

K-8 Math Guaranteed Access to Advanced Math

Policy Toolkit | Model Policy | 2026





About ExcelinEd

The Foundation for Excellence in Education (ExcelinEd) is a national leader in education reform. ExcelinEd is a hands-on, how-to policy and advocacy organization that designs and promotes model legislation and supports states with technical expertise, policy development, implementation strategies and public outreach.

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Introduction

Mathematical readiness, or a student's preparedness to learn new mathematical content, is the strongest predictor of success in Algebra I, or Integrated Math I (a course equivalent to Algebra I that combines algebra, geometry, statistics and data). Yet most schools advance students based on their age-based grade level rather than demonstrated readiness, leaving many high-performing students without access to advanced coursework.

Guaranteed access to advanced math addresses this gap. The policy uses performance on NAEP-aligned summative assessments to automatically enroll mathematically ready students into an advanced math pathway, one that leads to Algebra I, or Integrated Math I, in middle school and at least one college-credit bearing course (such as AP® (Advanced Placement®), IB® (International Baccalaureate®), dual or concurrent enrollment) in the last two years of high school.

The shift is straightforward but significant: rather than asking high-performing students whether they want advanced math, the system enrolls them by default and gives families the option to opt out. This change from opt-in to opt-out has produced measurable gains in access to advanced math in every state that has implemented it.

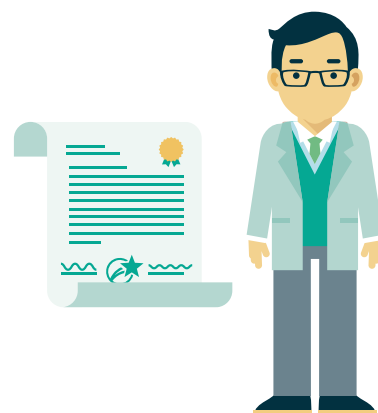
Toolkit: Guaranteed Access to Advanced Math

This toolkit supports states in implementing guaranteed access to advanced math policy, providing guidance on four implementation priorities:

- 1. Defining advanced math pathways**—the course sequences districts and schools must offer,
- 2. Communicating cutoff scores**—how to translate assessment results into enrollment criteria,
- 3. Parent communication**—what families need to know and when and
- 4. Instructional support**—how to prepare teachers and systems for increased advanced enrollment.

Defining Advanced Math Pathways

States must clearly define what an advanced math pathway looks like so that districts and schools understand what courses to offer, in what sequence and the associated standards. A well-defined pathway has three characteristics, the advanced math pathway:



1. Covers all foundational content.

Acceleration should not mean skipping content. An advanced math pathway must address all foundational math content standards, building the [Four Strands of Math Proficiency](#) throughout.

Compressing or combining courses is appropriate; omitting critical math concepts is not.

2. Specifies the course sequence.

States should define the sequence of courses students will follow, including how acceleration will be achieved. Acceleration can be achieved through compacting courses into one or more school years, summer bridge programs, and/or enrolling students into two math courses during a school year.

Moving faster through math content and courses is appropriate; skipping math content or classes is not.

3. Identifies clear endpoints by grade band.

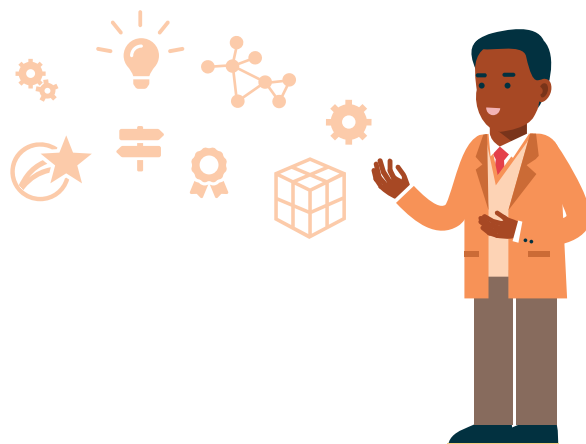
The intended goal of the advanced math pathway should be explicit:

- **Middle School:** Students complete Algebra I or Integrated Math I by the end of grade 8.
- **High School:** Students complete at least one college-credit bearing math course, such as AP®, IB®, dual/concurrent enrollment, during their last two years of high school.

