



STEM LAB

Science Technology Engineering Mathematics



Needs

Goals

The STEM LAB Goals are to provide a high-quality, standards-based, and personalized learning experience for all students. The goals are to provide a high-quality, standards-based, and personalized learning experience for all students.

Grade Level	Number of Students
Grade 1	10
Grade 2	15
Grade 3	20
Grade 4	25
Grade 5	30
Grade 6	35
Grade 7	40
Grade 8	45
Grade 9	50
Grade 10	55
Grade 11	60
Grade 12	65

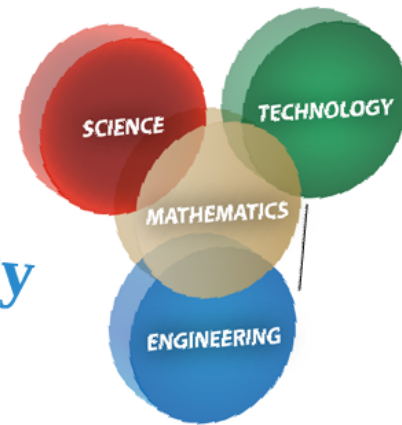
The Classroom

Combine Algebra 1 & Biology
2 Block / 3 Hours of Instruction
2 Certified Educators

The Students

STEM Lab

Learning Powered by Technology



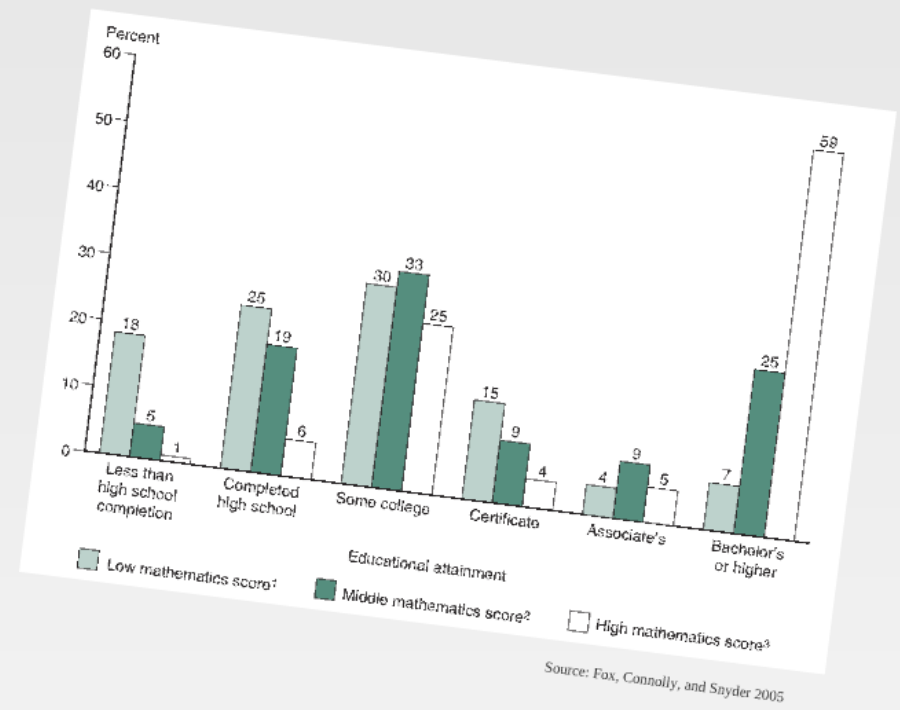
Needs

Our school is rural and low income.

Students and communities
in rural areas are often
disconnected from the
resources and opportunities
available in urban and
suburban areas.

Students in rural areas are
often at a disadvantage
when it comes to access to
technology and the internet.

Mathematics
is a challenging
subject for many
students in rural
areas.



Goals

To use a STEM based curriculum to create an engaging environment for learning math through application in science.

To use technology as a digital publishing platform that allows students to creatively express and apply what they are learning.

To make learning relevant to real life by application projects using engineering and technology.

