vision and strategy will improve mathematical outcomes for students. 70% of school leaders, specialists, and teachers will believe that the adopted mathematical instructional materials will support strong outcomes for students.
Implementation of Instructional Materials: By the end of 2025-26 school year, classroom teacher use of the mathematics instructional materials in Pre-K-12 (Frogstreet, i-Ready Classroom Mathematics, HMH Math 180, McGraw-Hill Reveal, ALEKS) will improve to better reflect our math vision.	Allegany County Public Schools will utilize a series of learning walk tools to help the district track progress. The tool(s), aligned to NCTM's Effective Mathematics Teaching Practices are aligned to the mathematics vision and curricula. Look For Tool The percentage of teachers exhibiting instruction aligned with the Effective Mathematics Teaching Practices as measured by the learning walk tools will increase during the school year..
Establish MTSS Tiered Instructional Structures: By the end of the 2025-2026 school year, schools will have identified and began implementation of tiered instructional structures.	In accordance with MSDE Math Policy, schools will: • Develop scheduling that meets or exceeds the minimum number of minutes required for mathematics instruction. • Identify staffing required to implement Tier 2 and Tier 3 instruction. • Develop identification protocols for students entering and exiting Tier 2 and Tier 3 instruction. • Establish an MTSS team as a part of or in addition to a PLC. • Identify resources that will be used for Tier 2 and Tier 3 instruction.
Implementation of Curriculum-Aligned Assessments: By the end of the 2025-2026 school year, grades Pre-K through Algebra 1 will implement, at a minimum, common unit assessments which will be used to identify students for intervention or acceleration.	ACPS will develop new and update existing common assessments to align with the revised standards for Pre-K through 8 during the 2025-2026 school year. Existing common assessments for Algebra 1 will continue through the 2026-2027 school year, then

	replaced with new common assessments for Integrated Algebra.
Monitoring Student Numeracy Growth and Development: By the end of the 2025-2026 school year, all ACPS students in Pre-K through Algebra 1 will be progress monitored a minimum of three times during the year using a standards aligned, norm based screener / diagnostic tool.	100% of Pre-K through Algebra I math teachers administer BOY, MOY, and EOY assessments used to monitor student progress. (Met 2024-2025 SY) • Pre-K through 8: i - Ready • Algebra 1: NWEA MAP
Ongoing, Job Embedded Professional Development: By the end of the 2025-2026 school year, all ACPS Mathematics teachers will have received in school professional learning to support equitable, standards-aligned mathematics instruction.	ACPS will provide professional development through: • District-wide PD Days: vendor delivered PD on HQIM and effective mathematics teaching practices: district staff led PD on CMP, MSDE Math Policy, and MTSS in the mathematics classroom. • In-school PD: vendor delivered PD during the school day, mathematics coaching, math PLC's

LEA liaisons in support of Math Policy implementation:

- **District Leaders:** CAO, Mathematics Supervisors, Blueprint Coordinator
- **School Leaders:** Principal, Assistant Principal, Special Education Facilitator
- **Instructional Specialist:** Specialist/Coach, Interventionist
- **Elementary and Secondary Mathematics Teachers:** Classroom Teachers, Special Education Teachers, Instructional Assistants.

Comprehensive Math Plan Implementation: Communication & Investment

Communication & Investment: The Comprehensive Plan for Mathematics will be completed by the district-level Mathematics Leadership Team (elementary/secondary mathematics supervisors and instructional specialists). The Mathematics Leadership Team will develop/implement the comprehensive mathematics plan and establish structures for collaboration and information sharing across the ACPS community.			
District Leaders	School Leaders	Instructional Specialists	Elementary and Secondary Math Teachers
Get feedback on the vision from additional district stakeholders beyond the mathematics team that developed the vision.	Thoroughly communicate the Comprehensive Mathematics Plan to all stakeholders.	Advocate for the mathematical vision during collaborative planning and 1:1 coaching.	Share feedback with specialists, leaders, and district leaders about the district's direction, including barriers to actualizing

Share with central office staff across the academic team (e.g. those that report to the CAO) to share the vision/strategy, solicit feedback, and enlist in shared ownership. Communicate widely and regularly about the mathematics vision and strategy via social media, district newsletters, and district/school meetings. Share data from progress monitoring efforts with school leaders, specialists, and teachers. Establish Math Policy Liaison Team	Advocate for the mathematics vision within each building. Share data from learning walks with teachers. Engage specialists and teachers in reflection and action planning. (PreK-12). Design master schedules so that students experience 90 minutes of math instruction, including 30 minutes for intervention/enrichment in elementary. In middle school, students experience an 82 minute math block that is split between Tier 1 instruction and Tier 2 support. Tier 3 support occurs outside of the 82 minute math block. Identify opportunities within the schedule to provide school day tutoring. Establishment of a math PLC / MTSS team Provide time for regular collaborative planning and meeting	Utilize the language from the vision, and learning walk tool in feedback conversations. Engage teachers in discussions and action planning related to the data collected during learning walks. Support the implementation of the Effective Mathematics Teaching Practices within tiered instruction.	the mathematics vision in their classrooms. Engage in learning about the mathematics vision and how it is captured in the instructional materials. Improve instruction through implementation of the Effective Mathematics Teaching Practices Actively participate in math PLC / MTSS teams
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Comprehensive Math Plan Implementation: Professional Learning and Coaching

Professional Learning & Coaching: We will take a multi-pronged approach to professional learning: - o School leaders, instructional specialists, and teachers will engage in professional learning around how the district's mathematics vision is embedded in their curricular materials. - o New elementary and secondary mathematics teachers will receive support in unpacking and utilizing their curricular materials. - o Elementary and secondary mathematics teachers will receive coaching to support their everyday use of the curricular materials.

o Vendor-provided professional learning			
District Leaders	School Leaders	Instructional Specialists	Elementary and Secondary Math Teachers
Design mathematics training for school leaders, instructional specialists, and teachers related to the mathematics vision/goals and the instructional materials. Facilitate professional learning for school leaders and specialists. Collaborate with specialists to facilitate learning for teachers. Dedicate training for all Pre-K-12 educators focusing on program enhancements. Standardize expectations for training that <i>new</i> teachers receive from their school-based specialists, including time to unpack the instructional materials and to see model lessons. Define the role/responsibilities of instructional specialists, in collaboration with school leaders. Provide tools and resources to support instructional specialists working with teachers. Provide training so that specialists are well equipped to use	Engage in learning around the mathematics vision/goals and the use of a vision-aligned learning walk tool. Provide time for new teachers to engage in professional learning on the core program materials with the instructional specialist. Allocate time for instructional specialists to be able to engage in regular planning and collaboration with teachers.	Engage in learning related to the mathematics vision/goals and the ways in which curricular materials reinforce the mathematics vision. Facilitate professional learning for teachers. Provide new teachers with training and support to unpack their instructional materials. Model mathematics lessons in teachers' classrooms. Set goals with teachers related to the mathematics vision. In coordination with school leadership, provide coaching to teachers via Mathematics Quality of Instruction (MQI) and Effective Mathematics Teaching Practices.	Engage in learning related to the mathematics vision/goals and the ways in which curricular materials reinforce the mathematics vision. Set goals in alignment with the vision Collaborate with an instructional specialist to inform future practice. Be open to coaching as an ongoing process that improves instruction and student learning.

program tools/resources.			
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Comprehensive Math Plan Implementation: Internalization of High-Quality Instructional Materials

Internalization of High-Quality Instructional Materials: Elementary and secondary mathematics teachers will engage in regular planning routines (unit and lesson internalization) with district instructional materials, so they feel prepared to deliver ACPS mathematics instruction. Resource allocation: District approved resources will be purchased using local/grant funding.			
District Leaders	School Leaders	Instructional Specialist	Elementary and Secondary Math Teachers
Communicate transparent and reasonable expectations related to unit and lesson framework. Reinforce unit and lesson framework aligned to core level instruction, with input from leaders and teachers. Identify providers of high-quality school day tutoring. Commit to district acquired HQIM as the primary instructional resource for tiered instruction	Engage in learning focused on the rationale for unit and lesson framework. Create conditions within their buildings for mathematics teachers to engage in collaborative planning. Create a school calendar that maps out collaborative planning dates. Identify time during the school day when tutoring can be provided.	Engage in learning focused on the rationale for unit and lesson framework. Support teachers to engage in unit and lesson framework during collaborative planning. Support teachers in effectively accessing and implementing HQIM into their lessons.	Engage in learning focused on the rationale for unit and lesson framework. Collaboratively plan with peers and/or instructional specialists utilizing the unit and lesson framework. Plan daily instruction utilizing the process in the lesson framework. Reflect on how unit and lesson framework processes are influencing their practice. Utilize HQIM during instruction, practice, and assessment with fidelity.

Comprehensive Math Plan Implementation: Progress Monitoring

Progress Monitoring: The district will reflect on progress towards goals throughout the year and engage in routines to review implementation strategies.

- School based administrators, through collaboration with instructional specialists, will capture trends in instruction through learning walks across math classrooms throughout the year, with the goal of informing and adjusting mathematical efforts.

District Leaders	School Leaders	Instructional Specialists	Elementary and Secondary Math Teachers
Develop a data collection plan and calendar that aligns to the mathematics goals. Design data collection tools, including a learning walk tool. Administer the Math Implementation Self-Reflection to leaders, instructional specialists, and mathematics teachers to determine future instructional needs. Coordinate learning walks and communicate with leaders about their participation and engagement in the learning walks. Analyze data related to implementation, instructional practice and student outcomes to plan next steps. Share progress monitoring data transparently with other district stakeholders, including regular celebrations of progress.	Participate in learning walks to identify school and districtwide trends in mathematics instruction. Reflect on trends in data to inform school-wide mathematics priorities. In coordination with district leaders, share progress monitoring data transparently with school stakeholders.	Collaborate with school leaders to share trends in mathematics instruction identified through learning walks Reflect on trends in mathematics data to inform professional learning. Use learning walk data to inform coaching needs within mathematics instruction	Collaborate with school and district leaders for the purpose of capturing district-wide trends. Complete the Math Implementation Self-Reflection. Reflect on individual learning walk data to inform practice.