Multiple onramps to the advanced math pathway are appropriate; a single, high-stakes opportunity to qualify is not.

Communication of Assessment Cutoff Scores

States must clearly communicate to districts and schools how students qualify for automatic enrollment. Guidance should address three pieces:



1. Which assessment is used.

The qualifying assessment should be a NAEP-aligned summative assessment.

2. When identification occurs.

Identification should begin no earlier than middle school and continue annually through the first two years of high school. In practice, students will have at least one opportunity to qualify for advanced math in middle school and one during the first two years of high school.

3. Cutoff score.

States should set and communicate a specific score threshold for automatic enrollment. Best practice is to enroll students who score proficient or above, or who score in the top quartile (top 25%) of the statewide assessment.

One important guardrail: automatic enrollment based on statewide assessment scores should supplement, not replace, local placement practices. Districts and schools may continue identifying additional students for advanced math using local criteria unless specified in policy.

Parent Communication

Because this policy shifts enrollment from an opt-in to an opt-out model, families need clear, proactive communication before placement decisions are made. States should provide districts and schools with a parent communication framework that covers the following:

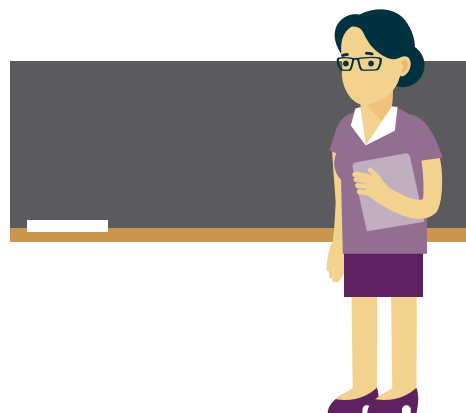


1. **The purpose and goals** of guaranteed access to advanced math, available math pathways and how each math pathway connects to college and career opportunities;
2. **How middle and high school math placement** affects a student's overall progression through math pathways and alignment to college and/or career goals;
3. **Opt-out process** for families of students who are automatically enrolled; and
4. **How families of students who did not meet the cutoff can request placement** in advanced math.

Communication should be provided in positive language that is understandable to the parent and delivered early enough for families to ask questions before enrollment is finalized.

Instructional Support

Expanding access to advanced math only succeeds if students are set up for success once they are enrolled. States should prepare districts and schools in three areas:



1. System readiness. States can fund or highlight acceleration supports such as summer bridge and/or after school programs.

2. Student support systems. Struggling in a new, challenging course is normal, including for students who qualify for advanced math! Every student enrolled in advanced math is entitled to timely, personalized support. States should provide districts and schools with guidance on:

- Evidence-based intervention strategies for advanced math settings,
- How to use Multi-Tiered Systems of Support (MTSS) or Response to Intervention (RTI) frameworks in advanced courses,
- How and when to communicate with families about a student's progress and the support that is provided both during and outside of the school day.

3. Teacher readiness. States should invest in upskilling current middle school teachers through professional development, additional licensure or micro-credentialing to ensure that every middle school has at least one teacher qualified to teach Algebra I or Integrated Math I.

State Examples

The following states have enacted guaranteed access to advanced math policies. Their experiences offer useful implementation reference points for states.



North Carolina

Policy: [SB 500](#); enacted: 2018, updated 2019 (passed unanimously)

North Carolina's [legislation](#) requires automatic enrollment in advanced math for students who score at the highest level (Level 5) on their grade 6 end-of-year math assessment. Students scoring at level 5 in 7th grade must be enrolled in Math I, a high school level course, in grade 8. Families may opt out after receiving written notification of placement.

The law includes annual reporting requirements that track enrollment and placement rates across demographic groups and geographic regions, providing the state with consistent data to monitor implementation.

[This video](#) highlights the impact of North Carolina's automatic enrollment policy.

