



**Subject: Middle School Math Pathways**

Dear Dr. Hayes, (cc: Dr. Haas, Dr. Keiser and Ms. Mitchem)

Family Council is grateful to Melissa Mitchem, ACPS lead coach for mathematics, for sharing valuable information at our February meeting (see [minutes](#)) and leading a vibrant discussion.

We are writing to share our support for committee work that we believe is underway, and to urge ACPS to take action for summer 2024 and the 2024-25 school year. Specifically, please:

- Create a clear course pathway to Algebra I by 8th grade for all students.
- Require every middle school to offer the same math pathway.
- Communicate to families the math pathway options clearly and consistently, in multiple formats easily accessible to all ahead of course selection.
- Ensure that 8th grade students who enter Algebra I have experienced no gaps in learning pre-algebra content.
- If a summer pre-algebra “boot camp” is needed in short-term, it must be available for students at every school.
- If high-intensity tutoring is a short-term solution, we request equity data on how many students at which schools are receiving these services.
- Clarify student entry criteria for Math 6 Compacted success.
- Dedicate instructional coaches with deep secondary math teaching instruction to support these classroom shifts in middle school.

We are including detailed information of the situation in the [Appendix](#). We’ve identified positive examples of what families at some schools are finding helpful re: communication.

A Burley parent and Family Council member provides an excellent summary of our position:

*“We know that getting to Algebra 1 in 8th grade is a precursor for success for high school and college. ACPS cannot rely upon summer school or skipping a foundational class to be the solution. Not only does the current math pathway not promote equity, but it essentially tracks students from 5th grade into a certain progression with no room for advancement. The Bellwether report called out this deficiency in our math “tracks” last year, so it is imperative we have a solution for this next school year. We cannot push this off one more year.”*

Thank you for all that you are doing to support instructional improvements for our kids.

Sincerely,  
Heidi Gilman Bennett  
Chair, Family Council

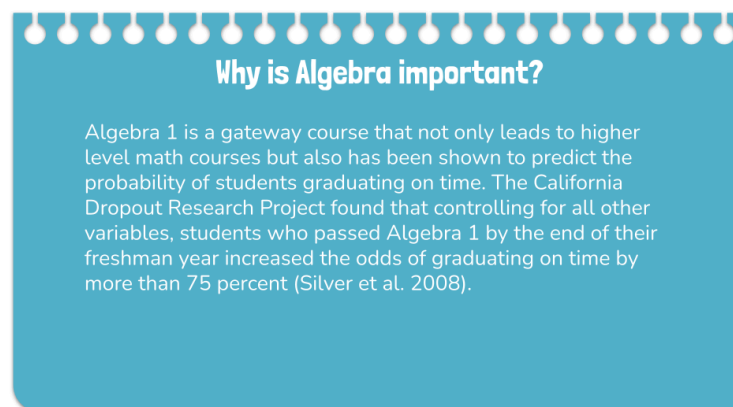
## Appendix

### Current Situation

- **Create a clear course pathway to Algebra I in 8th grade for all students.**

Currently – Rising 6th graders must choose between enrolling in Math 6 or Math 6 Compacted, which becomes a deeply consequential choice. The advanced “track” gets students to Algebra 1 in 7th grade, but following the Math 6 “track” leads to Algebra 1 in 9th grade. There is no clear option to get to 8th grade Algebra 1 currently, and we urge ACPS to make changes ASAP so that families can enroll students for the 2024-25 school year.

Melissa Mitchem summarized the importance of Algebra I for Family Council:



Although every ACPS MS seems to offer the Math 6 → Math 7 → Math 8 pathway, the options for moving out of this pathway are unclear once it's been selected. Families feel strongly that the options for student pathways must be clarified.

Furthermore, we would like to see all students represented in the pathways shared with families. Multiple participants were concerned that students receiving special education services or with 504s or learning differences were not reflected in the pathway options. Family Council has shared this input with SEAC as well.

