Breaking the Silos with Next Generation Science Standards

Syosset Board of Education Curriculum Presentation April 20, 2017

Education: Then & Now



Brief History of "Innovation" in Education



Technology "Why" Statement

We believe that through education, we can ignite curiosity that fuels motivation, innovation, collaboration, and problem-solving skills using technology as a pivotal tool to maximize student contributions in an ever-changing world.

Innovation Literacy



Next Generation of Learners





Crosscutting Concepts



Next Generation Standards

Performance Expectations: Students should know and be able to....

Science & Engineering Practices:	Disciplinary Core Ideas	Crosscutting Concepts
Behaviors of Scientists and Engineers students with which students should engage.	Science Content Life Sciences Physical Sciences Earth & Space Sciences Engineering & Technology	Themes among the scientific disciplines Examples: <i>Cause and Effect</i> <i>Structure and Function</i>
Connections to ELA, Writing & Math		

K-12 Shift Emphasizing Crosscutting Concepts



Elementary Schools Crosscutting

Current STEM Project: Oil Spills





Middle School Crosscutting

New Course aligned with Next Generation Science Standards, ahead of it's time and will continue next year.



2017-2018 School Year - Robotics and Coding in the Curriculum at HBT and Southwoods



High School STEM Crosscutting

SySTEM Robotics



2017-2018 Crosscutting Courses









Looking to the future...

More STEM Projects with Crosscutting Concepts which emphasize Science and Engineering Practices

Building opportunities into the K-12 curriculum for Robotics and Coding

Creating more crosscutting electives in the High School in addition to SySTEM Robotics and Science Research.

Our Instructional "Why" Statement

We have an obligation to prepare our students to be responsive to a continually changing world and take agency of themselves, their communities, and society as a whole.

LINK TO NEW STANDARDS

http://www.nextgenscience.org/

NYS Version:

http://www.p12.nysed.gov/ciai/mst/sci/document s/p-12-science-learning-standards.pdf