State guidance: [Advanced Mathematics Course \(AMC\) Enrollment Legislation | NC DPI](#)



Texas

Policy: [Senate Bill 2124](#); enacted: 2023

Before Texas implemented its guaranteed access to advanced math policy, high-achieving Black and Hispanic students were significantly less likely than their peers to be placed in Algebra I by eighth grade—not because of lower performance, but because the system didn't guarantee access. After implementation, [middle school Algebra I enrollment patterns](#) shifted substantially [across all student groups](#) scoring in the first quintile (top 20%) on the 5th grade summative assessment:

Student Group	Pre-Policy Enrollment	Post-Policy Enrollment
Black students	33%	82%
Hispanic students	46%	80%
White students	75%	83%
Asian students	90%	92%

State guidance: [Middle School Advanced Mathematics Program | Texas Education Agency](#)



Washington

Policy: [RCW 28A.320.195](#); enacted: 2019, implementation required by 2021-22

Washington's Academic Acceleration policy automatically enrolls students who meet or exceed state standards on 8th grade or high school statewide assessments into the next most rigorous course in the corresponding content area. Families retain the option to opt out.

[The Federal Way School District](#) piloted automatic enrollment before statewide policy was adopted. Their results were notable: the percentage of students of color enrolled in advanced coursework rose from 35% to 61% and advanced courses maintained an impressive 94% pass rate, which was 10% above district average. This local success was a direct catalyst for the state's decision to act on statewide policy. To support implementation, the state invited each district to apply for grants of up to \$10,000 to help expand their advanced coursework capacity.

State guidance: [Academic Acceleration | OSPI](#)



Indiana and Virginia

Indiana Policy: [HB 1634](#); enacted: 2025



Virginia Policy: [HB 2686](#); enacted: 2025

Both states have more recently enacted guaranteed access to advanced math policies and are earlier in the implementation process. Their state agency guidance documents are useful models for how to communicate policy requirements to districts and schools.

Indiana: [Middle School Advanced Mathematics Course Requirements for Auto Enrollment](#)

Virginia: [Mathematics Acceleration Policy](#)

Program Accountability Through Data Reporting

Annual data reporting is the primary accountability mechanism for guaranteed access to advanced math. It allows the state to confirm the policy is being implemented consistently, identify discrepancies across districts and schools and track whether expanded access is translating into student success. States should be able to pull required data directly from existing systems without placing significant new reporting burdens on districts and schools. The section below outlines what to collect, how to disaggregate it and how to use it.

The following data points should be reported annually to the legislature, state board of education or state education agency:

Data Point	Disaggregation Required
Number of students scoring proficient or above on the statewide end-of-year math assessment, grades 5–11	School, district, state; race, ethnicity, income, gender
Number and percentage of qualifying students enrolled in advanced math the following year	School, district, state; race, ethnicity, income, gender
Number and percentage of qualifying students who opted out of automatic enrollment	School, district, state; race, ethnicity, income, gender
Number and percentage of non-qualifying students who opted into advanced math	School, district, state; race, ethnicity, income, gender
Math assessment scores for students in each enrollment category (qualifying students enrolled, qualifying students who opted out and non-qualifying students who opted in)	School, district, state; race, ethnicity, income, gender
Advanced math pathways offered at each school and district	School, district
Instructional supports offered, and number and percentage of students requiring additional academic support participating in each intervention	School, district

Collecting this data is only useful if the state acts on it. States should review annual reporting with three questions in mind:

1. **Are qualifying students actually enrolled in advanced math?** A significant gap between the number of students who qualify and the number who are enrolled in advanced math the following year is a signal of implementation failure at the district or school level and warrants follow-up.
2. **Are there disparities across student groups in advanced math?** Opt-out rates, enrollment rates, and assessment scores should be reviewed by subgroup. Consistent disparities — for example, qualifying students from low-income families opting out at higher rates — may indicate that parent communication or support systems need strengthening.
3. **Are enrolled students succeeding once enrolled in advanced math?** Enrollment is the goal of this policy, but persistence and performance matter too. States should consider tracking course completion and pass rates for students in advanced math pathways as a supplementary measure of whether the system is working end to end.