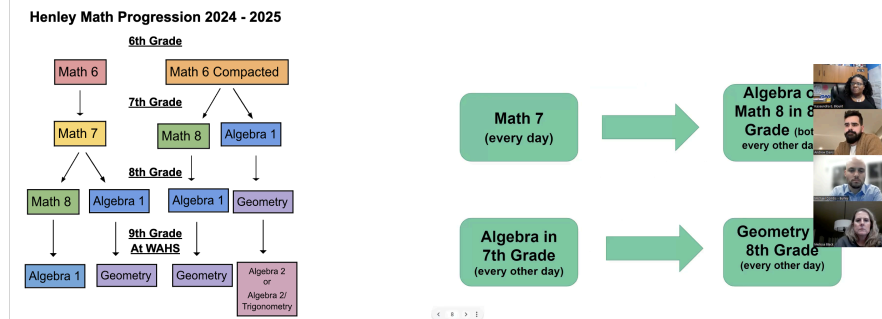
Family Council was encouraged to hear that Melissa Mitchem and team are reviewing the enrollment and student outcomes data. We are concerned that the move to every-other-day schedule for math in 8th grade may be negatively impacting student success. As a reminder, we have requested that ACPS conduct a [Middle School Program Evaluation](#), but we hope that the committee currently meeting is considering the every-other-day schedule impact.

- **Require every middle school to offer the same math pathway.**

Currently – No school offers a Math 7/8 class that would lead to Algebra I in 8th grade, We understand this is being considered by the committee meeting currently, and we strongly urge ACPS to provide this access to 8th grade Algebra 1 for the 2024-25 school year.

However, some schools are communicating to families that enrolling in Algebra 1 in 8th grade following Math 7 is a pathway. Other schools do not seem to be communicating this possibility. To be clear, we are *sincerely grateful* to all school counselors for communicating the options available; our frustration is not with school-based counselors, but with the lack of *consistency* at the division-level.

For example, [Henley](#) shows visually that skipping Math 8 is an option, and [Burley](#) described this as an option in a recorded Zoom (screenshot below), but doesn't share on the course selection form distributed to families:



To clarify, we do understand the value of piloting new programs and approaches at single schools before rolling out to others. However, we would like to see equity in access for these basic math pathways across schools.

- **Communicate to families the math pathway options clearly and consistently, in multiple formats easily accessible to all ahead of course selection.**

The Bellwether Audit provided feedback to ACPS about the need for communication to and engagement of families, and even gave specific examples about the need for sharing math pathways information:

5

**Root cause:** Internal and external stakeholders do not experience engagement in ways that meet their needs

Current State	What the Research Says
<p>Stakeholders across ACPS are dissatisfied with what they perceive as a <b>lack of transparency</b> around key decisions; stakeholders are <b>eager for more communication</b>, in more mediums, so they can be <b>stronger partners to the division</b></p> <ul style="list-style-type: none"> <li>• School <b>leaders and teachers want a greater say in the curriculum</b> that is being taught; when the division does seek their input it is not clear how that feedback is used</li> <li>• ACPS has tried to provide opportunities for the community to engage with the division and schools, but <b>community engagement remains inconsistent</b>; this may be partially due to a distrust of the school division</li> <li>• <b>Families and community leaders want more regular communication</b> from schools on student's academic progress, and currently face numerous barriers to engagement</li> </ul>	<p>A long-standing body of research has shown that <b>when teachers are active in reaching out to students' families, academic performance improves</b></p> <ul style="list-style-type: none"> <li>• One study of 71 high-poverty schools found that when teachers were active in outreach to families, students' reading and math scores improved at a 50 percent faster rate in reading and a 40 percent faster rate for math</li> <li>• What worked? Meeting every family <b>face-to-face</b>, <b>sending materials home</b> for parents to use to help their kids, and <b>staying in regular touch</b> with families on students' progress</li> </ul> <p>Relatedly, there is ample research on <b>approaches to changemangement</b> that is particularly important when planning significant shifts in practice</p> <ul style="list-style-type: none"> <li>• Change Management is one of the ten elements identified in the <a href="#">Carnegie Corporation Challenge Paper</a>, which recommends the <b>Concerns-Based Adoption Model</b> to determine the appropriate support to provide to the stakeholders experiencing change</li> </ul>

Sources: Short, Hirsch (2020), "Longitudinal Evaluation of School Change and Performance in Title 1 Schools," U.S. Department of Education


**5 Root cause:** Internal and external stakeholders do not experience engagement in ways that meet their needs

**Recommendation**

**Strengthen systems for input and feedback, and processes for communicating decisions** at all levels to ensure full spectrum of stakeholders across ACPS are authentically engaged, including students, families, teachers, school leaders, central office staff, and community members.