Needs

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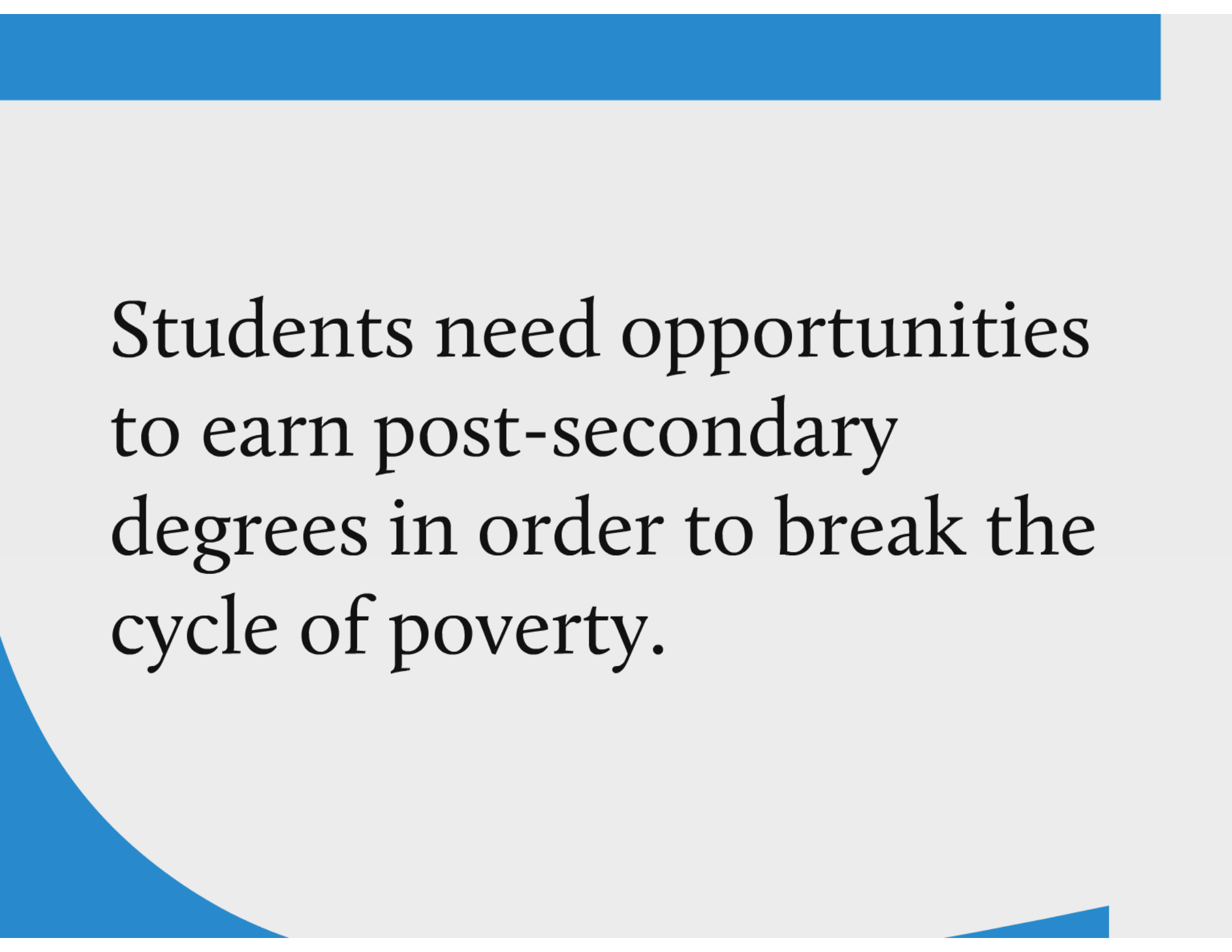
Students need opportunities to earn post-secondary degrees in order to break the cycle of poverty.

Studies show that success in Math is a strong factor in students continuing their education.

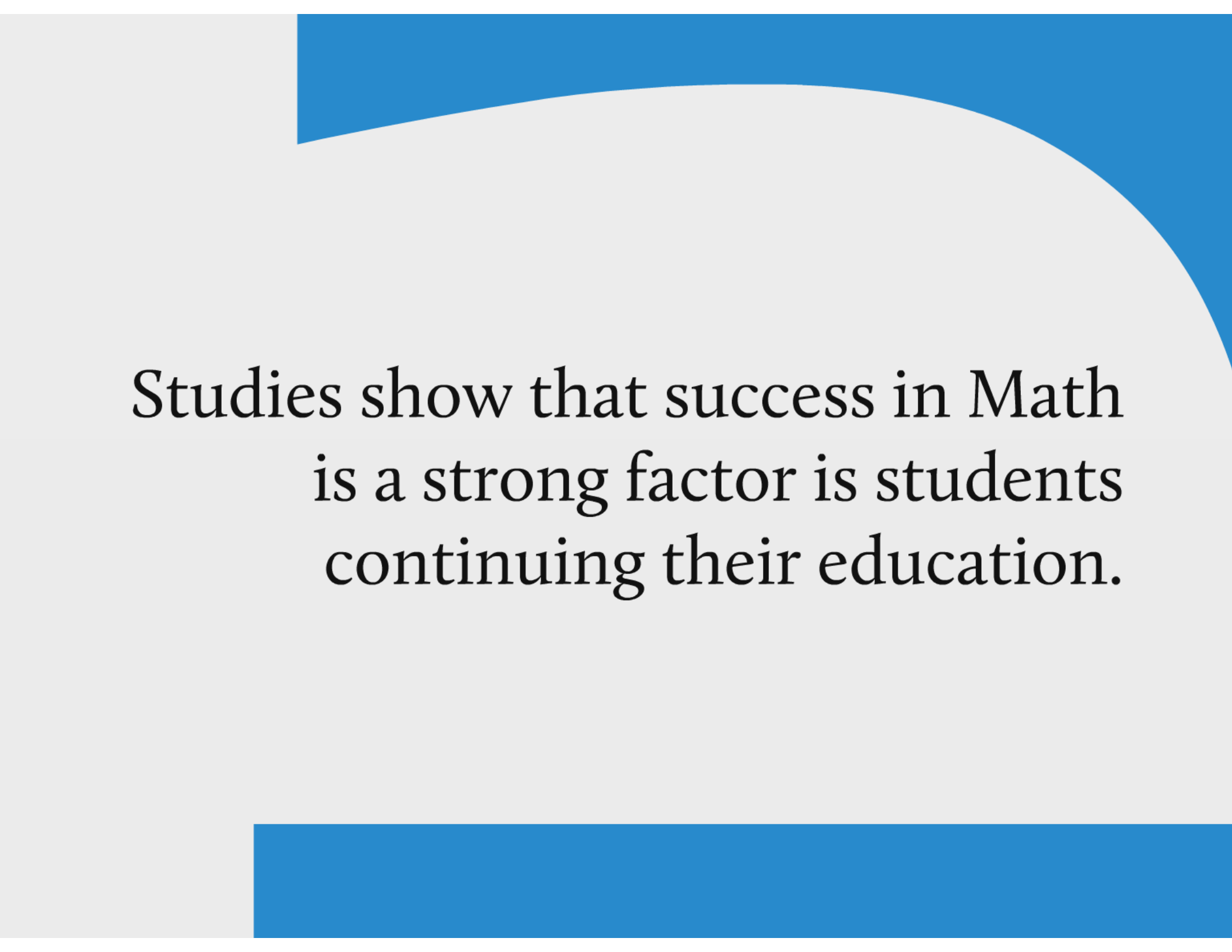
Math represents logical thinking that can be used in many situations and is a key to success in a student's career.