2025-2026 Planning Focus

In coordination with upcoming MSDE initiatives on acceleration, secondary math pathways, and the transition to Integrated Algebra courses, ACPS mathematics will commit to the initial planning of these initiatives in the coming school year:

- **Equitable Inclusion in Acceleration Policies (by SY 2027-2028):** ACPS will evaluate existing math acceleration policies through the lens of the MSDE Math Policy. We will review existing identification processes for acceleration and revise to align with MSDE guidance. Programming for accelerated students in grades 3-7 will be determined which allows for identified students to accelerate appropriately and successfully towards Integrated Algebra 1 in grade 8 or before.
- **Secondary Mathematics Pathways (by SY 2027-2028):** ACPS has already initiated a series of post-CCR mathematics pathways in preparation for meeting Blueprint requirements. As MSDE completes its work on mathematics pathways, ACPS will revise our pathways to comply with MSDE
- **Integrated Algebra Courses (by SY 2027-2028):** In preparation for the Integrated Algebra courses to begin in the 2027-2028 school year, ACPS will be discontinuing the traditional AGA sequence as follows:

Algebra 1 - Last offered in 2026-2027

Geometry - Last offered in 2027-2028

Algebra 2 - Last offered in 2028-2029

ACPS will follow all Integrated Algebra course implementation guidance as determined by MSDE.

Comprehensive Math Plan Planning: Equitable Inclusion in Acceleration Policies

Equitable Inclusion in Acceleration Policies: District and school leadership will review existing district mathematics acceleration guidelines and revise in accordance with MSDE Math Policy			
District Leaders	School Leaders	Instructional Specialist	Elementary and Secondary Math Teachers
Evaluate existing mathematics acceleration processes currently in place Review selection criteria for inclusion in mathematics acceleration for grade 3-7 Evaluate current accelerated math	Evaluate existing mathematics acceleration process occurring within the school Review selection criteria used within the school to accelerate students in mathematics	Collect data on students identified as accelerated in mathematics to determine if: • Students are correctly identified • The accelerated program is	Evaluate the readiness of students in an accelerated math program. Evaluate the design of the accelerated mathematics program to prepare students for continued acceleration

program offerings for fidelity of completion and preparation for subsequent acceleration Revise current mathematics acceleration processes in place to align with MSDE Math Policy guidance.	Evaluate any existing deceleration process in place Identify if students in mathematics acceleration are proportionally representative of the school population.	sufficiently preparing students for continued acceleration Identify accelerated students by measured subgroups	
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Comprehensive Math Plan Planning: Secondary Mathematics Pathways

Secondary Mathematics Pathways: District leadership will revise existing course offerings to align with MSDE Secondary Mathematics Pathways (once finalized by MSDE)			
District Leaders	School Leaders	Instructional Specialist	Elementary and Secondary Math Teachers
Evaluate existing mathematics course offerings for alignment to the MSDE Secondary Mathematics Pathways Plan for the discontinuation of courses which do not fit into any pathway or are not aligned to content standards determined by MSDE Plan for the development of courses which fit into one or more pathways and are aligned to content standards determined by MSDE Inclusion of AP and DE courses to the pathways	Communicate the Secondary Mathematics Pathways to staff (counselors, special educators) and develop a plan to offer courses in each of the four pathways. Provide time for teachers to have professional learning on courses and/or content standards which will be new. Identify staff best skilled to teach specific secondary mathematics pathway courses	ACPS does not have instructional specialists in mathematics at any high school.	Awareness of significant course changes that are coming. Knowledge of the secondary mathematics pathways and where courses will fit into one or more pathways

Comprehensive Math Plan Planning: Integrated Algebra Courses

Integrated Algebra Courses: The transition to Integrated Algebra courses will impact course offerings, staffing, and scheduling for grades 8 through 10.			
District Leaders	School Leaders	Instructional Specialist	Elementary and Secondary Math Teachers
Communicate the transition from AGA to Integrated Algebra to district and school leaders. Plan for the training of Integrated Algebra teachers (per MSDE schedule) Begin identification of HQIM for the Integrated Algebra courses.	Communicate the Integrated Algebra courses transition to staff (counselors, special educators) and develop a plan to offer Integrated Algebra 1, Geometry, and Algebra 2 in 2027-2028; Integrated Algebra 1, Integrated Algebra 2, and Algebra 2 in 2028-2029.. Provide time for teachers to have professional learning on the Integrated Algebra courses and content standards Identify staff best skilled to teach Integrated Algebra 1 and Integrated Algebra 2	Instructional Specialists will receive the same professional learning as the teachers assigned to teach the Integrated Algebra courses	Integrated Algebra teachers will receive training on teaching the Integrated Algebra courses

Professional Development Plan

Professional learning for all educators, including teachers, principals, instructional specialists, and central office staff, is necessary to create effective and equitable mathematics systems. Effective professional learning consisting of coaching, workshops, self-selected, and team centered learning, requires the commitment and collaboration of school system central office staff, instructional specialists, principals, and teachers. Leadership teams must build a culture of learning and growth to create and implement one cohesive professional learning plan. This will build teachers' content knowledge and pedagogy within the context of their high quality instructional materials. It will build administrators' capacity to support the skillful implementation of the mathematics curriculum through evidence-based strategies, within the structure of a robust MTSS. Effective professional learning plans should also consist of dedicated time for collaborative planning that allows educators to digest, create, and practice lessons and units, review student data and work samples, and engage in coaching cycles to support every teacher in their own professional growth goals.

ACPS utilizes a mix of county-developed professional learning and vendor-supplied experiences to build teachers' knowledge of their mathematics instructional practice and curricular materials. The district also supports teachers by providing elementary schools with instructional specialists and each middle school with an intervention teacher who can focus on the most intensive student needs in mathematics instruction and intervention. In elementary schools, ACPS staffs five instructional specialists and an early learning specialist who assist supervisors and support school administration, teachers, and support staff in ongoing professional development. In addition, instructional specialists focus on specialized areas to best meet the needs of staff and teachers. Three middle school instructional specialists also serve in parallel roles in our middle schools. ACPS does not currently have an instructional specialist assigned to high schools. The supervisors meet with instructional specialists to discuss updates at schools, analyze data, identify district strategies to share with their school principals, and create plans for professional learning.

ACPS believes that all professional learning should be of high quality and be seen by stakeholders as a valuable component of improving student learning. We believe that all professional learning should have the following characteristics.

- **SPECIFIC:** Professional learning addresses an identified need based on observation, student performance data, emerging trends in education, or teacher interest surveys.
- **RELEVANT:** Professional learning is connected to the instructional materials, instructional strategies (including MTSS), coaching, and collaboration that teachers are expected to apply to their practice. Professional learning should also be relevant to a teacher's subject area and grade level as much as possible.
- **EQUITABLE:** Professional learning helps teachers make informed decisions on how to

best use instructional materials and strategies so that all students have the appropriate support they need and also takes into consideration educators' own learning needs and provides them with appropriate support.

- **ONGOING:** Professional learning is provided regularly throughout the year to ensure educators receive the support they need.
- **ENGAGING:** Professional learning creates a safe space in which educators can ask questions, collaboratively develop and discuss ideas, practice new skills, receive feedback from others, and reflect on their learning.

All recent, existing and proposed professional learning for ACPS support the districts' commitment to providing high quality, equitable mathematics instruction through the use of a robust MTSS framework built upon evidence-based instructional strategies aligned with high-quality instructional materials. Additionally, ACPS professional learning is focused on building not just the teachers instructional toolbox, but also to foster a professional environment which is collaborative and supportive of high-quality classroom teaching. ACPS desires for its teachers to be proficient at growing student knowledge in mathematics by the best means possible, which may include taking some risks with using innovative approaches to classroom instruction. ACPS also desires that its teachers have the autonomy to select professional learning opportunities specific to their individual wants and needs.

The ACPS investment in math-specific coaching aligned to NCTM's Effective Mathematics Teaching Practices will enable ACPS to provide math teachers with professional learning geared directly towards improved teacher actions and student actions. These actions should be part of daily high-quality mathematics instruction leading to increased mastery of the Maryland College and Career Ready Standards for each grade level mathematics course. Through the use of mathematics-specific walkthrough observation tools ([K-8](#) / [9-12](#)) aligned to the Effective Mathematics Teaching Practices and the Standards for Mathematical Practice, ACPS will be able to evaluate the effectiveness of i-Ready and ACPS professional learning, evidenced by the improved usage of the practices in daily mathematics instruction. The tools support instructional frameworks that focus on building a foundation, strengthening and enhancing practice on explicit teacher and student actions. *Note - The K-8 walkthrough tool is specific to the i-Ready program, while the ACPS developed 9-12 tool mirrors the content of the K-8 tool, but is applicable to multiple high school HQIM.*

ACPS strives to provide teachers with professional learning experiences that, while isolated, blend into and conform to well rounded, inclusive classroom instruction. ACPS instills among its teachers guidelines for model instructional frameworks (GRRUDL), competency with high-quality instructional materials training (i-Ready) and addresses MTSS through training on intervention, differentiation, and awareness of culturally responsive teaching which includes Ruby Payne PD on poverty, implicit bias, and other professional learning which enables the classroom teacher to be aware of and able to address learning challenges unique to the individual students in the classroom.

ACPS has established a foundation of providing equitable mathematics instruction aligned to grade-level standards and numeracy development progressions by having a coherent K-8 mathematics program through i-Ready. ACPS has multiple years invested in i-Ready professional learning (district and school based), universal screening & progress monitoring, and classroom instruction. Through this partnership, ACPS has been able to provide consistency in the student mathematics experience that is beginning to show student growth, particularly in the middle school grades. While this has not manifested as a significant district-wide improvement in students reaching MCAP proficiency yet, it has resulted in a noticeable improvement in students exiting MCAP Level 1 status. As ACPS works to have MTSS fully implemented by the 2026-2027 school year, we believe that the foundation to integrate our K-8 mathematics program into the MTSS framework is in place. We are also working with our partners at McGraw-Hill to more effectively use their HQIM to provide MTSS for our high school students in mathematics. Our plan is to restore district and school based professional learning services from McGraw-Hill within the 2025-2026 school year.

During the 2025-2026 school year, ACPS will be focusing on developing a robust MTSS system and structure through all grades and content. Initial professional learning will be district based, then shifting to schools within their PLC teams. ACPS will also work with our HQIM vendor partners to strengthen usage of HQIM resources within tiered instruction. As ACPS internalizes how MTSS will be structured within all grade levels, professional learning will be delivered that addresses:

1. High quality Tier 1 instruction that concentrates on grade level standards, HQIM, effective mathematics teaching practices, and the Standards for Mathematical Practice.
2. High quality Tier 2 support, informed by data, using HQIM, effective mathematics effective mathematics teaching practices, and the Standards for Mathematical Practice.
3. High quality Tier 3 intervention, informed by data, using appropriate research based strategies and resources.

