



# AVID-STEM Math & Science Summer Bridge Program

**The AVID Summer Bridge programs are designed to strengthen students' math and science skills. They provide STEM (science, technology, engineering, and math) opportunities for students to explore math and science content through engaging, interactive lessons and collaborative activities that are rigorous, yet fun for students.**

Schools use the middle school math Summer Bridge programs to open access to advanced courses for students not previously identified for those courses. The math programs are also used to deepen content knowledge for students prior to their enrollment in the subsequent math courses.

The thematic science programs enhance students' critical thinking, scientific reasoning, and problem-solving skills. Students engage in real-world applications of science concepts by actively investigating scientific problems and analyzing information through qualitative and quantitative processes.

## Program Features

- High-engagement math and science content with a WICOR (writing, inquiry, collaboration, organization, and reading) emphasis: Cornell note-taking, interactive notebooks, writing and vocabulary activities, and team-building
- High-engagement, interactive, and collaborative lessons and activities
- Content aligned with national math and science standards and Next Generation Science Standards\*
- Academic language and literacy support
- Curriculum for 60 hours of student contact time (15 units of 4 hours each)

## Program Components

- Comprehensive teacher curriculum guides
- Student interactive notebooks
- CD containing all handouts and the interactive notebook file
- On-demand information module for administrators available on MyAVID website
- On-demand training modules for teachers available on MyAVID website
- Implementation and curriculum support via online and phone exchanges

\*Next Generation Science Standards is a registered trademark of Achieve. Neither Achieve nor the lead states and partners that developed the Next Generation Science Standards were involved in the production of this product, and do not endorse it.



## District/Campus Commitments

- District or individual school application for program(s)
- District-wide per-program participation fee
- Purchase of teacher curriculum guides and student interactive notebooks (or local printing of notebooks)
- Participation in on-demand information and training modules for administrators and teachers
- Teacher stipends and curriculum supplies
- Institutional costs (facilities, student transportation, meals, etc.)
- Provide program enrollment numbers

“*Students had the opportunity to analyze scientific data, draw conclusions, and represent that data mathematically. I believe that they gained the skills necessary to be successful in their math and science classes next year. They also built strong leadership characteristics.*”

Summer Bridge Teacher

## Math for 7th Grade

The Math for 7th Grade program can be used to accelerate students from on-level 6th grade math to advanced 7th grade math or as an enrichment program prior to or after 7th grade math. The content focus areas include rational number operations and concepts, algebraic expressions and equations, proportionality, and measurement. The results of an end-of-bridge exam provided by the school district, state exam scores, and previous course grade averages can be used to determine placement in 7th grade math.

## Algebra Readiness

The Algebra Readiness program strengthens students' understanding of fundamental math and algebraic concepts to provide a solid foundation for success in Algebra 1. It can be used to accelerate students from on-level 7th grade math to 8th grade Algebra 1, additional instruction prior to 9th grade Algebra 1, or as an enrichment program prior to or after 8th grade math. The content focus areas include algebraic equations, linear equations, transformations, multiple representation of functions, geometric figures, and graphical analysis. The results of an end-of-bridge exam provided by the school district, state exam scores and previous course grade averages can be used to determine placement in the subsequent math course.

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“ *Not only are the students improving their math skills, but the teachers are learning new instructional methods. They love it. Our district benefited by significantly raising the math competency of a large group of students. Additionally, our teachers were introduced to new, innovative teaching strategies that will be used throughout their careers. Students received enriched instruction that should benefit them next year. The science programs were especially interactive and engaging.* ”

District Administrator  
Survey Response



## Mission Possible (middle school science)

The Mission Possible science program engages students in hands-on science to develop critical thinking and scientific problem-solving skills, and to make science fun! It is designed for students in the 7th to 8th grade transition, but can be used for other grade transitions. In the program students track a dangerous scientist around the world to prevent his release of a deadly microorganism. On their virtual journey they perform scientific investigations in biology, chemistry, physics, environmental science, and math that relate to the geographic area where they have followed the scientist.

## ProPhone and the Environment

The ProPhone and the Environment program is a project-based learning opportunity in which students use inquiry-based activities and investigations in environmental science, biology, and math to solve a real-world problem. It is designed for students in the 8th to 9th grade or 9th to 10th grade transition. The project culminates in student presentations to an adult panel of judges. The focus areas include student investigations in experimental design and analysis, soil and water testing, topographical maps, biodiversity, population growth, data collection, and mathematical analysis.