The background features abstract geometric shapes in a vibrant blue and a light gray. A large blue shape occupies the top right, while a diagonal blue band runs from the bottom left towards the center. Another blue shape is visible in the bottom right corner.

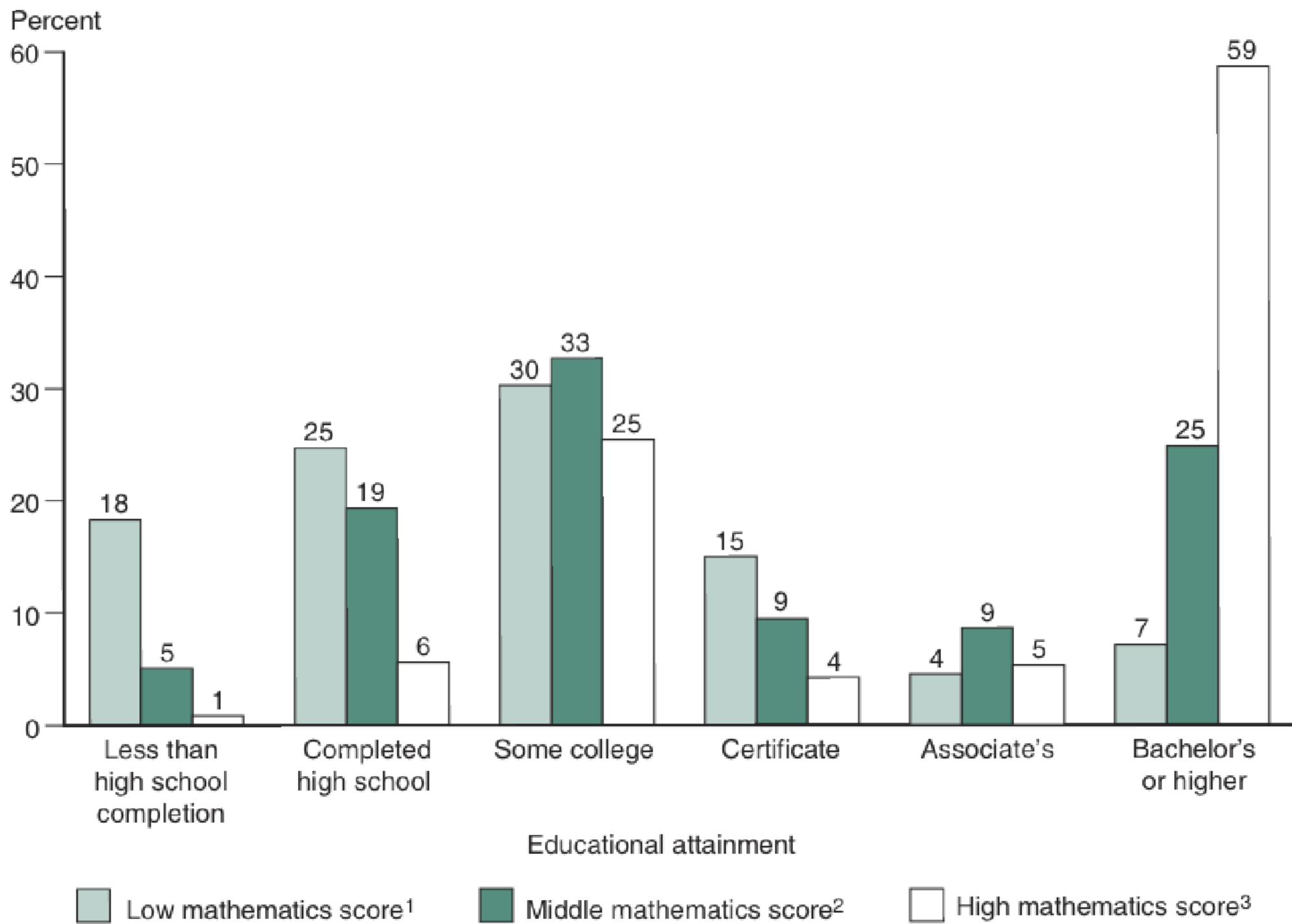
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Math represents
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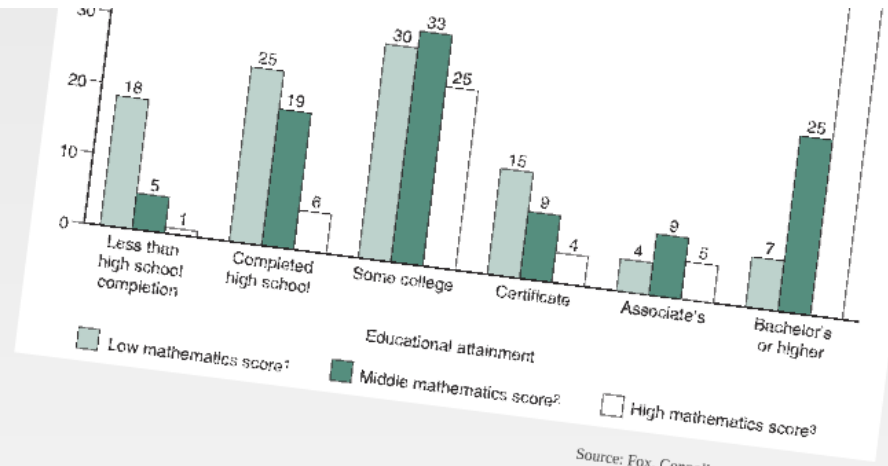
Needs

