BCPS Esports

Esports in education provides new opportunities for students to engage in their school community and foster teamwork.

MinecraftEdu

Broward Schools is utilizing the Minecraft Education platform to engage students in problem and project-based learning. Minecraft challenges involve collaboration with other children and teammates, addressing our goal of classroom equity and increasing the number of young women engaging in STEM through a positive online digital world environment.

Spatial Reasoning Pathways

Spatial reasoning is the ability to think and manipulate objects in 3-dimensions, often starting with a 2-dimensional representation of the object. Whether it is redesigning their own workspace, visiting interstellar worlds, or simulating a biological system, these skills empower students to navigate, manipulate, create, and build with, around, and in physical and virtual space. BCPS trains teachers in the Magic Leap hardware and in 3D design and programming (Unity, Unreal, Minecraft, Tinkercad, Paint 3D, etc.).

CONTACT US

Email
browardstem@browardschools.com

Website
browardschools.com/stem

STEM + CS Supervisor
Dr. Lisa Milenkovic

Broward STEM+CS Provides:

- Hands-on STEM and computer science through authentic experiences and competitions
- Foundational skills in collaboration, communication, critical thinking, computational thinking, problem-solving and perseverance
- Life ready students, who are globally aware citizens, prepared for future studies and careers in any area, not only those typically thought of as STEM-related

STEM Challenges - Quarterly STEM and environmental challenges for students.
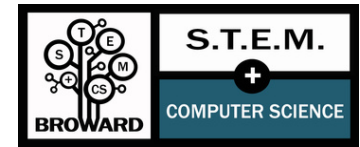bit.ly/browardstemchallenges

STAR Quest - Share STEM in Action happening in your schools and community! BCPS link:
bit.ly/STARquest

BCPS 8/12/24

STEM + Computer Science Applied Learning Dept.

Programs and Initiatives

browardschools.com/stem

KCW - 600 SE Third Avenue
Fort Lauderdale, FL 33301

Computer Science Programs

In partnership with Code.org we provide K-12 teachers with training to bring computer science (CS) into their classroom so that every student can benefit from integrated curricula such as:
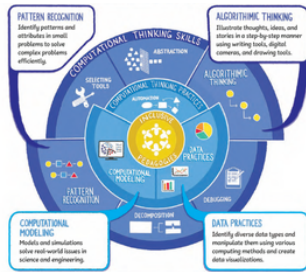
- CS Discoveries (6-8)
- AP CS Principles (9-12)
- AP CSA (9-12)
- CS Fundamentals (K-5)

In partnership with Amazon Future Engineers and BootUp we provide K-5 computer science using Scratch, micro:bit and Bee-Bot.

Computational Thinking

In partnership with Digital Promise, funded by the National Science Foundation, to help expand computer science in BCPS schools and across the nation. Districts Helping Districts: Scaling Inclusive Computational Thinking Pathways. The goal of the partnership is to develop and refine strategies for increasing computer science participation by learners from underrepresented backgrounds.

Computer Science Integration

Professional Development for teachers integrating computer science using online applications and physical computing, into various subject areas:

- Block Code Applications
- CS in Music
- CS in PE
- CS Toys Are Fun!
- Project MakeCode
- Eco-Data Exploration

#BrowardCODES
Computer Science in every school, for every student.

SECME-STEM Olympiad

A national program dedicated to focusing on equity and the inclusion of "learning and doing science, technology, engineering, and math." Competition includes mousetrap cars, water bottle rockets, generator build, robotic hands, banners, essays, and VEX exhibitions.
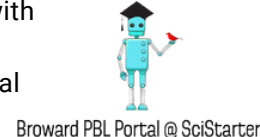
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VEX Robotics

With funding from the Robotics Education & Competition (REC) Foundation, we provide VEX robotics equipment and materials, teacher development and competitions for all traditional public schools in the District. We also support FIRST robotics (FLL, FTC, and FRC).

Broward PBL Portal @SciStarter

Provides opportunities for students to engage in projects with real-world relevance for learning. They can solve problems that are important to them and their communities. The Broward PBL Portal is the product of collaboration with SciStarter and Citizen Science. SciStarter is the place to find, join, and contribute to science by providing people with access to more than 2700 searchable formal and informal research projects & events.

Broward PBL Portal @ SciStarter

Environmental Stewardship

- **P3 Eco-Challenge** - District-wide challenge recognizes and rewards traditional BCPS schools, teachers, students, non-instructional and custodial staff for their efforts to learn about and implement environmentally sustainable measures and green initiatives within their schools and communities. browardschools.com/p3
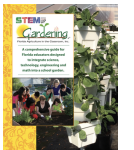
- **Broward Youth Climate Summit** - An annual event for students in grades 5-12 to provide a platform for students to advocate for policy change and gives students a voice for promoting environmental sustainability. browardschools.com/youthclimatesummit

- **Edible and Butterfly Gardens** - Participating teachers in the PD are provided a comprehensive curriculum supplement for teaching health, science, language arts, mathematics and social studies through using a school garden.

- **TEA Garden Food Forest** - Technology Enabled Agriculture or TEA Garden Food Forest at BCPS educates students, teachers and their communities on how and why they can sustainably grow edible food together in their neighborhoods.

- **How Low Can You Go** - In partnership with the Miami Heat, schools are challenged to find innovative ways to reduce energy consumption at each school campus in a 3-month period compared to the previous year. howlowcanyougochallenge.com