Professional learning on the revised Pre-K-8 standards and shifts will occur during the 2025-2026 school year. This professional learning will occur within the schools and be led by the instructional specialist assigned to the school. Professional learning for staff on the Integrated Algebra 1 and Integrated Algebra 2 standards, shifts, and HQIM will occur once guidance has been released from MSDE. Depending on the timeline and depth of professional learning required, ACPS will develop a professional development plan for affected staff that will enable them to be prepared to teach the course beginning with the 2027-2028 school year.

Teachers and Instructional Specialists will engage in the Maryland Effective Mathematics Educators course per MSDE direction. Specific information on structure of the professional learning and timeline for completion are to be determined.

A full listing of recent, ongoing and planned professional learning for mathematics is included in [Appendix C](#).

Equitable Instruction

ACPS strives to foster a learning environment that is equitable and inclusive for all students. Through commitment to MTSS, HQIM, evidence-based instructional strategies, professional learning, and collaboration, ACPS will ensure that all students feel valued, welcomed, and included within the educational experiences they encounter each day in mathematics. It is our goal that the school system has a culture that prioritizes equitable access for all to ensure that teachers and students have the resources they need and deserve. Through the utilization of the MTSS framework, high-quality instructional materials, collaboration, and professional learning we ensure that teachers will deliver effective instruction and students will successfully access grade level content. To accomplish this, ACPS will focus on building student mastery of the Standards of Mathematical Practice through the following five strands of mathematical proficiency: conceptual understanding, procedural fluency, adaptive reasoning, strategic competence, and productive disposition. This requires a culture rooted in the belief that everyone, adults and students alike, can and should be learning and growing every day.

Strands of Mathematical Proficiency	Evidence Based Teaching Practices	Resources and Connections
Conceptual Understanding Conceptual understanding connects prior knowledge and what is learned to application of novel situations, making mathematics applicable beyond just solving an isolated problem.	Spiral Reviews Productive Struggle Use of Higher Order Tasks CRA GRRUDL Small group instruction Differentiation Hands-on Learning through Manipulatives Connecting Concepts Make Real World Connections Collaboration and Communication with Proper Vocabulary	Carnegie Learning Adding it Up Standards for Mathematical Practices , refer to Standards 2, 4, 5, and 7 Gradual Release of Responsibility Universal Design for Learning
Procedural Fluency Procedural fluency refers to the ability to apply procedures efficiently, flexibly, and accurately.	Number Talks Three Reads GRRUDL Whole group instruction Small group instruction Differentiation Interactive game-based learning Personalized learning platforms (i-Ready, Khan Academy, ALEKS)	HMH K-5 Math Teaching Resources NCTM refer to slides 23-33 SMP, Standards 1, 6, and 7
Adaptive Reasoning Adaptive reasoning is the ability to think logically about relationships among concepts and situations and to justify the approach taken for a given solution.	GRRUDL Number Talks Collaboration and Communication with Proper Vocabulary Spiraled Curriculum Three Reads Use of Higher Order Tasks Four R's Turn and Talk Mathematical Discourse	SMP, Standards 2, 3, 6, 7, and 8 i-Ready

Strategic Competence Strategic competence is the ability to devise mathematical problems, represent them, and solve them.	Use of Higher Order Tasks Problem Based Learning Tasks Modeling Tasks Reasoning Tasks CRA Three Act Tasks Self Monitoring/Assessing	SMP, Standards 1, 2, 3, 4, 5, 6, 7, and 8 Summit Engaging Mathematical Tasks MCAP Public Release
Productive Disposition Productive disposition is the ability to see mathematics as useful, sensible, and worthwhile, while holding a growth mindset in regards to mathematical competence.	Productive Struggle Growth Mindset Real World Application Tasks Self Monitoring/Assessing	The 5 Strands of Mathematical Proficiency SMP, Standards 1, 2, 3, and 4 Carol Dweck

ACPS is already in compliance with MSDE Math Policy on the minimum daily time requirement of 60 minutes for K - 8 mathematics instruction. At the elementary level, students receive 90 minutes of mathematics instruction daily encompassing all tiered instructional levels. In the middle schools, students receive 82 minutes daily of mathematics instruction encompassing Tier 1 and Tier 2. Tier 3 mathematics instruction occurs during the co-curricular period built into the middle school day. High school instructional times for mathematics varies by school schedule, ranging from 45 to 90 minutes daily. ACPS is in the process of determining how to incorporate Tier 2 and Tier 3 instruction within existing high school scheduling and staffing constraints.

ACPS does not endorse tracking of students within our scheduling practices. Elementary classes are heterogenously grouped for grade level Tier 1 instruction, with Tier 2 and Tier 3 instruction providing small group or individual specialized instruction that encompasses intervention, remediation, enrichment, and acceleration. Middle school scheduling places all students in heterogeneous grade level courses, with the exception being students who are identified for Algebra 1 while in middle school are enrolled in grade 6 and grade 7 courses that allow them to access all middle school math standards before grade 8.

ACPS uses progress monitoring to measure the level of student participation and involvement in the learning process and analyzes student interaction with grade level content, the teacher, and peers. *(See above table for connections between the Strands of Mathematical Proficiency and Evidence Based Teaching Practices)*

ACPS has been using the Gradual Release of Responsibility instructional framework at all grade levels since 2017. Additionally, ACPS has provided extensive and ongoing district-wide training on growth mindset, implicit bias, and the impact of poverty on student learning. Beginning with the 2024-2025 academic year, ACPS will focus on improving staff understanding and implementation of MTSS through district and school-based professional learning. Specific to K - 8 mathematics instruction, ACPS teachers have and continue to receive professional learning and coaching from Curriculum Associates on implementing strategies aligned to the 5

Strands of Mathematical Proficiency through their i-Ready curriculum. Similarly, teachers of high school courses receive professional learning from McGraw Hill in support of how the Strands of Mathematical Proficiency is integrated into the Reveal Math curricular resources.

Observations made using walkthrough tools aligned to the [NCTM Effective Mathematics Teaching Practices](#) in conjunction with i-Ready consultant observation; school-based administrator observation; and instructional coaching are used to ensure adherence to district instructional strategies, best practices in mathematics instruction, and that the core instructional resources are implemented with fidelity. With the walkthrough tools, observers will be looking for specific teacher actions and specific student actions. Teachers will receive feedback from consultants and administration to identify next steps for instructional coaching that will lead to improved student learning. Moving forward, ACPS would like to extend the use of the walkthrough tool to be implemented by teachers through peer observation to increase teacher effectiveness.

Beyond the use of walkthroughs to measure what is happening in the mathematics classroom, these tools, when used in collaboration with common assessments, consistent use of HQIM, and research-based instructional strategies, best ensures the alignment, clarity, coherence, and effectiveness of mathematics instruction.

Student demographics for ACPS consistently show a student population that is more than 90% white, approximately 5% black, and less than 5% all other racial subgroups combined. Within our student population more than 50% are considered economically disadvantaged. Knowing this, ACPS promotes heterogeneous mixing of students through all courses, insuring equitable access to Tier 1 instruction, with access to support services for Tier 2 and Tier 3 provided based on the students' mathematics needs. Given this, ACPS is able to provide accommodations and strategies that we believe will aid students who may be disadvantaged, though these strategies are made available to all students regardless of need.

Differentiated Accommodations and Strategies

- Culturally Responsive Teaching/Multilingual Curricular Resources

It is critical that students see examples of math problems as relevant to themselves, their lives, and their cultures. All learners engage with curricula that implement tasks that support high levels of cognitive demand, encourage deep learning, and respect learners' diversity and prior experiences. Our curriculum emphasizes being culturally and linguistically responsive (CLR) and entails the validation, affirmation, building, and bridging of students' cultural and linguistic behaviors through instructional practices. ELL differentiated instruction provides scaffolds for the different levels of language proficiency and language domains so teachers can address students' language needs. The curriculum incorporates family activities that encourage home and school connections. The program addresses social and cultural elements to engage all students, builds safe, equitable learning environments, and promotes relationships within our communities.

- Multilingual Instruction

Historically, ACPS has few students who are non-English speaking. As ELL students enter ACPS schools, we have been able to provide services as follows:

- Google translate for oral communication
- Conversion of online text to native language
- Use of foreign language teacher to assist with communication with the student and family.
- Have the Community School Coordinator work as a liaison between the school and family
- ELL Tutors
- Translation services and resources

- Parent Liaison / Community School Coordinator

Several ACPS schools utilize a parent liaison to help bridge the school to its community. Through the coordination of educational-friendly activities, such as math nights, the parent liaison is able to promote fun ways for whole families to be a part of the educational process. This partnership helps foster a positive relationship between families and learning. This additional family support of education reinforces the importance of education to the student.

- High Expectations

ACPS teachers set high expectations for all students. Teachers post and communicate content, language, social purposes for each lesson. This allows all students to know the expectations for not only what they are going to be learning, but also for behavior and interacting in the classroom with all students. ACPS also incorporates success criteria into each lesson so that students can identify when they have mastered the daily lesson.

- Inclusion

ACPS offers an inclusive learning environment, with support, in which students with disabilities, regardless of the nature or the severity of the disability and need for related services, receive education within the regular education classroom. Special educators meet with classroom teachers during scheduled collaborative planning times to provide differentiated instruction aligned to students' specific IEP and 504 goals. In addition, various models of co-teaching are utilized to maximize the quality of differentiated instruction within the classroom.

- CHIP

ACPS offers students the opportunity to participate in a Chinese Partial Immersion program (CHIP). In this program, elementary students are taught Math/Science/Chinese by Chinese teachers. This program not only offers a culturally diverse environment, but has also had the added benefit to accelerate many students in the Math curriculum. After elementary school, students have the option to continue their

learning of Chinese through middle and high school, resulting in the ability to graduate with a Dual-Language certificate.

- **Students Experiencing Poverty**

ACPS continues to apply Ruby Payne's Framework for Understanding Poverty, along with her work on Emotional Poverty. All ACPS instructional staff have received professional learning on both topics, with each ACPS school providing continued reinforcement and extension of the initial training. This work has enabled ACPS teachers to maintain an awareness of the factors that impact students experiencing poverty and arms them with the skills to help students succeed despite their circumstance.