and low income.

Students need opportunities to work with technology in a safe and supervised environment.

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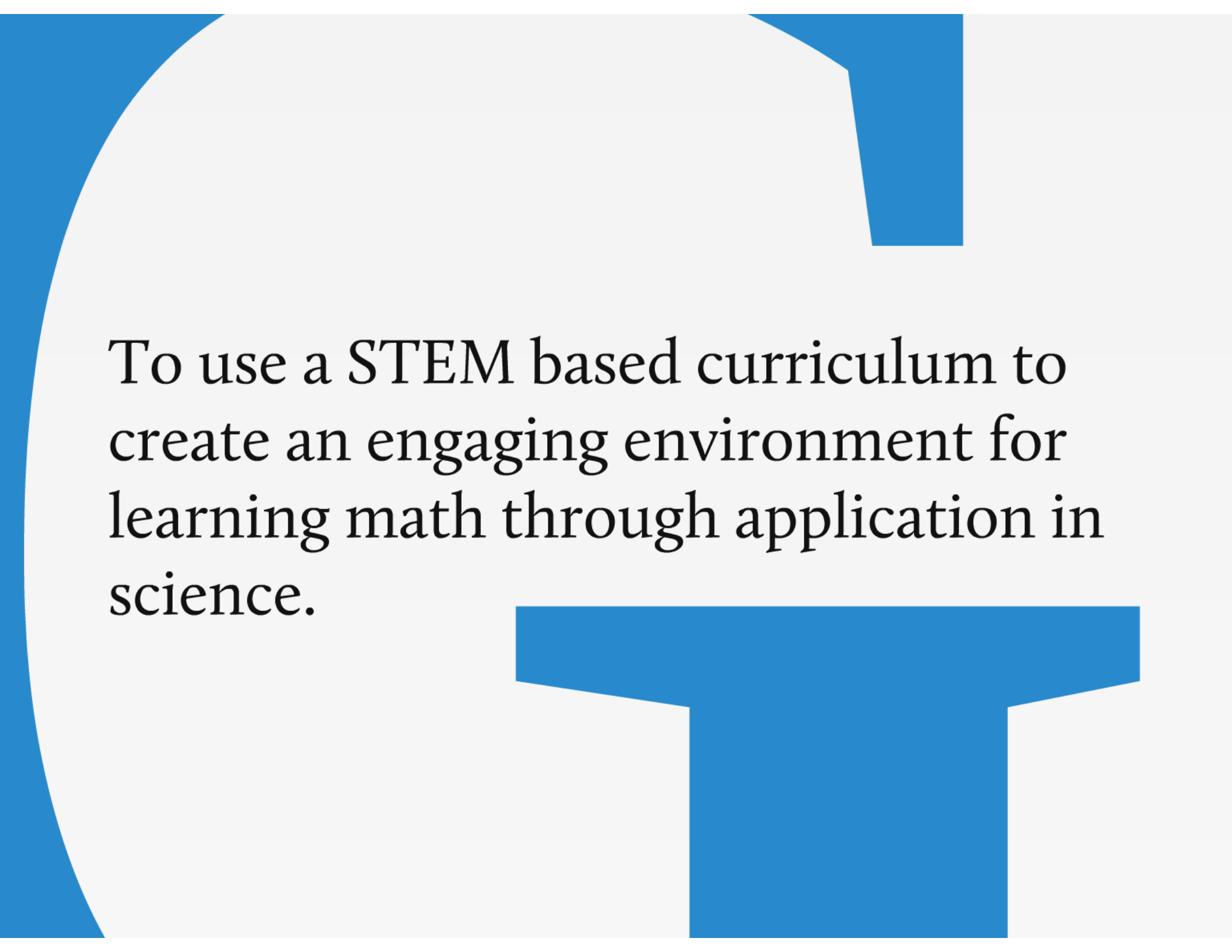
Source: Fox, Connolly, and Snyder 2005