**What This Could Look Like**

- A. **Increase transparency into Division-wide decisions** by over-communicating with all stakeholders, using multiple methods of communication, and explaining the rationale behind decisions
- B. **Deepen engagement and supports for families across the Division;** this could include:
  - o **Create family-friendly companion guides** aligned to the Division's adopted curricula to provide families visibility into what students are learning, what "on-track" looks like, and what strategies families can use at home to support their students
  - o **Increase family awareness of K-12 pathways and course progression** and ensure parents are engaged in course selection, especially for 8th grade math and key transitions (e.g., rising 6th, rising 9th graders)
  - o Increase access to key school/ Division information by, at a minimum, **providing interpretation services at all school and Division events**, and translating info on curricula, course selection, and student safety
- C. **Deepen external partnerships** at both the central office and school level with community-based orgs whose missions and goals align with those of ACPS and who are serving the same students and families


41 

**5 Recommendation:** Strengthen systems for input and feedback

**Key Initiative**

**5b. Deepen engagement and supports for families across the Division** by creating family-friendly informational materials, increasing awareness of K-12 pathways, and investing in interpretation/ translation services

Actions	Timing
1. Create family-friendly companion guides aligned to the Division's adopted curricula to provide families visibility into what students are learning, what "on-track" looks like, and what strategies families can use at home to support their students	Fall '23
2. Increase family awareness of K-12 pathways and course progression and ensure parents are engaged in course selection, especially for 8th grade math and key transitions (e.g., rising 6th, rising 9th graders)	Fall '23
3. Plan sessions to share resources and gather input/feedback from families; schedule these to occur in multiple places (in schools, community centers, churches) and at multiple times (morning, afternoon, evening)	Fall '23
4. Increase access to key school/ Division information by, at a minimum, providing interpretation services at all school and Division events, and translating info on curricula, course selection, and student safety	Fall '23
5. Gather and synthesize feedback from families and staff; develop plans to improve family engagement based on feedback	Winter '23
6. Implement improvements to family engagement efforts based on feedback; continue gathering input and feedback from diverse constituents	Spring '24

43 

As we noted above, the communication to families has been inadequate and inconsistent, but we find many positive examples of individual school counseling teams working hard to provide information to families. Notes of both praise and opportunities for improvement by increasing consistency across schools:

- o [Middle School Program Guide](#) – Multiple middle schools refer to the MS Program Guide to provide families with essential course selection information. [For ex:](#)

*"Here is the list of course descriptions."* [Links to MS Program Guide.]

Family Council has been [advocating to ACPS](#) division leaders since November to update this "brochure" which serves as the primary vehicle for centralized communication to families. As of now, the school board has approved the current version despite being aware of the errors and lost opportunities, and we have received no confirmation from central office leaders that this Program Guide will be modified. While making edits on paper will not solve this complex problem, it is evidence of a much broader communication challenge in ACPS.

- [Middle School Course Listing](#) – Likewise, in the [same advocacy](#), we pointed out to ACPS leaders that Math 6 Compacted is entirely missing from the only centralized listing of MS courses, which was also approved by the school board in December despite having received timely notification of errors.

Descriptions of course content are essential pieces of information for families and students to make decisions about enrollment. However, most MSs are not sharing descriptions for the existing math courses. We urge ACPS to make these publicly available so families can make informed decisions. See Henley Counseling [website](#), which seems to be the only school that publishes this information for each middle school grade level.

**J. T. HENLEY MIDDLE SCHOOL**  
**SEVENTH GRADE REGISTRATION INFORMATION 2024-2025**

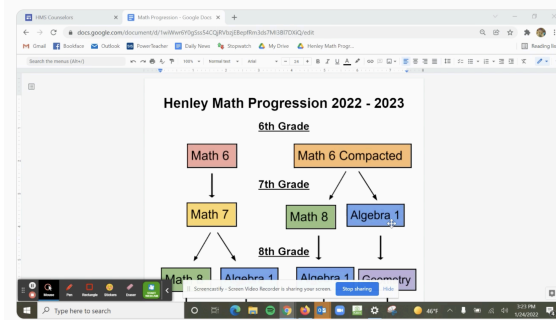
This document contains information regarding seventh grade math and elective offerings for the 2024-2025 school year. Math course descriptions are listed below as math is offered at grade level and honors level. **History, Language Arts, and Science courses are not leveled.**

**Math 7** students will master whole number operations and have a sound background in problem-solving involving fractions and decimals. Emphases of study are geometry, percentages and ratios. This class meets for a full block **every day**. Math 7 is to prepare students to potentially take Honors Algebra 1 in eighth grade.