Math Acceleration

All students in K-8 are evaluated three times per year using the i-Ready diagnostics, while students in grades 3-8 also take the MCAP for their grade level course. These data points are our primary indicators for selecting students who show potential for acceleration in mathematics. All students identified for acceleration in mathematics will be placed on an Individualized Acceleration Plan (IAP)

- **Elementary:** A school-based acceleration committee will convene to create an acceleration plan for students who have scored at the distinguished level on MCAP. The team will consider other data points such as i-Ready diagnostics, unit assessments, and teacher observation. At the end of grade 2, students consistently scoring above grade level on the diagnostic can be considered for an acceleration plan. At the elementary level, plans will outline structures for cluster grouping, curriculum extensions and grade level acceleration.
- **Middle:** Upon entering middle school, students have a historical record of i-Ready and MCAP data to inform potential placement on an accelerated program leading to Algebra 1 (or Integrated Algebra 1) while in middle school. Through grades 6 and 7, students continue adding to their i-Ready and MCAP performance history. ACPS determines benchmarks that students should meet to be placed in the accelerated program. Data points collected while in middle school will be used to support continued placement in the accelerated program or to inform a need for deceleration. The accelerated mathematics program in middle school consists of telescoped courses in grade 6 (Math 6 + half of Math 7) and in grade 7 (half of Math 7 + Math 8).

Intensive Interventions by Middle School

Elementary teachers will use the diagnostic data, unit assessments and lesson quizzes to identify skill gaps and form instructional groupings. Students who are in need of Tier 3 instruction will receive intensive intervention through the use of small groups or one on one support with teacher led supplemental instruction. Progress monitoring will provide appropriate data points to ensure the effectiveness of intervention.

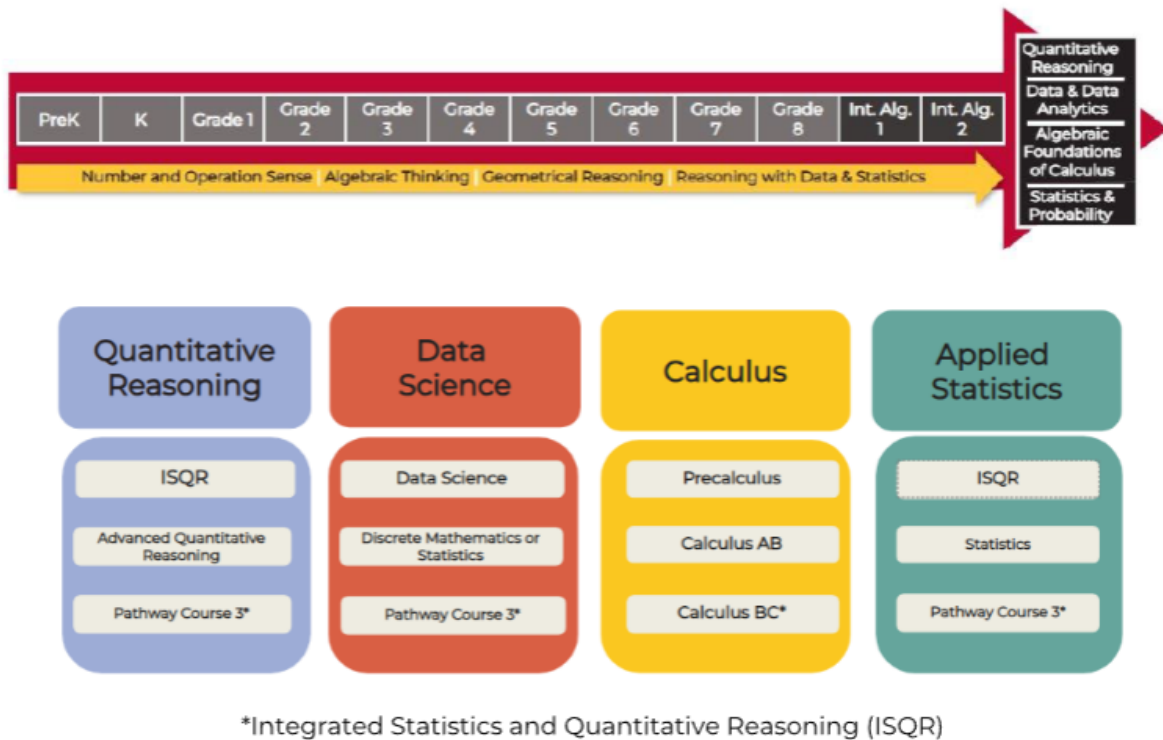
In middle school, students who are multiple years below grade level, according to prior MCAP and diagnostic data, are initially identified for potential Tier 3 intensive intervention. These intervention services are provided during a math intervention segment built within the daily 30 minute co-curricular period. Instruction is provided by the math intervention teacher, special educator, classroom teacher, or instructional coach. Student placement within Tier 3 is fluid, based upon frequent assessment of tiered learning goals.

Implementation Plan for the Transition to Integrated Algebra Courses

School Year	Implementation
2025-2026	Continue AGA sequence for all first time Algebra students; Introduction of Integrated Algebra course structure and standards
2026-2027	Final year of AGA sequence for all first time Algebra students; professional learning on Integrated Algebra 1 course. Last year of Algebra 1 MCAP
2027-2028	First year of Integrated Algebra 1 for all first time Algebra students; continue Geometry (last year) and Algebra 2; professional learning on Integrated Algebra 2 course
2028-2029	First year of Integrated Algebra 2; continue Algebra 2 (last year); First Integrated Algebra 2 MCAP
2029-2030	Complete Implementation of Integrated Algebra courses and MCAP assessment. All AGA sequence courses are removed.

Secondary Math Pathways

ACPS will provide mathematics courses that fully align with the proposed MSDE Secondary Mathematics Pathways.



ACPS will remove courses that do not align with the pathways, revise existing courses that can align with the pathways, and add new courses that would open access to pathways not currently possible in ACPS. Identification of courses as Honors will be per guidance from MSDE. Development of new MSDE proposed courses will be in accordance with MSDE guidance.

Existing Dual Enrollment courses which support one or more pathways will continue to be provided.

Year	ACPS Course	Implementation
2026-2027	Integrated Algebra (local Math 301) Trig / PreCalculus (Math 373) Hon. Trig/PreCalculus (Math 383) AP Precalculus	Removed Removed Removed Added

2027-2028	Algebra 1 (Math 341) Applied Prob & Stats (Math 398) College & Career Prep (Math 390) Integrated Algebra 1 ISQR Data Science (TBD) Adv. Quantitative Reasoning (TBD) Elements of Math (Math 392)	Removed Removed Removed Added Added Added Added Revised
2028-2029	Geometry (Math 362) Hon. Geometry (Math 372) Integrated Algebra 2	Removed Removed Added
2029-2030	Algebra 2 (Math 351) Hon. Algebra 2 (Math 361)	Removed Removed

Family and Community Partnerships

The ACPS Comprehensive Mathematics Plan, aligned with the MSDE PreK-12 Maryland Mathematics Policy is a strategic initiative designed to transform mathematics teaching, learning, and achievement from early childhood through secondary education. This policy supports the foundational goals of The Blueprint for Maryland's Future by ensuring that all students, regardless of background, have equitable access to a coherent and high-quality mathematics education. The ACPS plan and MSDE policy include recommendations to implement a structured mathematics program that develops students' conceptual understanding and fluency in mathematical concepts, skills, and strategies. By aligning teaching and learning practices with these goals, the policy aims to prepare students to apply mathematical knowledge in real-world contexts, enhancing their readiness for daily life, higher education, and future careers. ACPS will work to inform families and our community partners about our plan moving forward through a variety of approaches.

Opportunities to learn about shifts, resources, and policy

Audience	Topic	Method
Families Community	Shifts in Mathematics Programming • Revised Standards • MTSS in mathematics • Mathematics Pathways	ACPS will broadly communicate the shifts in mathematics programming to families and the community at large • ACPS website • Local print and electronic media • School based information nights • Online forums • Math Policy Liaison Team
Families Community	Resources for supporting students with grade level standards aligned mathematics • MSDE mathematics standards • ACPS text based support • Online text based support • Supplementary online resources • Supplementary school based resources	ACPS will continue to invest in high quality instructional materials and resources for our mathematics programs. ACPS primary mathematics instructional resources provide support to help families take part in their child's mathematics education. • i-Ready • McGraw Hill / ALEKS ACPS realizes that students and families may access a

	• Tutoring • School information nights	variety of online mathematics resources that are widely available. Some free math educational websites include: • Khan Academy (All Grades) • Mathplanet (Pre-Algebra and above) • GreeneMath (Pre-Algebra and above)
District staff School based staff Mathematics teachers Families Community	Learning about the MSDE Mathematics Policy • District staff • School based administrators • Mathematics Teachers • Families • Community members	Central office staff, school based administrators, and mathematics teachers will be provided with professional learning on the MSDE Mathematics Policy through the 2025-2026 school year • District: Elementary, Secondary, and Combined Council meetings will provide administrative and supervisory staff with professional learning on the contents and implementation of the MSDE Mathematics Policy in ACPS • School: Teachers will receive professional learning on the MSDE Mathematics Policy through district and school based professional learning • Community: Families and community members will be able to discuss the MSDE Mathematics Policy with school based administrative and instructional staff. • Math Policy Liaison

		Team
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Supporting families of students not achieving grade level numeracy by the end of grade 3

ACPS regards communication as one of the most essential components necessary to form a working relationship between student, family, and school. We encourage frequent parent contact, share encouraging signs of growth, and develop strategies for improvement to foster a collaborative environment for student success.

- Math Day/Math Nights encouraging family involvement in mathematical themes and purposes
- Elementary Math Strategy Videos that model strategies learned by students
- After-School Tutoring
- Home-School Compact - for establishment of learner/parent/teacher communication
- Parent access to current grades through grade reporting system
- Mid quarterly parent notification of below average grades
- Following Diagnostic i-Ready identification of skills to work on
- Parent Reports through i-Ready
- Parent Connection feature of i-Ready site
- Parent Letter informing families of lesson goals prior to each weekly lesson

ACPS strives to support families and encourage an active partnership that promotes student success through increased communication and a willingness to work as a team.