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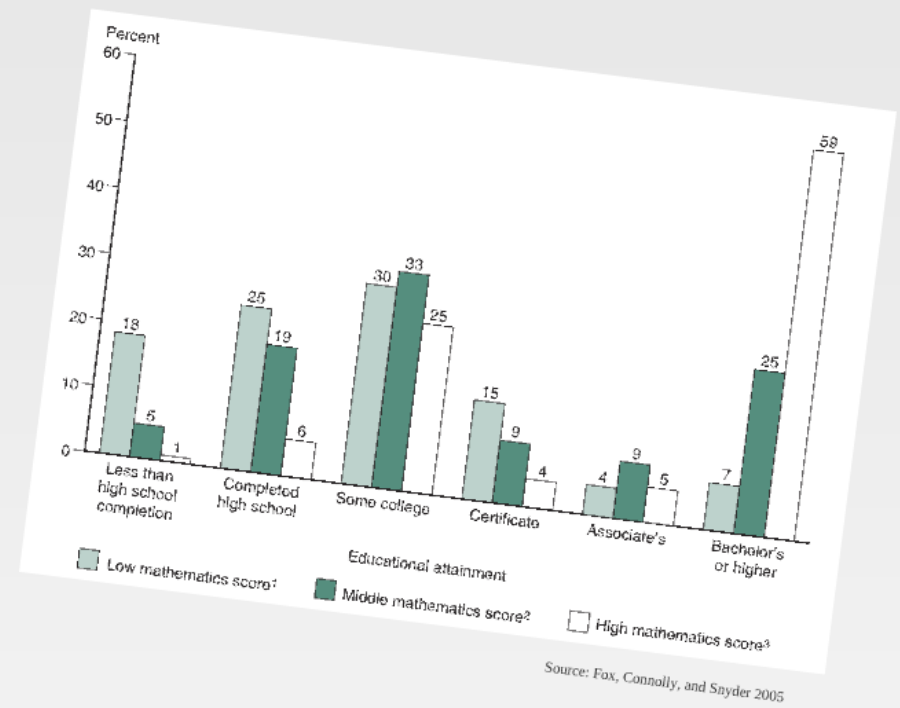
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STEM LAB

Science

Seeks to explain the complexity of the natural world and uses this understanding to make valid and useful predictions.

Technology

Utilizes innovative tools, materials, and processes to solve problems or satisfy the needs of individuals, society, and the environment.

Engineering

Creates applied scientific principles to develop products and systems to address needs, design processes, objects that benefit society.

Mathematics

Science, Engineering, and Technology use Mathematics to explore, generate, and explain the natural and man-made worlds.




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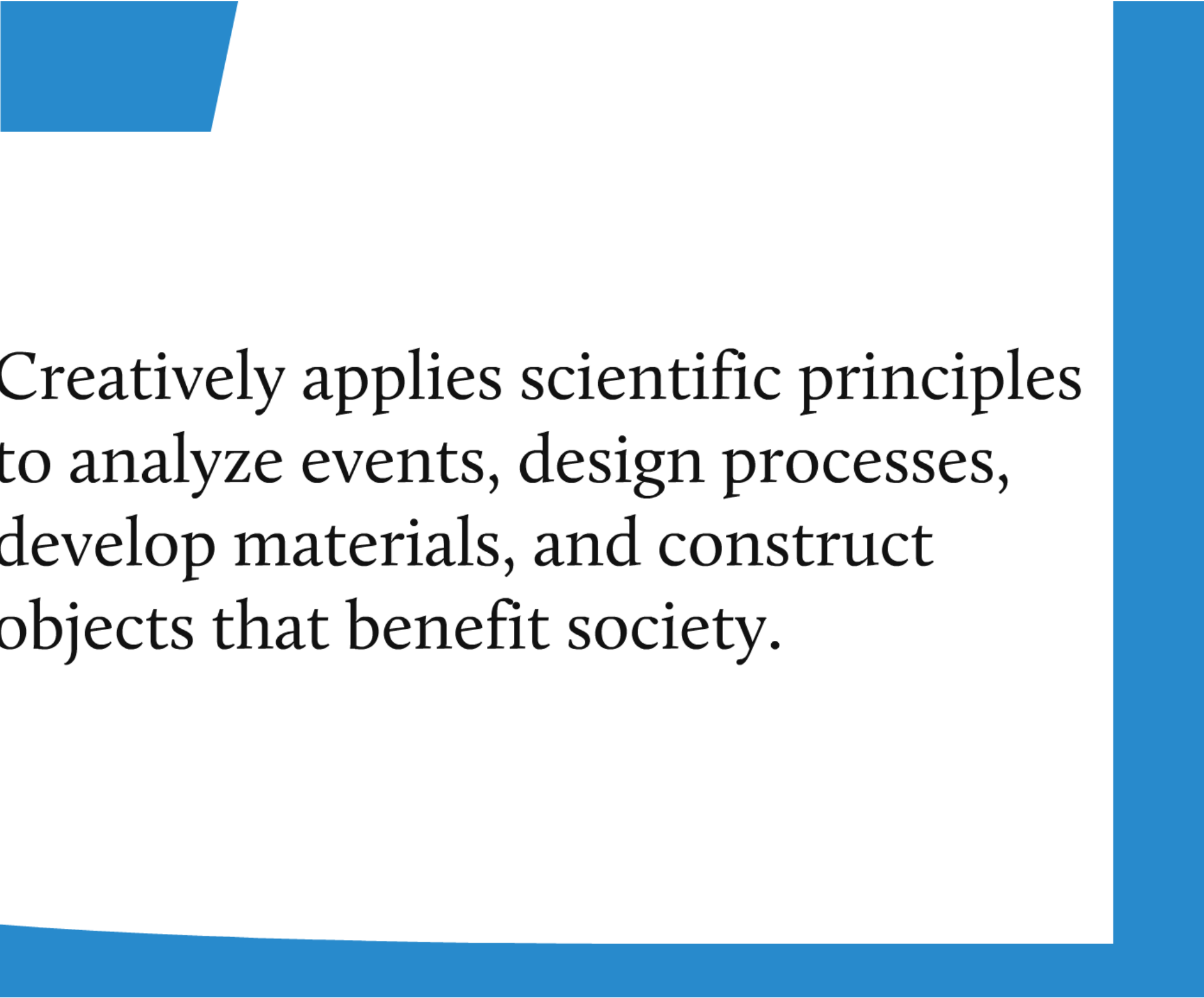
Technology



