

SAC Meeting Minutes- ELMS

Date – March 8, 2022

Call to Order

The meeting was called to order at 8:07 AM. Present were: Amira Ray, Karen Huzar, Deborah Clark, Stacy Alcuaz, Elizabeth Citro, Cheryl Middleton, Kristy Zumwalt

Absent: Shari Johnson

Guests: Nicki Spirtos, Lisa Leonarduzzi, Emily Sikes, Cristina Fallara

Absent:

2. Approval of Minutes

Motion to approve the September minutes as written by Mrs. Alcuaz, second by Mrs. Middleton

3. Presentations: Engineering Curriculum

*All students use 1 elective to take the grade level Engineering elective. The curriculum is based on Project Lead the Way, and uses the design process to build problem-solving skills through project based learning. All course provide communication and collaboration skills useful in all aspects of their future studies and jobs.

6th Grade – Mr. Dority: 2 semester – the Magic of Electrons (which includes electromagnets, soldering/blinkys, microbits/rovers) and Science of Technology (which includes simple machines/pinball, glue chemistry, oil spills). A bonus for his class is the use of the wood shop for students designed and created CO2 cars or pinball machines.

7th Grade – Mr. Stewart: 2 semesters – Energy and Environment (which includes wind turbines, penguin dwellings, green cars) and Flight & Space (which includes tetrahedral kites, balsa gliders, and missions to Mars – new unit).

8th Grade – Mr. Haddix: curriculum includes Intro to Engineering Design and is a high school credit class. Curriculum includes project-based learning and computer-aided design/OnShape, 3D printing, Charms, and Automaton. Being for high school credit – this course prepares them for more specific engineering courses at the HS and college levels.

The Design Process: used by engineers to solve problems. The goal is to build student confidence in their problem-solving skills and is beneficial for all classes – particularly math and science. The design process has 2 steps: 1 – define the problem; 2 – generate concepts; 3 – design a solution; 4 – Build and test a prototype; 5 – Evaluate the solution/results; 6 – present solutions.

Testing: 6th and 7th grade teach 2 semester courses, so there is an EoC for each semester. There is also a Design Process Certification Test administered. 97% of 7th graders passed Certification Test at the end of 2021! 8th grade administers 1 EoC exam that covers the entire year.

Engineering Advisory Board: is made up of members of the local engineering community to include retired engineers, business owners, professors etc. The 3 main goals of the board are as follows: 1. Provide verification that instructional content for the program includes specific competencies within the curriculum as well as reviewing knowledge, skills, and attitudes being taught to be in line with the needs of future employers. 2. Provide assistance to teachers with opportunities to upgrade teachers' technical skills and knowledge, as well as serve as guest instructors and mentors. 3. Provide service to the school and community by promoting career and technical programs as well as assisting in long range planning.

Extras: Students have opportunities to join the ELMS Makers Club which explores Makerspace to learn skills such as computer modeling, 3D printing, cardboard prototyping, and woodworking. There is also a STEM club available to all grade levels that meets on Tuesday morning and is centered around the Young Inventors Challenge. There is a gathering in April with other STEM clubs in the district to show off their inventions. We also participate in the Young Inventors Challenge which is an opportunity for students to invent something to make the world a better place!

4. Principal Update – none

5. New Business - none

6. Old Business - none

6. Open Discussion:

7. Adjourn

The meeting was adjourned at 8:25 AM , and the next SAC meeting is scheduled for 4/12/22 at 8:00 AM.