Involving families in MTSS Tier 2 and Tier 3 instruction

During elementary parent conferences, teachers provide information about the child's academic level and progress. Items discussed include diagnostic scores, grade level placements, and progress towards goals. Parents are informed of how the Tiered supports are aligned to the individual needs of their child. Strategies and resources are shared with families to encourage reinforcement of at home learning. Reports will be distributed to families who are unable to attend parent conferences.

Secondary parental involvement will mirror that of elementary, with more emphasis placed on direct school to family communication. Parents of secondary students will be informed of their students' need for Tier 2 or Tier 3 instruction, including strategies and resources that may be

used at home to support the tiered instruction occurring in the school. The Mathematics page of the district website will provide links that direct families to suitable online resources.

ACPS is in the process of establishing a common protocol for how families will be notified when Tier 2 and/or Tier 3 support is warranted`.

Involving community and business partners to support local math Programming

ACPS continues to maintain a strong relationship with our IHE through Dual Enrollment offerings. Currently, ACPS offers six Dual Enrollment mathematics courses through Allegany College of Maryland and Frostburg State University. Additionally, ACPS has partnered with these institutions to support MATHCOUNTS for middle school students and a competition for high school students.

As the courses within the MSDE Secondary Mathematics Pathways become better defined, ACPS will plan to leverage these partnerships to help provide professional learning for courses new to us, specifically with Data Science and Quantitative Reasoning.. ACPS has also worked with local organizations in math related fields to present to students such as our middle school Focus on the Future program, CTE experiences for students in STEM programs, and having engineers from the county speak to students about that career path. ACPS plans to continue with these and expand upon the opportunities students have to connect mathematics with their career goals.

A collaboration between families, communities and schools is a vital part of mathematical success in ACPS. Families and community members support, reinforce and foster a positive attitude toward mathematical learning. In order to develop successful mathematical thinkers, we must prioritize: (1) building strong relationships (2) understand and support culturally diverse needs and (3) utilize all stakeholders' assets. To access centralized resources, please visit <https://www.acpsmd.org/>.

Vision	Engagement	Community Partnerships	Growth Mindset
Communicate the school system's mathematics vision to families and community stakeholders The vision will be communicated during the 2025-2026 academic year. Feedback, using an online	Provide diverse opportunities for families and community stakeholders to be informed of/attend informational sessions and mathematics related events. Family Connections: PTA/PTO programs: This	Strengthen ACPS and parental relationships with community partners. When collaborating, the attached policy is utilized. Family Connections:	Cultivate a culture that provides learning opportunities to promote positive experiences in math for all stakeholders. Family Connections: Math Strategy Videos:

data collection tool, from the community will be compiled and reviewed to help shape the final product. Family Accommodations: ACPS website, school-based website, and written communication Parents, community members, and educators will be provided an online survey that will provide feedback on the vision. Review of the feedback provided will allow ACPS staff to review and refine the vision as warranted.	organization is intended to build home-school connections and organize various events throughout the school year. Community School Coordinator (Community School campuses only): Plays a vital role in developing and facilitating community events to build strong home-school connections Mathematical events/Informational Sessions: Events are intentionally planned and executed to help support academic learning, inform families of state testing requirements/curriculum support (HQIM) and to promote family engagement at home. HQIM Website: Provides materials for families to understand the content, help their children build essential math skills and be present in their child's learning. Teacher/family Open Communication: Allows for home-to school communication to assist educators and families in building strong relationships. Parent/Student Resource ACPS Webpage: A centralized location where families can access pertinent information pertaining to their child's education	Community Schools: This program develops, utilizes and leverages partnerships to connect diverse and underserved communities to the essential resources needed in order to thrive and close achievement gaps. Innovative Programs: These programs provide more inclusive and engaging learning environments for students to develop essential life skills. Professional Development Schools (PDS-teacher prep internships): Connects colleges and local school systems to develop and implement a program for future educator candidates Career Center for Technical Education: Learning at CCTE is an inclusive and collaborative effort of students, staff, family, and community for success in a diverse and changing world. After-school Program: This program strives to increase academic performance in math while promoting civic engagement and college & career readiness enrichment opportunities.	This resource provides various methods/strategies for parents to support their child at home. This resource provides parents with math confidence when working with their child at home. Curriculum-supported Social/Emotional Learning (SEL) Resource: This resource provides tips on how to support students at home. When students have positive attitudes about learning, they develop SEL skills that will help them succeed in math class.
Plan of Action:	Plan of Action:	Plan of Action: Are all stakeholders aware of community partnerships?	Plan of Action: Is there support and

Was the mathematics vision communicated through the ACPS website, school-based website, and through written communication? Will families and community stakeholders have the opportunity to provide feedback on the mathematics vision? How?	Do families and community members have an opportunity to engage in mathematics related events? How often? Do families have an opportunity to provide feedback on math related events? What means of communication will be utilized to provide mathematics related content? How often? Are all math resources for parents/students/community members in an easily accessible, organized, and centralized location on the ACPS website?	Are all community partners (businesses, nonprofits and community centers) listed and/or linked in a centralized location on the ACPS website? Do families have an opportunity to provide feedback on community partnerships?	resources provided from school to foster positive math experiences at home? Do families have an opportunity to provide feedback on providing learning opportunities that promote positive math experiences? Is the SEL website linked on the ACPS website?
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[ACPS Comprehensive Mathematics Plan: Family and Community Partnership Survey](#)

Appendices

Appendix A

Goals and Metrics: Grade level MCAP Proficiency

Grade 3 Goals:

ACPS will target the following subgroups:

- **Economically Disadvantaged Students:** scored 9% below the mark for all students.
- **Sp. Ed. Students:** scored 24% below the mark for all students.
- **Black Students:** scored 19% below the mark for all students.

MCAP Proficiency Targets for 3rd Grade Mathematics by Gender, Socioeconomic Status, Ethnicity, and Service Group				
	22-23	23-24	24-25	25-26
All	41%	45%	46%	51%
Male	46%	45%	51%	56%
Female	36%	45%	41%	46%
ED	33%	35%	37%	42%
SE-Y	17%	24%	22%	37%
B	31%	29%	27%	32%
H	67%	42%	*	52%
2+	40%	34%	43%	44%
W	41%	46%	46%	51%

Grade 4 Goals:

ACPS will target the following subgroups:

- **Economically Disadvantaged Students:** scored 11% below the mark for all students.
- **Sp. Ed. Students:** scored 25% below the mark for all students.
- **Black Students:** scored 25% below the mark for all students.
- **Two or more races Students:** scored 10% below the mark for all students

MCAP Proficiency Targets for 4th Grade Mathematics by Gender, Socioeconomic Status, Ethnicity, and Service Group				
	22-23	23-24	24-25	25-26
All	36%	39%	40%	45%
Male	35%	45%	43%	48%
Female	36%	32%	36%	41%
ED	27%	34%	29%	34%
SE-Y	14%	12%	15%	20%
B	19%	28%	15%	20%
H	50%	50%	46%	51%
2+	27%	31%	30%	35%
W	36%	40%	41%	46%

Grade 5 Goals:

ACPS will target the following subgroups:

- **Economically Disadvantaged Students:** scored 10% below the mark for all students.
- **Sp. Ed. Students:** scored 27% below the mark for all students.
- **Black Students:** scored 11% below the mark for all students.
- **Two or more races Students:** scored 9% below the mark for all students

MCAP Proficiency Targets for 5th Grade Mathematics by Gender, Socioeconomic Status, Ethnicity, and Service Group				
	22-23	23-24	24-25	25-26
All	32%	31%	36%	41%
Male	33%	32%	39%	44%
Female	30%	29%	31%	36%
ED	23%	22%	26%	31%
SE-Y	11%	11%	9%	14%
B	20%	21%	25%	30%
H	0%	53%	33%	37%
2+	18%	20%	27%	32%

W	32%	31%	37%	42%
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Grade 6 Goals:

ACPS will target the following subgroups:

- **Economically Disadvantaged Students:** scored 10% below the mark for all students
- **Sp. Ed. Students:** scored 18% below the mark for all students
- **Two or more races Students:** scored 12% below the mark for all students

MCAP Proficiency Targets for 6th Grade Mathematics by Gender, Socioeconomic Status, Ethnicity, and Service Group				
	22-23	23-24	24-25	25-26
All	22%	22%	20%	25%
Male	22%	20%	19%	24%
Female	21%	22%	21%	26%
ED	16%	13%	10%	15%
SE-Y	4%	5%	2%	7%
B	12%	21%	10%	15%
H	30%	14%	16%	21%
2+	20%	24%	8%	12%
W	22%	21%	22%	37%

Grade 7 Goals:

ACPS will target the following subgroups:

- **Hispanic Students:** scored 18% below the mark for all students
- **Sp. Ed. Students:** scored 21% below the mark for all students
- **Black Students:** scored 11% below the mark for all students

MCAP Proficiency Targets for 7th Grade Mathematics by Gender, Socioeconomic Status, Ethnicity, and Service Group				
	22-23	23-24	24-25	25-26
All	22%	23%	25%	30%
Male	28%	28%	25%	30%
Female	15%	19%	25%	30%
ED	14%	17%	17%	22%
SE-Y	10%	3%	4%	9%
B	13%	12%	14%	19%
H	13%	17%	7%	12%
2+	19%	21%	29%	34%
W	22%	24%	26%	31%

Grade 8 Goals:

ACPS will target the following subgroups:

- **All Students:** no more than 5% of any subgroup passed MCAP Math 8.
- **Sp. Ed. Students:** no Sp. Ed. student passed MCAP Math 8

MCAP Proficiency Targets for 8th Grade Mathematics by Gender, Socioeconomic Status, Ethnicity, and Service Group				
	22-23	23-24	24-25	25-26
All	6%	6%	4%	9%
Male	5%	6%	5%	10%
Female	7%	6%	3%	8%
ED	5%	4%	5%	10%
SE-Y	2%	4%	0%	5%
B	2%	2%	5%	10%
2+	3%	3%	3%	8%
W	6%	6%	4%	9%

Algebra I Goals:

ACPS will target the following subgroups:

- **Economically Disadvantaged Students:** scored 8% below the mark for all students
- **Sp. Ed. Students:** scored 8% below the mark for all students
- **Black Students:** scored 16% below the mark for all students
- **Hispanic Students:** scored 14% below the mark for all students

MCAP Proficiency Targets for Algebra I Mathematics by Gender, Socioeconomic Status, Ethnicity and Service Group				
	22-23	23-24	24-25	25-26
All	25%	17%	22%	27%
Male	26%	17%	24%	29%
Female	24%	15%	20%	25%
ED	16%	10%	14%	19%
SE-Y	5%	5%	14%	19%
A	86%	43%	*	53%
B	12%	9%	6%	11%
H	23%	18%	8%	13%
2+	18%	13%	18%	23%
W	24%	17%	23%	28%

KEY: Grade 3 Goals through Algebra 1 Goals

ED= Economically Disadvantaged

EL = English Learner

A = Asian

SE-Y = IEP-Y

B = Black / Afr. Amer.