Utilizes innovative tools, materials, and processes to solve problems or satisfy the needs of individuals, society, and the environment.

Engineering






Creatively applies scientific principles to analyze events, design processes, develop materials, and construct objects that benefit society.





Mathematics





Science, Engineering, and
Technology use Mathematics to
explore questions about the natural
and human-made worlds.



STEM LAB

Science

Seeks to explain the complexity of the natural world and uses this understanding to make valid and useful predictions.

Technology

Utilizes innovative tools, materials, and processes to solve problems or satisfy the needs of individuals, society, and the environment.

Engineering

Creates applied scientific principles to develop products and systems to address needs, design processes, or solve the broadest society.

Mathematics

Science, Engineering, and Technology use Mathematics to explore, generate, and test the natural and man-made worlds.



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The Classroom

Combine Algebra 1 & Biology

2 Block // 3 Hours of Instruction

2 Certified Educators

The Students

**Under the STEM
Setup, Biology and
Algebra Support
Each Other**

**Curriculum would revolve around
application projects that combine
Algebra and Biology using Engineering
and Technology as support**



3 Hours Allows for Deeper Exploration of Topics



3 Hours Allows for Flexibility to Focus on Algebra or Biology

ey to I

2 Educators Allows for:

- **Professional Camaraderie**
- **Shared Responsibility**
- **One on One Time with Students**
- **Better Assessment and Curriculum**

Combine Algebra 1 & Biology 2 Block // 3 Hours of Instruction 2 Certified Educators

The Students

Problem solvers - able to define a problem, question & rethink, gather collect information, and then apply that information to develop solutions to new situations

Innovators and creatives - able to generate ideas, think outside the box, and create new products, services, or solutions

Inventors - recognize needs of the world & creatively design, test, & redesign and implement solutions


Logical Thinkers - apply rational & logical thought processes of science, math, and engineering design to innovation & invention

Designers - use intuition & self-direction to set agendas, develop solutions, and create products, services, or systems that meet the needs of customers, with vision for the world's best future

Technologists - gather, evaluate & explain the current state of knowledge, and use the tools, models, & systems that they develop

Problem Solvers - able to define question & problem, gather collect & organize data, draw conclusion, apply understandings to new & novel situations

Innovators - use science,
math, & technology and
apply to engineering design

The slide features a light gray background with four blue decorative shapes: a curved shape in the top-left corner, a curved shape in the top-right corner, a trapezoidal shape in the bottom-right corner, and a small triangular shape in the bottom-left corner.

Inventors - recognize needs of
the world & creatively
design, test, & redesign and
implement solutions



Self-Reliant- use initiative & self-motivation to set agendas, develop & gain self-confidence, work within time specified time frames



Logical Thinkers-apply rational & logical thought processes of science, math, and engineering design to innovation & invention



Technologically Literate-understand & explain the nature of technology, develop the skills needed, & apply technology appropriately



Combine Algebra 1 & Biology 2 Block // 3 Hours of Instruction 2 Certified Educators

The Students

Problem Solvers – add to or refine question & problem, gather collect data, make hypotheses, test, modify problem to develop new questions

Inventors – use scientific method to create new ideas, test, modify, repeat

Inventors + recognize needs of the world & creatively design, test, & redesign and implement solutions

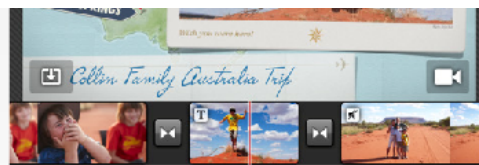
Designers – use intuition & self-compassion to set agendas, develop ideas, create prototypes, test, refine and repeat the process

Logical Thinkers – apply rational & logical thought processes of science, math, and engineering designs to innovation & invention

Technologists – apply science, technology & engineering to create the future of the world, to improve the quality of life, to solve the world's problems

Learning in Hand





iMoive for iPod

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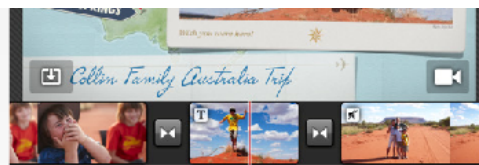