**Math 8** is for students who completed Math 6 Compacted, but are not yet ready for Honors Algebra 1. This course will meet **every other day** and will be a mixed class of seventh and eighth grade students. Instruction will cover algebra, geometry, probability, number sense, and graphing. By the end of the course, students will have a deep understanding of algebraic expressions, equations and inequalities, as well as how to represent algebraic relationships graphically.

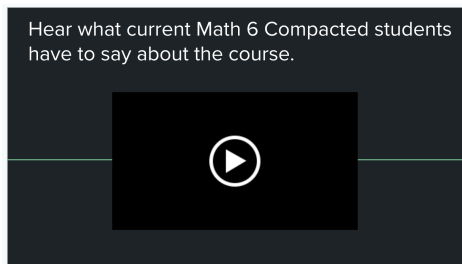
**Honors Algebra 1** includes the study of properties and operations of the real number system, evaluating rational algebraic expressions, solving and graphing first-degree equations and inequalities, translating word problems into equations, operations with and factoring of polynomials, and solving simple quadratic equations. Algebra will meet **every other day and is for high school credit**.

- Video – We really appreciate [this 3-minute video](#) created by Ms. Rocket, who is both a Henley school counselor and math teacher, and we hope that ACPS central office will create a series of short and simple videos to guide families and students to make math course selections. So many families are unable to visit school in-person during the workday or after-school hours to meet with teachers or counselors, so this type of video is a great vehicle for communication. We like that Ms. Rocket directs the information to students, and also urges families to reach out to teachers and counselors, as families may be reluctant for cultural or practical reasons to contact school staff.



We also want to acknowledge the inclusion of a [student voice video](#) by the Burley counseling team, as families are hearing quite discouraging messages coming from our easily-influenced early adolescents about enrolling in anything but the

most advanced math track. The recorded Burley Zoom sessions, one for rising 6th and a separate for rising 7th/8th, are lengthy but appreciated.



- Languages – We can find very little information available to families in non-English languages, nor is information published in formats that allow for easy Google Translation. We appreciate that the [Henley information](#) has headers in Spanish, with Google Docs also available in Spanish. Muchas gracias, consejeras escolares en Henley.

**Math / Matemáticas**

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**Math 6 or Math 6 Compacted**

6th grade students at Henley Middle School will take either Math 6 or Math 6 Compacted depending upon a variety of factors including recommendation from their 5th grade teacher, standardized test scores.

Click the links below for detailed descriptions of these two math options and the math progression:

[Math Course Descriptions](#) / [Ofertas de matemáticas](#)  
[Henley Middle School Math Progression](#) / [Gráfico de progresión matemática](#)

- Family Options – We appreciate the [Lakeside](#) counseling team’s explanation that the selection of courses is flexible with room for movement:

Traditional Math Pathways in Middle School: Please note, these are just the three traditional pathways. There is flexibility for movement in both 7th and 8th grade year to move up a level or down a level. Starting in a math course in 6th grade in no way means your child will not have the ability to move.

6th Grade Year	7th Grade Year	8th Grade Year	9th Grade @ AHS
Math 6	Math 7	Math 8 with Pre-Algebra	Algebra I
Math 6	Math 7	Algebra I	Geometry
Math 6 Compacted	Algebra I	Geometry	Algebra II

- Equity Statement – We appreciate the [Walton](#) counseling team’s recognition of course selection as an equity issue, and strongly suggest that the specific information listed in #1-3 be made available to all families.

#### Course Participation and ACPs Anti-Racism Policy

- [Click here](#) to access the full policy.
- To address disparities in course participation (including AP/honors participation):
  1. All school staff making class recommendations shall provide a written electronic explanation for the recommendation to students and/or families.
  2. School counselors shall be responsible for educating students and families as equitable partners in the selection process and course sequencing.
  3. Middle and high schools will offer opportunities for supplementary coursework, such as summer bridge programs or tutoring during or after school, to students interested in moving to higher level courses.