H = Hispanic

2+ = Two or more races

W = White

* = < 10 in subgroup for this MCAP administration

Appendix B

Numeracy Development

Elementary:

Pre-Kindergarten Growth Goals:

By 2027, the county average for each benchmark will be a minimum of 80% or show a 5% growth.

County Benchmark Averages:

Benchmark 1	Benchmark 2	Benchmark 3
66%	85%	85%

K-5 Growth Goals:

The % of students reaching proficiency or better in all measured subgroups and overall will increase by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

The % of Special Education students scoring two or more grades below grade level (Below Basic) will decrease by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

Kindergarten

2025 All Subgroups and Overall: Goal met

Fall - 11% to Spring - 72%

2025 Special Education scoring two or more grades below grade level: N/A

2026:

ACPS – Elementary Math – Kindergarten – Spring 2025									
Rating	Number	Gender		Race				Special Education	
		Male	Female	White	Black	Hispanic or Latino	Two or more	Not	Reported
Advanced	275	122	153	244	8	6	23	203	42
	54%	53%	54%	57%	29%	46%	45%	57%	40%
Proficient	94	40	54	71	12	3	10	80	14
	18%	17%	19%	17%	43%	23%	20%	20%	13%
Basic	142	68	74	115	8	4	18	94	48
	28%	30%	26%	27%	29%	31%	35%	23%	46%
Below Basic									
	511	230	281	430	28	13	51	407	104
End of Year Target– Increase % of Proficient & Advanced combined by ...	10%	10%	10%	10%	10%	10%	10%	10%	10%
	61%	60%	62%	61%	70%	54%	62%	65%	50%

First Grade

2025 All Subgroups and Overall: Goal met

Fall - 8% to Spring - 43%

2025 Special Education scoring two or more grades below grade level: Goal met

Fall - 43% to Spring - 16%

2026:

ACPS – Elementary Math – First Grade – Spring 2025									
Rating	Number	Gender		Race				Special Education	
		Male	Female	White	Black	Hispanic or Latino	Two or more	Not	Reported
Advanced	187	108	79	170	2	1	15	167	20
	35%	36%	34%	38%	7%	10%	33%	40%	18%
Proficient	81	38	43	72	4	3	4	71	10
	15%	13%	19%	16%	14%	30%	9%	17%	9%
Basic	238	133	105	195	18	6	25	176	62
	45%	45%	45%	43%	64%	60%	54%	42%	56%
Below Basic	21	17	4	15	4		2	3	18
	4%	6%	2%	3%	14%		4%	1%	16%
	527	296	231	452	28%	10	46%	417	110
End of Year Target– Increase % of Proficient & Advanced combined by ...	10%	10%	10%	10%	10%	10%	10%	10%	10%
	43%	38%	50%	43%	22%	38%	40%	48%	22%

Second Grade

2025 All Subgroups and Overall: Goal met

Fall - 7% to Spring - 45%

2025 Special Education scoring two or more grades below grade level: Goal met

Fall - 69% to Spring - 39%

2026:

ACPS – Elementary Math – Second Grade – Spring 2025									
Rating	Number	Gender		Race				Special Education	
		Male	Female	White	Black	Hispanic or Latino	Two or more	Not	Reported
Advanced	126	79	47	119	1	3	6	107	19
	23%	28%	19%	25%	4%	23%	16%	25%	17%
Proficient	111	50	61	101	4		6	102	9
	21%	17%	24%	21%	14%		16%	24%	8%
Basic	224	116	108	193	13	8	18	180	44
	42%	41%	43%	41%	46%	62%	49%	42%	39%
Below Basic	78	41	37	61	10	2	7	36	42
	14%	14%	15%	13%	36%	15%	19%	8%	37%
	539	286	253	474	28	13	37	425	114
End of Year Target– Increase % of Proficient & Advanced combined by ...	10%	10%	10%	10%	10%	10%	10%	10%	10%
	38%	37%	36%	39%	19%	27%	28%	41%	20%

Third Grade

2025 All Subgroups and Overall: Goal met

Fall - 9% to Spring - 50%

2025 Special Education scoring two or more grades below grade level: Goal met

Fall - 65% to Spring - 39%

2026:

ACPS – Elementary Math – Third Grade – Spring 2025									
Rating	Number	Gender		Race				Special Education	
		Male	Female	White	Black	Hispanic or Latino	Two or more	Not	Reported
Advanced	162	94	68	146	5	5	10	148	14
	30%	34%	25%	31%	20%	50%	22%	35%	12%
Proficient	112	61	51	102	1		9	93	19
	21%	22%	19%	22%	4%		20%	22%	16%
Basic	181	73	108	151	13	2	17	143	38
	33%	27%	40%	32%	52%	20%	38%	33%	33%
Below Basic	88	46	42	73	6	3	9	43	45
	16%	16%	15%	16%	24%	30%	20%	10%	39%
	543	274	269	472	25	10	45	427	116
End of Year Target– Increase % of Proficient & Advanced combined by ...	10%	10%	10%	10%	10%	10%	10%	10%	10%
	41%	44%	39%	43%	26%	45%	34%	47%	27%

Fourth Grade

2025 All Subgroups and Overall: Goal met

Fall - 19% to Spring - 53%

2025 Special Education scoring two or more grades below grade level: Goal met

Fall - 78% to Spring - 54%

2026:

ACPS – Elementary Math – Fourth Grade – Spring 2025									
Rating	Number	Gender		Race				Special Education	
		Male	Female	White	Black	Hispanic or Latino	Two or more	Not	Reported
Advanced	168	92	76	159	4	1	4	158	10
	33%	35%	30%	36%	20%	8%	8%	39%	9%
Proficient	104	45	59	86	2	4	15	92	12
	20%	17%	23%	19%	10%	33%	31%	23%	11%
Basic	125	58	66	103	7	5	14	96	29
	24%	22%	26%	23%	35%	42%	29%	24%	27%
Below Basic	117	65	52	95	7	2	15	59	58
	22%	25%	20%	22%	35%	17%	32%	14%	53%
	514	260	253	443	20	12	48	405	109
End of Year Target– Increase % of Proficient & Advanced combined by ...	10%	10%	10%	10%	10%	10%	10%	10%	10%
	34%	30%	38%	34%	21%	33%	39%	39%	17%

Fifth Grade

2025 All Subgroups and Overall: Goal met

Fall - 29% to Spring - 55%

2025 Special Education scoring two or more grades below grade level: Goal met

Fall - 74% to Spring - 54%

2026:

ACPS – Elementary Math – Fifth Grade – Spring 2025									
Rating	Number	Gender		Race				Special Education	
		Male	Female	White	Black	Hispanic or Latino	Two or more	Not	Reported
Advanced	194	122	72	166	7	10	21	185	9
	35%	40%	29%	36%	22%	48%	36%	41%	9%
Proficient	106	59	47	96	5	2	4	93	13
	19%	19%	19%	21%	16%	10%	7%	20%	13%
Basic	131	68	63	105	7	5	19	109	22
	24%	22%	25%	23%	22%	24%	33%	24%	22%
Below Basic	122	54	68	93	13	4	14	67	55
	22%	18%	27%	20%	41%	20%	24%	15%	55%
	553	303	250	460	32	21	58	454	99
End of Year Target– Increase % of Proficient & Advanced combined by ...	10%	10%	10%	10%	10%	10%	10%	10%	10%
	26%	28%	24%	26%	20%	41%	24%	27%	16%

Middle:

Numeracy development in the middle grades focuses on ratio & proportional relationships, algebraic reasoning, statistics & probability, geometry, and functions.

Grade 6 Growth Goals

The % of students reaching proficiency or better in all measured subgroups and overall will increase by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 24.6% to Spring - 45.1% : Goal met

2026:

The % of students scoring two or more grades below grade level (Below Basic) or better in all measured subgroups and overall will decrease by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 40.6% to Spring - 31.5% : Goal not met

2026:

Mathematics Grade 6 Spring 2025 (Cohort Graduating 2031)																		
	Number	Gender			Race							Special Education		504		ELL	FARMS	NON FARMS
		Male	Female	Unspecifi ed (X)	White	Black	Asian	Nat Hawaiian Pacific Is	Am Indian or Alaska Nat	Two or more races	Hispanic Latino	Yes	No	Yes	No	YES	YES	NO
Advanced	116	58	57	0	104	5	1	2	0	4	0	5	110	0	116	0	57	58
	21.52%	21.48%	21.76%	0.00%	22.56%	22.73%	25.00%	100.00%	0.00%	8.51%	0.00%	4.76%	25.76%	0.00%	22.05%	0.00%	13.94%	47.15%
Proficient	127	51	74	0	113	2	1	0	2	9	0	7	118	4	123	0	89	36
	23.56%	18.89%	28.24%	0.00%	24.51%	9.09%	25.00%	0.00%	66.67%	19.15%	0.00%	6.67%	27.63%	30.77%	23.38%	0.00%	21.76%	29.27%
Basic	126	72	51	0	108	5	1	0	1	11	0	17	106	5	121	0	102	21
	23.38%	26.67%	19.47%	0.00%	23.43%	22.73%	25.00%	0.00%	33.33%	23.40%	0.00%	16.19%	24.82%	38.46%	23.00%	0.00%	24.94%	17.07%
Below Basic	170	89	80	0	136	10	1	0	0	23	0	76	93	4	166	0	161	8
	31.54%	32.96%	30.53%	0.00%	29.50%	45.45%	25.00%	0.00%	0.00%	48.94%	0.00%	72.38%	21.78%	30.77%	31.56%	0.00%	39.36%	6.50%
	539	270	262	0	461	22	4	2	3	47	0	105	427	13	526	0	409	123
End of Year Target-- Increase % of Proficient & Advanced combined by	10.00%	10.00%	10.00%	*	10.00%	10.00%	*	*	*	10.00%	*	10.00%	10.00%	*	10.00%	*	10.00%	10.00%
Fall 24 to Spring 25 Change	20.49%	16.19%	24.82%		21.23%	9.09%				20.68%		4.43%	24.76%		20.44%		18.40%	26.82%