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AudioBoo

Description	Quantity	Price	Total
iPod Lab w/20 I-Pod Touch 8gb	1	\$6,599.00	\$6,599.00
Add-On iPod Touch 8gb	20	\$229.00	\$4,580.00
Apple Professional Development Program (Two Day)	1	\$4,500.00	\$4,500.00
Flip UltraHD 8GB 2 hr	2	\$200.00	\$400.00
Blue Microphone Snowball for Education	1	\$100.00	\$100.00
Apple TV	1	\$99.00	\$99.00
MacBook (White/13.3" LED/2.26GHz Intel Core 2 Duo/2GB DDR3/250GB)	1	\$899.00	\$899.00
STEM Coach	1	\$1,500.00	\$1,500.00
Apple Composite AV Cable	1	\$49.00	\$49.00
Apps and Software	1	\$1,274.00	\$1,274.00
		Total	\$20,000.00





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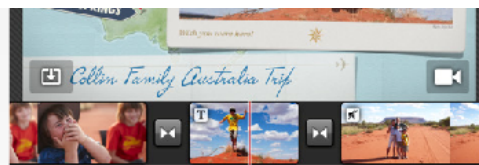
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<http://www>



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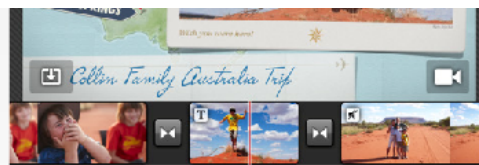


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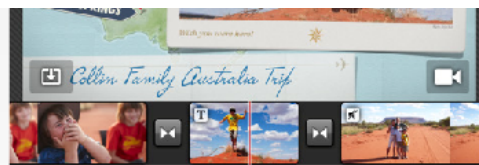


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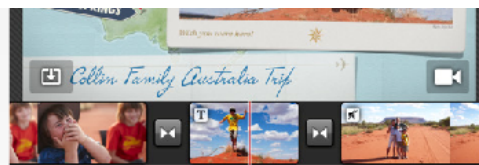


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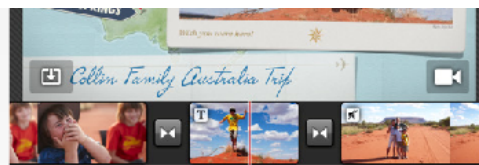


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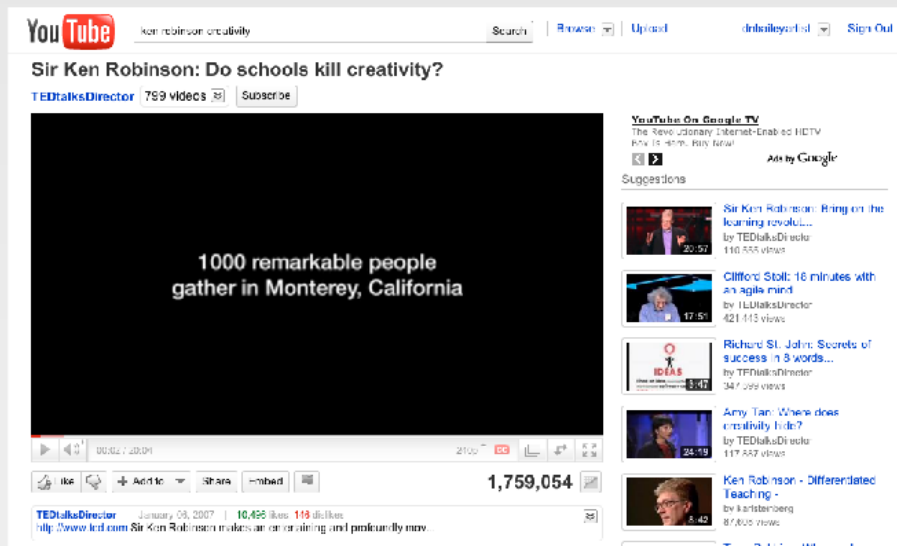
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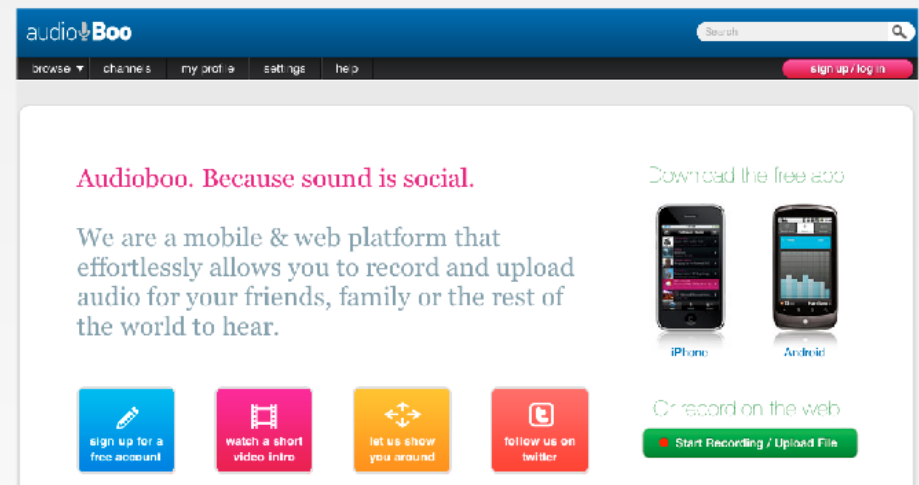
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CURTIN SPRINGS



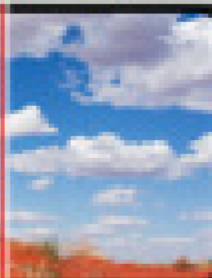
Wish you were here!



