

STEM AT PS/IS 276

PTA Meeting
April 21, 2017

Current STEM Programming

- Aligned with ISTE standards (International Society for Technology in Education)
- Hands on building and engineering activities in lower grades
- Composing music
- Introducing computer skills such as keyboarding to beginning coding

Common Sense Media Digital Certification

- Technology Vision Statement
- Online pd for staff
- In two grades, teach 3 ¾ hours of digital citizenship (grades 5 and 8)
- Digital Citizenship teacher training
- Engage and Educate parents in three ways (teen panel, parent discussion, family toolbox)

Draft Technology Vision Statement

The Battery Park City School community strives to make our students ready for the world ahead in the 21st century and prepares them for what they will encounter with the understanding that technology will be an integral part of our students lives. We want to encourage growth and development of students to efficiently, responsibly and collaboratively use technology to promote critical thinking, problem solving and communication skills that are required for students to be lifelong learners and creators.

The vision for Battery Park City School is to engage students in thoughtful lessons utilizing technology and resources, allowing students to work to the best of their abilities. With on-going, comprehensive professional development teachers will gain new skills and knowledge to integrate developmentally appropriate technology encouraging cooperative learning.

Students will develop critical thinking skills in a technology rich environment. They will grow to be proactive and respectful digital citizens by communicating in a purposeful manner using collaborative tools. Our school community members will create a positive digital footprint.

Workshops for Parents

May 5 at 8:30 am in the auditorium

- Book Club:

[It's Complicated: The Social Lives of Networked Teens](#) by Danah Boyd. (Full text at the link. It is a free download or you can buy at a bookseller).

Late May at 8:30 am in the auditorium (date tbd)

- Teen Panel. 7th and 8th graders will be talking about social media

Engineering

- Construction Kids in grade 1 (boats and bird houses)
- Center for Architecture Bridge study in grade 2
- Engineering is Elementary projects in grade 3: Windmills and Solar Ovens
- Inventions using electromagnetism in grade 4
- Model plane design to investigate variables in grade 5
- Maker space in library with Basia

Basic Technology Skills

- Type to Learn in grades 3-5
- Grammar and spell corrections
- Google apps:
 - Google docs, sheets, forms, slides, blogs
- Collaborative workspaces
- Artifacts of learning -- newsletters, comic books, blogs, videos, etc.
- Basic coding in some classes

Digital Citizenship

- Online safety
- Digital footprint
- Cultivating digital identity and reputation
- Citation of resources

Research skills

- Gleaning information from videos
- Identifying, analyzing and authenticating sources
- Searching databases for information
- Synthesizing information from multiple sources

Digital Creativity

- Building tolerance for the messiness of the design process
- Break problems into component parts, extract info, develop models to understand complex systems or facilitate problem solving
- Basic coding and projects in grade 5 and 8
- Composing music using Garage Band and Finale
- Genius hour in grade 4

Next Steps

Build teacher skill sets in technology and coding

- On going PD

Develop a robotics program

- Builds on initial work with coding
- Links our early childhood hands on building with more sophisticated uses of technology

Building on computer resources in classrooms

Update on Hardware and Software

- 3 sets of 32 and 1 set of 24 laptops in carts.
- 2 class sets of ipads have been ordered for middle school math
- Laptop safes in classrooms: 3rd grade 4th grade, 5th grade humanities, art, Spanish
- 70 new laptops ordered for next year
- Dreambox, Brainpop, Type to Learn,
- Free online software: Google apps, code.org, python, codester

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Funding

PTA funding for a teacher salary and tech intern

PTA funding for hardware and resources

Grants for hardware and resources (RESO-A and others)

Resources

[Learning to Think Like a Computer](#)

[Who Needs Charters When You Have Public Schools Like These?](#)

[ISTE standards](#)