Wellford Academy of Science and Technology

Developed by
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1. Big Idea
   To develop thinkers and life-long learners through the integration of STEM education into the curriculum.

2. Goals and Objectives
   Integrate STEM education into the classroom.
   Each grade level will implement a culminating STEM project.
   Have guest speakers/field trips at least once every nine weeks.
   Conduct parent nights to inform and inspire parents about STEM education.

3. Learning Experiences
   Teacher will implement one STEM project as a culmination project for each science strand. For example:  
   K-Matter Groups use a variety of materials to create a boat that best demonstrates the properties of buoyancy.
   1- Force/motion
      Groups create a rubber band ball to see which will bounce the highest.
   2- Magnets
      Groups create a magnetic car to see which can travel down a maglev track at the highest speed.
   3- Heat/matter
      Groups create an insulator using a soda can and materials of choice to create the best insulator.
   4- Electro magnetism
      Groups create the strongest electro magnet.

4. Assessment
   Showcase student produced artifacts, student science notebooks that document thinking and processes, rubrics.
   Students reflect on visits from guest speakers, field trips and a variety of oral and written technology based presentations.
   Parents will complete surveys to provide feedback.

5. Timeline
   1st Year
   Willing teachers implement STEM curriculum, teachers develop curriculum
   And willing teacher invite others to observe
   2nd Year
   Workshop offered in summer to encourage and support teacher participation
   3rd Year
   Complete implementation
   4th Year
   Migrate from culminating project to daily instructional activities

6. Resources
   Local business support, local university support and STEM products and resources