Aug. 10/02



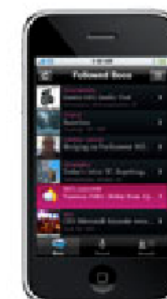
Collin Family Australia Trip



Audioboo. Because sound is social.

We are a mobile & web platform that effortlessly allows you to record and upload audio for your friends, family or the rest of the world to hear.

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free account



watch a short
video intro



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you around



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STEM Coach

The STEM Coach will act as a third certified teacher whose sole purpose in the classroom is to monitor the success of the program and offer suggestions for improving the curriculum.

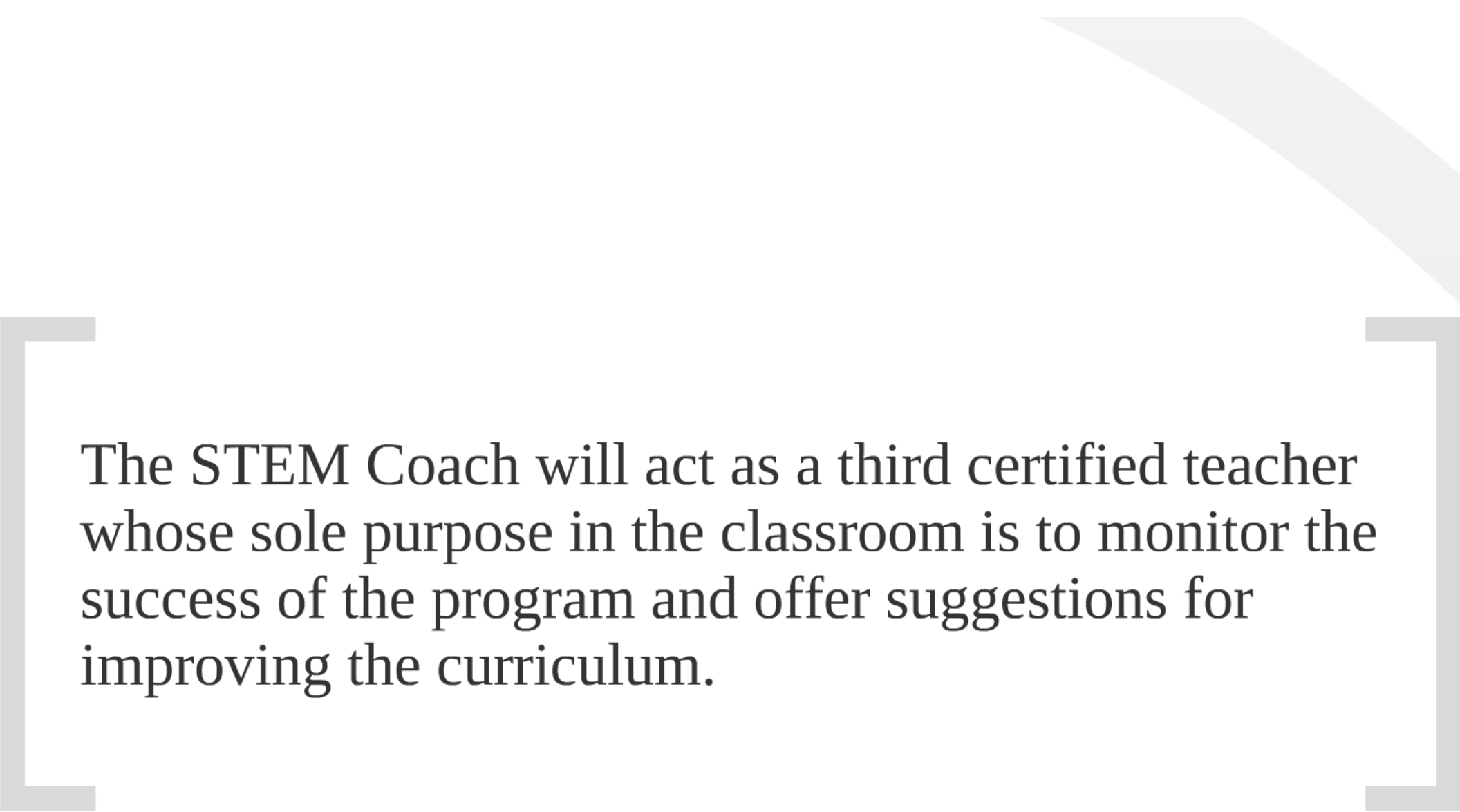
Monitor and Support

Participants consider how characteristics of the blended learning environment impact school curricula and how Apple technologies can help them achieve teaching and learning goals. Participants will gain experience with digital tools and blended learning environments and they will begin to develop a curriculum development action plan.

Apple Training

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Monitor and Support





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