

Overview

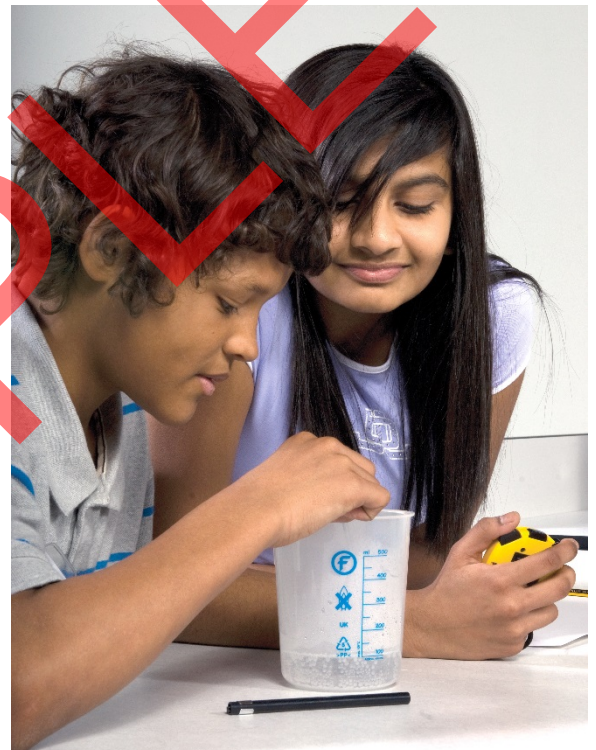
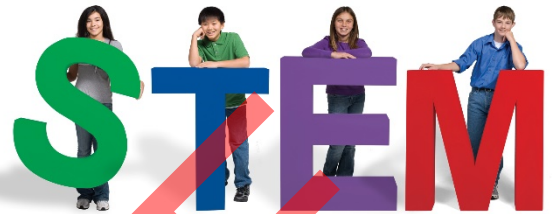
Pitsco Education provides engaging hands-on STEM solutions for K-5 students at Blanco Vista Elementary School. In this program, students experience age-appropriate explorations in science and math. In the process, students engage in essential skills such as teamwork, communication, critical thinking, and problem solving.

This solution includes curriculum, environment, and professional services as described below.

STEM Solutions

Pitsco Education STEM solutions serve students in Kindergarten-Grade 5. Age-appropriate explorations integrate all aspects of core curriculum ranging from math and science to language arts and social studies. In each program, students gain knowledge and develop skills that are transferrable to other courses and to future careers.

Lower elementary students explore investigations in the context of project-based learning focused on tangible constructions and activities. In the process, they experience applications for 21st century skills such as problem-solving and teamwork. Concurrently, upper elementary students are engaged in team-based, small-group activities in a cooperative-learning environment. Each hands-on exploration is accompanied by real-world activities that demonstrate relevance.



STEM Lab Details

- **Grade:** K-5
- **Class Size:** 28
- **Cohorts:** 4
- **Learning:** small group or whole class
- **Curriculum Elements:**
 - **Pitsco Education Elementary STEM Units** are whole class, cross-curricular problem-solving activities and experiments focused on a particular theme. Students work in collaborative teams to design and build models with everyday materials. These activities give students an opportunity to learn about the role of structures in technology and engineering while applying concepts of structures in life science, physical science, math, and language arts.
 - **Pitsco Education Missions** help students connect scientific practices to scientific content and applied math concepts. Using guided inquiry and hands-on instructional equipment, students are connected and engaged in STEM subject matter. Students work together in cooperative teams of four students. Within each team, each member has an assigned crew role. Each Mission contains an art activity, engineering challenge, math application, and science application.
- **Correlations:** 3rd Grade – Science 89%, 4th Grade – Science 86%; 5th Grade – Science 77%
- **Consumables:** Provided for initial year
- **Licenses:** Includes three years of licenses for each Mission and the Synergy ITC learning content management system
- **Environment:** The STEM Lab includes workstations and chairs for 28 students and one teacher, as well as two storage units/cabinets.
- **Electronic Equipment:** This program requires 4:1 student computing. Recommended equipment includes seven student computers, one teacher computer, student headphones/ear buds, and a printer. Further, this program requires the school to provide access to the Internet. *This equipment is the responsibility of the school. 1:1 student computing is ideal during the program's assessment component.*
- **Professional Services**
 - Professional development is a one-day, onsite seminar for four teachers. Additional teachers may join for an additional fee.
 - A Pitsco Education Service Manager (ESM) will provide on-site support to the lab twice during its first year of operation.

Kindergarten STEM Unit	
✓ Exploring Structures for Animals	
Grade 1 STEM Unit	
✓ Exploring Structures in Literature	
Grade 2 STEM Units	
✓ Exploring Packages	
✓ Exploring Transportation	
Grade 3 Missions	
✓ Life Cycles	✓ Skyscrapers
✓ Matter	✓ Space
✓ Science Skills	✓ Traits & Variation
✓ Seasons and Weather	
Grade 4 Missions	
✓ Design Solutions	✓ Plants
✓ Earth Processes	✓ Space Exploration
✓ Earth Rocks	✓ Transportation & Power
✓ Ocean Life	
Grade 5 Missions	
✓ Ecosystems	✓ Scientific Discovery
✓ Energy	✓ Solar System
✓ Limited Resources	✓ Weather & Water
✓ Matter Properties	