

SEPT 2018 - SEPT 2019

Numbers of teachers
involved in Curriculum
review and development:

Social Studies
56

Science
55

Hours of
time spent
by teachers:

Social Studies
320

Science
450

WHAT DOES THIS LOOK LIKE IN THE CLASSROOM?



Seventh grade social studies students apply their knowledge of various forms of government to collaboratively build the tallest tower.



First graders learned about wind and weather, then applied their knowledge to make a sail and windmills as part of the new Engineering is Elementary curriculum.



Engineering to Learn students applying their knowledge to design bridges.

INQUIRY DESIGN MODEL

As a result of our review process, Social Studies classes adopted an "Inquiry Design Model" in which students answer an engaging and compelling question that is grounded in content and standards. For example:

- "Was President Roosevelt's New Deal a good deal?" (high school question)
- "Was the American Revolution avoidable?" (middle school question)
- "Does it matter how leaders are chosen?" (elementary question)

Students must answer supporting questions as they work through their answers, and they may present their learning in any number of formats including presentations, debates, and essays.

ENGINEERING IS ELEMENTARY

As a result of an audit on our science curriculum, which included student and parent surveys, we are including engineering topics at all levels. Students in grades 1-5 are using Engineering is Elementary kits developed by the Museum of Science in Boston. Students now complete projects and challenges that encourage them to use what they learn about engineering to design and test solutions. They use the data they collect to answer questions like, "How do the size and material of a sail change the way a windmill works?"

Middle school students use engineering to study electricity, build rockets, and design earthquake-proof structures. Ninth grade science was redesigned to become an Engineering to Learn class. Students are loving the new projects like building effective bridges and buoyant racing boats.

DESIGN-TEST-REDESIGN

Starting with a mousetrap car project, ninth-graders learn the ins and outs of the "design-test-redesign" model that they will use in future projects. Instead of a traditional "egg drop" activity, students design a restraint system to keep a raw egg passenger safe inside a small car with a bumper system - all while staying within a budget. Each student then records a "sales pitch" to an executive of a car company highlighting why the design is worthy of investment.

Students also build career skills working in groups that must collaborate, communicate, and compromise. Students lead the way in this new curriculum using their new knowledge to focus on the design-test-redesign process. Even more of this design-type of thinking is being incorporated into our middle and high school science courses as they are developed.

"What really sets Haverford's Curriculum Review program apart is the number of student focus groups, parent survey responses and teachers who are involved. That kind of engagement and feedback strengthens the redesign process in a way that ensures we are offering our students engaging and meaningful learning experiences."

- Dr. Maureen Reusche, Superintendent

For more information, visit haverford.k12.pa.us/departments/curriculum-instruction