Key Policy Considerations

Guaranteed access to advanced math works best as part of a broader, coherent K-8 math strategy. States should consider how this policy connects to:

- **Foundational skill-building.** A larger pool of students will qualify for automatic enrollment when a strong math system is in place. This policy is most effective when aligned with a [comprehensive K-8 math policy](#) that prioritizes grade-level proficiency in the early years.
- **Existing local placement practices.** Automatic enrollment is designed to overlay and strengthen, not replace, local measures for identifying and placing students into advanced math. Districts and schools may continue to use additional criteria to identify students who do not meet the statewide cutoff score but are otherwise ready for advanced coursework.
- **Opportunity gaps.** Research and state data consistently show that high-achieving students from historically underserved groups are less likely to be placed in advanced math when placement depends on teacher recommendation or family initiative. Automatic enrollment based on assessment performance removes that barrier systematically.

Guaranteed access to advanced math is a straightforward policy change with far-reaching effects. By shifting enrollment from opt-in to opt-out, states remove a structural barrier that has long kept high-performing students, particularly those from historically underserved communities, out of coursework they are ready for and deserve access to. The evidence from North Carolina, Texas, Washington and other states confirms that when systems are designed to open doors by default, more students walk through them. However, access alone is not enough. This policy succeeds when paired with well-defined advanced math pathways, clear family communication, prepared teachers and strong student support. States that implement this policy thoughtfully and hold themselves accountable through data will expand not only the number of students who reach Algebra I in middle school, but also the number who are prepared for the opportunities that follow.

Resources

[Toolkit to Support Evidence-Based Algebra Instruction in Middle and High School](#)

Research

Austin, Megan; Backes, Ben; Goldhaber, Dan; Li, Dory; Streich, Francie. *Leveling Up: A Behavioral Nudge to Increase Enrollment in Advanced Coursework*. Working Paper No. 271-1022. National Center for Analysis of Longitudinal Data in Education Research. October 2022. [CALDER WP 271-1022.pdf \(caldercenter.org\)](#).

Huffaker, E. (2025). *Evidence-based practices for Algebra I access, placement, and success* (Brief #34). EdResearch for Action. https://edresearchforaction.org/wp-content/uploads/FINAL-Algebra-1-EdResearch_designed.pdf

Miller, C. E., & Phillips, M. (2026). *Long-term consequences of early access to educational opportunity* (EdWorkingPaper No. 26-1472). Annenberg Institute at Brown University. <https://doi.org/10.26300/5k32-jw43>

Plucker, Jonathan A., Berg, Brenda, and Kuwayama, Heena. *Automatic Enrollment in Advanced Courses: A Bipartisan Approach to Excellence and Equity in K-12 Schools*. Johns Hopkins School of Education, Institute for Education Policy. 2024. [content \(jhu.edu\)](#).

Wolfe, Rebecca L., Steiner, Elizabeth, D., Schweig, Jonathan. *Getting Students to (and Through) Advanced Math: Where Course Offerings and Content Are Not Adding Up*. RAND Corporation. March 21, 2023. [Getting Students to \(and Through\) Advanced Math: Where Course Offerings and Content Are Not Adding Up \(rand.org\)](#).

Articles

AssessmentHQ: [States should use test scores to increase student enrollment in advanced math](#)

Chad Aldeman: [When should you accelerate your child?](#)

E3 Alliance: [Expand access and reduce disparities by auto-enrolling highest-performing math students into advanced math pathways](#)

EdSurge: [Talented Students Are Kept From Early Algebra. Should States Force Schools to Enroll Them?](#)

edtrust: [Automatic Enrollment Policies for Advanced Coursework](#)

edtrust: [Common Questions About Automatic Enrollment Policies for Advanced Courses](#)

Education Commission of the States: [Expanding Advanced Course Auto-Enrollment in Texas and Washington - Education Commission of the States](#)

EducationWeek: [A New Approach to Algebra in 8th Grade Seems to Produce Big Benefits](#)

EduProgress: [Automatic Enrollment in Advanced Math Courses](#)

ExcelinEd: [ExcelinEd Launches Guaranteed Access to Advanced Math as Part of a comprehensive Math Policy](#)