- **Ensure that 8th grade students who begin Algebra I have experienced no gaps in learning pre-algebra content.**

Currently – We appreciate that parents and caregivers can opt to enroll students in any level of course without prerequisites, and that the counselors are strongly advising families to speak with math teachers. However, what isn't currently clearly communicated in writing is that when students enter Algebra 1 in 8th grade from Math 7 (or “skip Math 8” or “override”), they will have missed learning important pre-algebra content.

We urge ACPS to create a math course pathway that ensures all students are taught key math concepts for pre-algebra during the school year math courses. Bellwether noted this deficiency in the ACPS-created math content:

3 Root cause: Gaps in content, esp. for secondary math and K-5 interventions, create barriers for teachers and students	
Current State	What the Research Says
<p>ACPS has invested in high-quality instructional materials (HQIM) to support Tier 1 instruction in elementary math and literacy; however, this same investment has not been consistently made in middle school math, Algebra 1, and RTI.</p> <ul style="list-style-type: none"> <li>• ACPS lacks aligned middle school math HQIM that prepares students for Algebra 1, the gateway course for advanced math</li> <li>• ACPS Algebra 1 scope and sequence was developed in-house and is not accompanied by aligned resources; additionally, instructional coaches do not prioritize supporting secondary math</li> <li>• Teachers want more resources and research-based strategies to support Tier 2 and 3 instruction, and highlight challenges finding time in the school day for RTI supports</li> <li>• Relatedly, ACPS is required to replace Being a Reader with a state-recommended literacy program by the '24-'25 school year</li> </ul>	<ul style="list-style-type: none"> <li>• Education researchers have established that <b>using better instructional materials improves student outcomes</b>; when teachers use HQIM they can focus their efforts on more deeply understanding content, building relationships with students, and consistently maintaining high expectations for instructional tasks</li> <li>• In addition to the ample research on the impact of HQIM, there are many <b>best practices around curricular adoption</b> that should inform plans to adopt new curricula</li> <li>• As a shorter-term strategy, <b>High-Impact Tutoring is a promising strategy</b> for improving accelerating student outcomes with a growing research base effective than other interventions that have been tested and is effective across grade and content levels <ul style="list-style-type: none"> <li>◦ We note that not all tutoring programs have been shown to improve student achievement; leaders should choose <a href="#">specific models</a> backed by evidence of impact on important outcomes</li> </ul> </li> </ul>
<small>Sources: Short, Hirsch (2020); "Selecting for Quality: 6 Key Adoption Steps," EdReports. See <a href="#">EvidenceTutoring.org</a> for more on tutoring providers with a strong evidence base.</small>	

Family Council members are hearing directly from a number of families who plan to “override” and move into Algebra 1 in 8th grade, and have no idea that their child will have missed important pre-algebra content. We are also worried about the burden this places on math teachers as expressed above, and would like to understand whether negative student outcomes are resulting for students who make this jump.

- **If a summer pre-algebra “boot camp” is needed in short-term, it must be available for students at every school.**

Currently – The primary route for students to receive instruction in pre-algebra content when moving from Math 6 into 8th grade Algebra 1 seems to be to sign up for a summer course, which has sometimes been described as an Algebra “[Boot Camp](#)” or “Summer Bridge”.

However, this summer course has not been offered by every middle school, and not every year. We understand that staffing and transportation have been barriers, but urge ACPS to make this summer offering available to all middle school students.

Bellwether recommends this as a short-term solution to building equitable enrollment and success in Algebra classes, but sets a goal of this summer course being available for 2025.



We are hopeful, as Melissa Mitchem alluded to at a school board meeting, that it can be available for 2024.

3

**Recommendation:** Invest in High-Quality Instructional Materials to fill gaps in content

Key Initiative

**3a.2. Invest in short-term solutions to strengthen 9th Grade Algebra 1 skills;** pilot a summer math transition camp and implement a high-intensity tutoring model to support middle school math students