Grade 7 Growth Goals

The % of students reaching proficiency or better in all measured subgroups and overall will increase by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 21.1% to Spring - 39.3% : Goal met

2026:

The % of students scoring two or more grades below grade level (Below Basic) in all measured subgroups and overall will decrease by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 50.5% to Spring - 38.2% : Goal met

2026:

Mathematics Grade 7 Spring 2025 (Cohort Graduating 2030)																		
Rating	Number	Gender			Race							Special Education		504		ELL	FARMS	NON FARMS
		Male	Female	Unspecifi ed (X)	White	Black	Asian	Nat Hawaiian Pacific Is	Am Indian or Alaska Nat	Two or more races	Hispanic Latino	Yes	No	Yes	No	YES	YES	NO
Advanced	97	41	56	0	86	2	1	0	0	8	0	2	95	2	94	0	50	47
	18.16%	15.89%	20.51%	0.00%	18.53%	8.70%	20.00%	0.00%	0.00%	19.05%	0.00%	2.86%	20.61%	16.67%	18.11%	#DIV/0!	14.62%	24.87%
Proficient	113	48	65	0	102	3	1	0	0	7	0	2	111	3	110	0	58	55
	21.16%	18.60%	23.81%	0.00%	21.98%	13.04%	20.00%	0.00%	0.00%	16.67%	0.00%	2.86%	24.08%	25.00%	21.19%	#DIV/0!	16.96%	29.10%
Basic	120	68	51	0	104	6	1	0	0	9	0	13	106	3	117	0	71	48
	22.47%	26.36%	18.68%	0.00%	22.41%	26.09%	20.00%	0.00%	0.00%	21.43%	0.00%	18.57%	22.99%	25.00%	22.54%	#DIV/0!	20.76%	25.40%
Below Basic	204	101	101	0	172	12	2	0	0	18	0	53	149	4	198	0	163	39
	38.20%	39.15%	37.00%	0.00%	37.07%	52.17%	40.00%	0.00%	0.00%	42.86%	0.00%	75.71%	32.32%	33.33%	38.15%	#DIV/0!	47.66%	20.63%
	534	258	273	0	464	23	5	0	0	42	0	70	461	12	519	0	342	189
End of Year Target-- Increase % of Proficient & Advanced combined by	10.00%	10.00%	10.00%	*	10.00%	10.00%	*	*	*	10.00%	*	10.00%	10.00%	*	10.00%	*	10.00%	10.00%
Fall 24 to Spring 25 Change	18.22%	14.35%	22.22%		19.07%	9.74%				12.99%		4.42%	20.36%		17.94%		7.93%	22.75%

Grade 8 Growth Goals

The % of students reaching proficiency or better in all measured subgroups and overall will increase by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 13.7% to Spring - 18.4% : Goal not met
2026:

The % of black students two or more grades below grade level (Below Basic) will decrease by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 71.7% to Spring - 57.7% : Goal met
2026:

Mathematics Grade 8 Spring 2025 (Cohort Graduating 2029)																		
Rating	Number	Gender			Race							Special Education		504		ELL	FARMS	NON FARMS
		Male	Female	Unspecifi ed (X)	White	Black	Asian	Nat Hawaiian Pacific Is	Am Indian or Alaska Nat	Two or more races	Hispanic Latino	Yes	No	Yes	No	YES	YES	NO
Advanced	34	15	19	0	32	1	0	0	0	1	0	1	33	1	33	0	15	19
	10.27%	9.38%	11.52%	0.00%	11.35%	6.67%	0.00%	0.00%	0.00%	3.03%	0.00%	1.59%	12.60%	25.00%	10.19%	0.00%	6.44%	20.65%
Proficient	27	9	18	0	23	1	0	0	0	3	0	0	27	2	25	0	12	15
	8.16%	5.63%	10.91%	0.00%	8.16%	6.67%	0.00%	0.00%	0.00%	9.09%	0.00%	0.00%	10.31%	50.00%	7.72%	0.00%	5.15%	16.30%
Basic	79	40	39	0	66	4	0	0	0	9	0	9	70	0	79	0	51	28
	23.87%	25.00%	23.64%	0.00%	23.40%	26.67%	0.00%	0.00%	0.00%	27.27%	0.00%	14.29%	26.72%	0.00%	24.38%	0.00%	21.89%	30.43%
Below Basic	191	96	89	0	161	9	0	1	0	20	0	53	132	1	187	0	155	30
	57.70%	60.00%	53.94%	0.00%	57.09%	60.00%	0.00%	100.00%	0.00%	60.61%	0.00%	84.13%	50.38%	25.00%	57.72%	0.00%	66.52%	32.61%
	331	160	165	0	282	15	0	1	0	33	0	63	262	4	324	0	233	92
End of Year Target-- Increase % of Proficient & Advanced combined by	10.00%	10.00%	10.00%	*	10.00%	10.00%	*	*	*	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	*	10.00%	10.00%
Fall 24 to Spring 25 Change	4.68%	2.29%	7.45%		4.95%	7.45%				1.31%		1.59%	6.12%	55.00%	4.09%		2.76%	8.83%

Grade 8 Algebra 1 Growth Goals

100% of students will reach proficiency or better in all measured subgroups and overall by the end-of-year diagnostic.

2025 Overall: Spring - 83.6% : Goal not met
2026:

Middle School Algebra 1 Spring 2025 (Cohort Graduating 2029)																		
Rating	Number	Gender			Race							Special Education		504		ELL	FARMS	NON FARMS
		Male	Female	Unspecifi ed (X)	White	Black	Asian	Nat Hawaiian Pacific Is	Am Indian or Alaska Nat	Two or more races	Hispanic Latino	Yes	No	Yes	No	YES	YES	NO
Advanced	103	62	41	0	92	1	3	0	0	7	0	1	102	2	101	0	44	59
	48.13%	50.00%	45.56%	0.00%	47.67%	16.67%	100.00%	0.00%	0.00%	58.33%	0.00%	50.00%	48.11%	22.22%	49.27%	0.00%	46.32%	49.58%
Proficient	76	45	31	0	70	2	0	0	0	4	0	1	75	6	70	0	28	48
	35.51%	36.29%	34.44%	0.00%	36.27%	33.33%	0.00%	0.00%	0.00%	33.33%	0.00%	50.00%	35.38%	66.67%	34.15%	0.00%	29.47%	40.34%
Basic	31	15	16	0	28	3	0	0	0	0	0	0	31	1	30	0	20	11
	14.49%	12.10%	17.78%	0.00%	14.51%	50.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	14.62%	11.11%	14.63%	0.00%	21.05%	9.24%
Below Basic	4	2	2	0	3	0	0	0	0	1	0	0	4	0	4	0	3	1
	1.87%	1.61%	2.22%	0.00%	1.55%	0.00%	0.00%	0.00%	0.00%	8.33%	0.00%	0.00%	1.89%	0.00%	1.95%	0.00%	3.16%	0.84%
	214	124	90	0	193	6	3	0	0	12	0	2	212	9	205	0	95	119
End of Year Target-- Increase % of Proficient & Advanced combined by	10.00%	10.00%	10.00%	*	10.00%	*	*	*	*	10.00%	*	*	10.00%	*	10.00%	*	10.00%	10.00%
Fall 24 to Spring 25 Change	31.01%	30.83%	30.00%		28.91%					64.39%			30.32%		30.68%		23.71%	32.06%

High:

Numeracy development in the high school leading to CCR focuses on solving and graphing algebraic equations (linear, exponential, quadratic), working with polynomials, working with radicals, and applying geometric relationships.

Algebra Growth Goals

The % of students reaching proficiency or better in all measured subgroups and overall will increase by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 12.1% to Spring - 17.4% : Goal not met

2026:

The % of students scoring two or more grades below grade level (Below Basic) in all measured subgroups and overall will decrease by 10% from the beginning-of-year diagnostic to the end-of-year diagnostic.

2025 Overall: Fall - 72.1% to Spring - 67.5% : Goal not met

2026:

ACPS Algebra 1 and Integrated Algebra Grades 9 and 10 Spring 2025 (Cohorts Graduating 2027 and 2028)																		
Rating	Number	Gender			Race						Special Education		504		ELL	FARMS	NON FARMS	
		Male	Female	x	White	Black	Asian	Nat Hawaiian Pacific Is	Am Indian or Alaska Nat	Two or more races	Hispanic Latino	Yes	No	Yes	No	Yes	Yes	Non Farms
Advanced	41	19	22	0	37	2	1	0	0	1	1	4	37	0	41	0	28	13
	9.79%	8.37%	11.46%	0.00%	10.28%	12.50%	100.00%	0.00%	0.00%	2.50%	9.09%	6.15%	10.45%	0.00%	10.10%	0.00%	8.72%	13.54%
Proficient	32	17	15	0	29	2	0	0	0	1	0	1	31	0	32	0	24	8
	7.64%	7.49%	7.81%	0.00%	8.06%	12.50%	0.00%	0.00%	0.00%	2.50%	0.00%	1.54%	8.76%	0.00%	7.88%	0.00%	7.48%	8.33%
Basic	63	29	34	0	58	0	0	0	0	5	0	1	62	0	61	0	45	18
	15.04%	12.78%	17.71%	0.00%	16.11%	0.00%	0.00%	0.00%	0.00%	12.50%	0.00%	1.54%	17.51%	0.00%	15.02%	0.00%	14.02%	18.75%
Below Basic	283	162	121	0	236	12	0	0	2	33	10	59	224	9	272	0	224	57
	67.54%	71.37%	63.02%	0.00%	65.56%	75.00%	0.00%	0.00%	100.00%	82.50%	90.91%	90.77%	63.28%	100.00%	67.00%	0.00%	69.78%	59.38%
	419	227	192	0	360	16	1	0	2	40	11	65	354	9	406	0	321	96
End of Year Target-- Increase % of Proficient & Advanced combined by	10.00%	10.00%	10.00%	*	10.00%	10.00%	*	*	*	10.00%	10.00%	10.00%	10.00%	10.00%	10.00%	*	10.00%	10.00%
Fall 23 to Spring 24 Change	5.29%	4.57%	6.13%		5.92%	17.31%				-5.87%	3.21%	3.34%	5.74%	-10.00%	6.11%		5.43%	5.21%

Appendix C

Professional Learning Provided for Pre-K - 12 Mathematics

District-wide

Employee Group	Grade Level(s)	Name of Training	Provider and Training Type	Total Number of Hours	Time Period for Completion	Learning Forward Standards for Prof. Learning	Purpose of Professional Learning
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Ruby Payne	Vendor, District and School, On-going	5 Hours	Annual Update	Equity Practices Equity Drivers Equity Foundations	Understanding the framework of poverty. Helps staff understand mindsets of generational poverty to produce best practices in the classroom.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	GRRUDL	District and School, On-going	20 Hours	Continual	Curriculum Assessment & Instruction Learning Designs Cultural & Collaborative Inquiry	The ACPS instructional framework for lesson planning, design, and instructional delivery for all content.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Implicit Bias	Vendor, Initial (Upcoming)	Estimated 5 Hours	TBD	Equity Practices Equity Drivers Equity Foundations	Raising awareness of unconscious biases and their impact on decision making.

Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	MTSS	District and School, On-going	20 Hours	Annual beginning August 2024	Learning Designs Curriculum, Assessment, & Instruction	Provides all staff with the process for addressing educational needs of all students through high quality tiered instruction, targeted remediation, and intensive intervention.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Growth Mindset	District, Ongoing	5 Hours	Continual	Equity Driver Culture of Collaborative Inquiry Evidence	Promotes student belief that skills can be learned and mastered over time through perseverance and grit.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Success Criteria	District, Ongoing	2 Hours	Annual beginning August 2023	Learning Designs Curriculum, Assessment, & Instruction Evidence	To make learning clear, measurable, and achievable for the students. Helps students understand exactly what success looks like.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Culturally Responsive Teaching	District, Initial (Upcoming)	Estimated 5 Hours	TBD	Equity Practices Equity Drivers Equity Foundations	Recognize student's diverse cultural backgrounds, experience, and identities as assets to learning. Allows for teaching to be more inclusive, relevant, and effective for all learners.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Multi-Language Learners	District, Initial (Upcoming)	Estimated 5 Hours	TBD	Equity Practices Equity Drivers Equity Foundations	Insuring full access to academic success, social integration, and personal empowerment, while honoring and building upon their home language and culture.

Instructional Specialists	Pre-K - 12	Mathematical Quality of Instruction (MQI) Coach Training	District, Initial	40 hours	2024 - 2025 School Year	Implementation Leadership Professional Expertise	Math specific instructional coaching focusing on effective mathematics teaching practices. Coaches use the MQI process to coach teachers
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 8	OGAP	MSDE, Initial	TBD	TBD	Curriculum, Assessment, & Instruction	TBD
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Effective Universal Instruction	District, Initial	TBD	2024 - 2025 School Year	Learning Designs	High quality research based teaching designed to meet the needs of all students
Principals and Instructional Specialists	K - 8	Learning Walks	Vendor, TBD	6 Hours	2023 - present	Implementation Resources Culture of Collaborative Inquiry	To gather insight into teaching and learning by observing classrooms in a focused non-evaluative way, inform strategy, and support continuous improvement.
Teachers, Principals, Instructional Specialists, Central Office	Pre-K - 12	Revised Mathematics Standards	District, initial	TBD (per MSDE)	2025-2026 school year	Curriculum, Assessment, & Instruction	Updating teachers on the revised standards per course that will define the content (depth and rigor) that students will be responsible to know moving forward.
Teachers, Instructional Specialists,	Pre-K - 12	Maryland Effective Mathematics Educator Course	District	TBD (per MSDE)	TBD (per MSDE)	Learning Designs Curriculum, Assessment, & Instruction	Support educators in implementing the state's updated integrated mathematics standards.

Elementary

Employee Group	Grade Level(s)	Name of Training	Provider and Training Type	Total Number of Hours	Time Period for Completion	Learning Forward Standards for Prof. Learning	Purpose of Professional Learning
Elementary Teachers and Principals	K - 5	Sequencing Ideas to Deepen Mathematical Reasoning	Vendor, Ongoing	10 hours	Annual	Evidence Resources Learning Designs	The purpose of sequencing ideas to deepen mathematical reasoning is to build understanding in a logical and connected way, helping learners move from basic concepts to more complex reasoning.
Elementary Teachers and Principals	K - 5	Instructional Groupings/ Differentiated Instruction	Vendor, Ongoing	10 hours	Annual	Implementation Curriculum, Assessment & Instruction Learning Designs	The purpose of instructional groupings and differentiated instruction is to meet the diverse learning needs of all students, ensuring that each learner can access, engage with, and master mathematical concepts at an appropriate level of challenge or support.
Elementary Teachers and Principals	K - 5	Digital Resources and Tools	District, Ongoing	1.5 hours	Annual	Resources	Familiarize students/teachers with digital tools that will be used on state assessments. Encourage practice with features/tools that will be encountered.
Elementary Teachers	K - 5	Monitoring	District,	1.5 hours	Annual	Curriculum,	Provide teachers with

and Principals		Pathways, Passed Lessons, and Time on Task	Ongoing			Assessment, & Instruction Evidence	process and manner to monitor student progress on their pathway, and make any necessary adjustments to ensure success.
Elementary Teachers and Principals	K - 5	Number Talks	Vendor and District, Ongoing	10 hours	Annual	Learning Designs Evidence	Continued in-service on this topic in order to build a strong number sense within our learners. Teachers must internalize the need to include Number Talks on a routine basis.
Elementary Teachers and Principals	K - 5	i-Ready Program Implementa tion Updates	Vendor. Ongoing	3 hours	Annual	Implementation Resources Culture of Collaborative Inquiry	Presented to encourage teachers to work together and improve their teaching practices. Provides teacher opportunities to refine their craft. .
Elementary Teachers and Principals	K - 5	Customizin g Comprehen sion Checks	District, Initial	1.5 hours	Annual	Curriculum, Assessment, & Instruction Resources	Permits teachers to internalize and create a more personalized assessment of lesson content.
Elementary Teachers and Principals	K - 5	Before, During, and After the Diagnostic	District, Ongoing	10 hours	Annual	Curriculum, Assessment, & Instruction Resources Implementation	Providing teachers with a means to motivate and encourage students to excel, acknowledge positive mindsets, and establish learning goals upon data analysis.
Elementary Teachers and Principals	K - 5	Concrete, Representa tional, and Abstract	District, Ongoing	30 hours	Annual	Learning Designs Implementation Evidence	The benefit of using Concrete-Representational- Abstract (CRA) progressions in math

		Progression s					instruction is that it supports deep, conceptual understanding by guiding students through stages of learning-from hands-on exploration to symbolic reasoning.
Instructional Specialists and Principals	PK - 5	Jim Knights: Instructional Coaching Model	Vendor, Initial	21 hours	Summer, 2023	Leadership Professional Expertise	Use effective techniques to foster relationships between coaches and teachers to build a more productive learning environment.
Instructional Specialists	K - 5	i-Ready Program Implementation	Vendor, Initial	3 hours	Summer, 2024	Implementation Resources Culture of Collaborative Inquiry	Designed for careful planning, execution, and ongoing monitoring and program evaluation.
Elementary Teachers and Principals	K - 5	Productive Struggle	Vendor, Ongoing	1.5 hours	Annual	Learning Designs	The benefit of productive struggle in mathematics is that it promotes deep learning, resilience, and critical thinking, helping students develop a stronger and more lasting understanding of mathematical concepts.

Secondary

Employee Group	Grade Level(s)	Name of Training	Provider and Training Type	Total Number of Hours	Time Period for Completion	Learning Forward Standards for Prof. Learning	Purpose of Professional Learning
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Secondary Teachers and Principals	6 - 8	i-Ready	Vendor, Ongoing	24 Hours	Annual	Implementation Resources Curriculum, Assessment, & Instruction	Essential for maximizing the effectiveness of the i-Ready resources and instructional delivery. Helps with building stronger data analysis skills with the teaching staff.
Secondary Teachers and Principals	6 - 12	NWEA MAP	Vendor, Initial	4 Hours	Annual	Implementation Resources Curriculum, Assessment, & Instruction	Helps teachers learn how to analyze, interpret, and act on diagnostic results. Helps to integrate diagnostic data into the core instructional resources.
Secondary Teachers and Principals	6 - 12	ALEKS	Vendor and District Ongoing	2 Hours	Annual	Implementation Resources	Helps teachers to effectively use the tool for student personalized learning, progress monitoring, and targeted intervention.
Secondary Teachers and Principals	6 - 12	McGraw Hill/Reveal	Vendor and District Ongoing	12 Hours	Annual	Implementation Resources Curriculum, Assessment, & Instruction	Essential for maximizing the effectiveness of the i-Ready resources and instructional delivery. Helps with building stronger data analysis skills with the teaching staff.
Secondary Teachers and Principals	6 - 12	MCAP	District, Ongoing	6 Hours	Annual	Curriculum, Assessment, & Instruction	Provides training on interpreting, analyzing, and applying MCAP results to inform and improve classroom instruction.
Secondary Teachers and Principals	6 - 12	Student Engagement	District, Initial	TBD	TBD	Learning Designs Culture of Collaborative Inquiry	Help educators develop the skills, strategies, and mindset needed to actively involve students in their learning: intellectually, emotionally, and

							behaviorally
Secondary Teachers and Principals	9 - 12	Career Connections in Mathematics	District, Initial	TBD	TBD	Equity Practices Professional Expertise	Highlights broad range of professions that utilize mathematical skills.
Secondary Teachers and Principals	8 - 12	Integrated Algebra 1 and Integrated Algebra 2	District, initial	TBD (per MSDE)	2026-2028	Curriculum, Assessment, & Instruction	Train teacher on the new courses required for high school mathematics. Discussion on the standards, sequencing, and assessment.
Secondary Teachers	6-12	Effective Mathematics Teaching Practices	District, initial	16 Hours	2025-2026 School Year	Learning Designs Curriculum, Assessment, & Instruction	Help educators build knowledge, skills, and strategies needed to teach math in ways that are conceptually deep, engaging, and equitable.