ExcelinEd: [Guaranteed Access to Advanced Mathematics](#)

Fordham Institute: [We need more automatic enrollment for advanced courses](#)

Fordham Institute: [The Leaky Pipeline: Assessing the college outcomes of Ohio's high-achieving low-income students](#)

Just Equations: [Calculated Barriers: Examining the History Behind Math Inequities Facing Black Students](#)

Policy Changes Lives: [Math policy 201: When should students take Algebra I or should they?](#)

Policy Changes Lives: [Math policies that can help fix the nation's math crisis.](#)

The74: [When Every Student Is Guaranteed a Chance, More Reach Advanced Math](#)

Appendix

{Title} Guaranteed Access To Advanced Math Act

{Intent} The intent of the Legislature is to automatically enroll middle school and high school students who are mathematically ready in an advanced math pathway that leads to Algebra I or Integrated Math I in middle school and multiple dual enrollment, AP, IB, etc. math courses in high school and to ensure that students who are not on an advanced math pathway complete Algebra I or Integrated Math I no later than grade 9.

1. Definitions

- a. Department. The state Department of Education.
- b. Advanced Math Pathway. A sequence of courses that accelerates and/or combines math content from grades 6 through 11 which culminates in students taking Algebra I, or the integrated equivalent, in middle school and multiple college-credit bearing mathematics courses in high school such as AP, IB and dual or concurrent enrollment.
- c. Integrated Math I. A standards-aligned, credit-bearing high school math course that is equivalent to Algebra I in an integrated math pathway. It replaces the traditional Algebra I course and introduces students to foundational mathematical concepts across algebra, geometry, statistics and data through a cohesive approach.

2. Guaranteed Access to Advanced Math. Each school district shall develop an advanced math pathway as defined by this Act that is designed to enable students to be prepared for and enroll in Algebra I, or Integrated Math I, in middle school and college-credit bearing math courses in high school.

- a. A school district shall automatically enroll in a Middle School or High School advanced math pathway as defined by this Act a student who scores proficient/grade level or higher on the statewide annual end of year math assessment in grades 5 through 11.
- b. Districts must provide transparent information to students and parents about:
 - 1. How advanced math enrollment in middle and high school affects students' progression through math pathways;
 - 2. The purpose and goals of guaranteed access to advanced math;
 - 3. The available math pathways including high school math pathways and
 - 4. How each math pathway supports preparation for post-secondary college and career opportunities.
- c. The parent or guardian of a student who does not meet the criteria for automatic enrollment under Subsection (2.a) may opt the student into advanced math courses.

- d. The parent or guardian of a student described by Subsection (2.a.) may opt the student out of automatic enrollment under that subsection.
- e. To ensure students succeed in advanced math, the district and school must provide reasonable instructional support beyond the core math instruction. The school and/or district must provide a system of support for students to achieve success in the advanced math pathway. These supports may include, but are not limited to
 - 1. A specific high-quality instructional program or
 - 2. A set of steps used to help students improve in math and instruction
 - i. instructional time,
 - ii. high-dosage tutoring,
 - iii. small group instruction or
 - iv. technology enabled activities during the school day.
- f. The state shall annually report to the Legislature:
 - 1. The number of students who score proficient/grade level or higher on the statewide annual end of year math assessment in grades 5 through 11 by school, district, and state for each student group (race, ethnicity, income, gender, etc.).
 - i. Of the students in Section (2.a), the number and percentage of students who were:
 - a. Enrolled in advanced math courses the subsequent year, including Algebra I, or Integrated Math I, in middle school;
 - b. Enrolled in advanced math courses in high school;
 - c. Not proficient/grade level and opted in and
 - d. Automatically enrolled and opted out.
 - 2. The grade 5 through 11 math scores on the statewide annual end of year math assessment of students in each category of Section (2).
 - 3. Information about the advanced math pathway offered to middle school and high school students in each school or district.
 - 4. A list of support offered at each school and district, and number and percentage of students participating in each support option.

3. Effective Date. upon passage/July 1, 20XX.

4. State Board Authority and Responsibilities. The State Board of Education shall have authority to enforce this act.