Actions	Timing
1. Recruit a design team made up of math teachers, interventionists, and other constituents to begin developing plans for a high-intensity tutoring (HIT) program targeting current middle school math students	Summer '24
2. Outline the goals and design of the HIT program, and develop a budget to pilot the program at 1-2 middle schools during SY24-25 (should include deciding whether ACPs will run the program or partner with a provider)	Summer '24
3. Pilot HIT program at 1-2 middle schools; gather and synthesize feedback from students, families, tutors, teachers, and school leaders; develop plans to improve program based on feedback	Fall '24
4. Implement and communicate improvements to pilot program based on feedback; continue gathering feedback to inform decision about whether to stop, continue, or scale the program in SY25-26	Spring '25
5. Recruit a design team to begin developing plans to pilot a math summer transition camp that targets middle school students in need of additional support to master pre-Algebra concepts	Spring '25
6. Communicate plans for summer math camp to families across the Division and begin recruiting students, prioritizing those most in need of additional supports	Spring '25
7. Pilot summer math camp; gather and synthesize feedback from students, families, teachers, and other constituents; develop plans to improve camps based on feedback	Summer '25

Note: we recommend National Student Support Accelerator's [Toolkit for Tutoring Programs](#) as a helpful starting point for HIT design and planning.

- **If high-intensity tutoring is a short-term solution, we request equity data on how many students at which schools are receiving these services.**

Families have been assured that lots of work is being done to make improvements aligned with the Bellwether audit recommendations, but have little documentation of the work underway nor data to provide assurance that short-term solutions like high-intensity tutoring are reaching students equitably. As reference, here is the information we see as of Feb 28 on the [Bellwether Audit Status Board](#):

Pilot a Summer Math Transition Camp and High Intensity Tutoring (24-25)		Pending	2024-2025
Project Components	Status	Timeframe (for completion)	
Recruit a design team		Summer 2024	
Outline goals, develop a budget to pilot program		Summer 2024	
Pilot high intensity tutoring programs at 1 or 2 middle schools (All in Virginia escalated this)	✓	School Year 2023-24; 2024-2025 continue	
Evaluate the pilot, decide whether or stop, continue or scale		Spring 2025	
Recruit a design team for math camp		Winter 2024	
Communicate plans for summer math camp to families and recruit students		Spring 2025	
Pilot summer math camp		Summer 2025	
Evaluate, develop plans to improve camps based on feedback and evaluation		Summer 2025	

Family Council repeats our request for detailed information on high-intensity tutoring delivery to be shared publicly, preferably at a school board meeting as well as in a public family-friendly forum such as an Office of Community Engagement webinar.



- **Clarify student entry criteria for Math 6 Compacted success.**

Math 6 Compacted condenses 3 years of math into a single academic year. Family Council is hearing anecdotally that students are entering the advanced course and then struggling with the content, which suggests that the criteria for entry is unclear. We urge ACPS to examine the data on student success and use this to create more consistent entry criteria. While we appreciate that families may elect to enroll students in any level of course, the lack of clearly-communicated and data-based criteria is problematic. We are also concerned that this lack of entry criteria puts teachers into an impossible situation where they must additionally reteach basic math skills in an every-other-day schedule for 8th grade Algebra.

As reference, we find that [some](#) middle schools are communicating only student dispositions (attitude, work ethic, etc) while [others](#) focus strongly on quantitative measures. Family Council assumes that both are relevant, and we ask for consistency and clarity.

Levels in Grade 6	Math 6 Compacted 3 Years Compacted <i>Course name changed for 2021-2022 school year</i>	Math 6
<b>Problem Solving</b>	<ul style="list-style-type: none"> <li>* Works above for most concepts</li> <li>* Grasps instructed concepts with little or no practice</li> <li>* Abstract thinker; poses analytical questions</li> <li>* Risk taker - seeks challenges</li> <li>* Justifies mathematical arguments</li> </ul>	<ul style="list-style-type: none"> <li>* Works on or below grade level</li> <li>* Grasps concepts with concrete examples, repetition, and independent practice</li> <li>* Requires support for challenges</li> </ul>
<b>Computation Accuracy</b>	Mastery of two mathematical strategies in multiplication and division of whole numbers and decimals, <b>one being the traditional algorithm.</b>	Uses multiplication and division strategies.
<b>Middle School Curriculum Exposure</b>	<ul style="list-style-type: none"> <li>* Concept of integer ordering</li> <li>* Concept of multiplication of fractions</li> <li>* Fluidity with fractions, decimals, and <del>percentages</del></li> <li>* Solving two-step equations</li> </ul>	* Not applicable
<b>Grades 4 and 5 SOL</b>	475 or above	Below 475
<b>MAP Score (end of 5<sup>th</sup>)</b>	235 or above	Below 235
<b>Middle School curriculum that will be covered</b>	6th, 7th, & 8th Grade Curriculum	6 <sup>th</sup> Grade Curriculum
<b>SOL Test that will be given</b>	6 <sup>th</sup> Grade Mathematics SOL	6 <sup>th</sup> Grade Mathematics SOL
<b>Projected Grade to Take Algebra I</b>	7th Grade	8th or 9th Grade

Math 6 Compacted	Math 6
This is a student you see being successful in an every-other-day, mixed grade Algebra I class as a 7th grader.	This is a student you see being successful taking Algebra I as either an 8th or 9th grader. Algebra I as a 7th grader is not completely out of the question, but it requires additional and deliberate support.
A natural self-starter and capable of problem-solving obstacles independently or with very little assistance.	Typically requires detailed directions in order to start.
Has confidence to take risks without the constant or frequent need for validation.	Lacks some academic confidence, requiring frequent check-ins with peers or an adult in order to feel comfortable in completing a task.
Has the ability to use his/her resources (notes, online resources, peers and/or adults) in order to obtain information and problem solve when necessary.	Takes notes, but often must be reminded to use them when struggling.
Perseveres without needing encouragement.	Perseveres with encouragement.
Naturally poses analytical questions.	Can be taught to pose analytical questions with modeling.
Seeks challenges without incentive.	May seek challenges with incentive.
Not only retains concepts and skills but is able to transfer/connect new and already mastered content.	Needs frequent spiraling of concepts and skills in order to aid in retention. Can make connections to other mathematical concepts and skills with assistance.
Justifies his/her work with mathematically appropriate language and with clarity.	Can explain his/her work but does not always provide clarity or appropriate/ correct mathematical language.
Seeks to truly understand mathematics rather than to simply apply an algorithm or strategy.	Occasionally relies on an algorithm or strategy to answer problems without truly understanding the reasoning behind it.
Challenges him- or herself to see mathematical problems from different angles and solve or simplify problems in multiple ways.	Has the ability to see problems in different ways but needs assistance in doing so and/or wouldn't have thought to do so without it being suggested by someone else.
Consistently high achieving.	High achieving in some areas but needs additional support in others.
Maintains endurance when necessary.	Long tasks or tasks that span over time are a challenge.

- Dedicate instructional coaches with deep secondary math teaching instruction to support these classroom shifts in middle school.

Finally, Family Council members are concerned that instructional coaches with secondary math experience and/or credentials may not be hired for the next school year. We will be watching the budget discussions to understand more deeply about the ACPS proposal and prioritization of needs. We would like to understand what will be done to address Bellwether's identification of lack of instructional coaching for secondary math.

3 Root cause: Gaps in content, esp. for secondary math and K-5 interventions, create barriers for teachers and students	
Current State	What the Research Says
<p>ACPS has invested in high-quality instructional materials (HQIM) to support Tier 1 instruction in elementary math and literacy; however, this same investment has not been consistently made in middle school math, Algebra 1, and RTI.</p> <ul style="list-style-type: none"> <li>• ACPS lacks aligned middle school math HQIM that prepares students for Algebra 1, the gateway course for advanced math</li> <li>• ACPS' Algebra 1 scope and sequence was developed in-house and is not accompanied by aligned resources; additionally, instructional coaches do not prioritize supporting secondary math</li> <li>• Teachers want more resources and research-based strategies to support Tier 2 and 3 instruction, and highlight challenges finding time in the school day for RTI supports</li> <li>• Relatedly, ACPS is required to replace Being a Reader with a state-recommended literacy program by the '24-'25 school year</li> </ul>	<ul style="list-style-type: none"> <li>• Education researchers have established that <b>using better instructional materials improves student outcomes</b>; when teachers use HQIM they can focus their efforts on more deeply understanding content, building relationships with students, and consistently maintaining high expectations for instructional tasks</li> <li>• In addition to the ample research on the impact of HQIM, there are many <b>best practices around curricular adoption</b> that should inform plans to adopt new curricula</li> <li>• As a shorter-term strategy, <b>High-Impact Tutoring is a promising strategy</b> for improving accelerating student outcomes with a growing research base effective than other interventions that have been tested and is effective across grade and content levels. <ul style="list-style-type: none"> <li>◦ We note that not all tutoring programs have been shown to improve student achievement; leaders should choose <a href="#">specific models</a> backed by evidence of impact on important outcomes</li> </ul> </li> </ul>
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