

Meeting #5 – Tuesday, March 12, 2013
3:00 – 5:00pm at Sehome High School

Minutes

Present: Jason Alexander, Sharon Camblin, Kirstin Copeland, Jeff Coulter, Paula Dagnon, Rob Freeman, John Getchell, Atrina Gharai, Ralph Hayden, Jane Hodge, Gil Lund, Brian MacNevin, Carter Maden, Connor McGreevy, Linda Miller, Steve Morse, Tracy Shaw, Michele Shenkin, Jim Straatman, Tim Stricklett, Sue Thomas, Jeff Thran, Greg Verbarendse, Charles Waller, Joe Wooding

Meeting started at 3:10pm.

Welcome: Co-chair Ralph Hayden welcomed group and briefly summarized the agenda.

Best Practices Demo: Kevin Criez, Technology Teacher and Robotics Club Advisor, Sehome HS
The group watched a short video that gave an overview of the FIRST (*For Inspiration and Recognition of Science and Technology*) Robotics competition, and Criez provided additional info. Some highlights:

- Started by entrepreneur and inventor Dean Kamen (*invented the Segway*)
- Kamen felt that young people could be inspired by science, engineering and technology role models in the way they are by sports superstars.
- Developed an annual competition based on the concept of a sports tournament.
- Different than sports competition in that “every player can turn pro”
- Each team is given a bunch of parts and six weeks to build a robot that will perform an pre-determined task
- The competition takes place over a 4-day period, in a large arena with 6 teams of up to 20 students competing at once
- It’s competitive, but cooperation happens quite freely between teams
- The cost per team is \$12,000 and according to FIRST rules, cannot be provided by the District, it must be raised in the community
- One aspect of the FIRST program is to incorporate community members as advisors and mentors. Their role is to help students figure out what is needed and how to procure materials and develop their ideas.
- All FIRST competition work is done outside of class (after school and on weekends)

Kevin briefed the group on the origins and development of the Sehome Robotics Club:

- Started in 2008 at the urging of three students who had heard about the FIRST Robotics competition.
- After the first state competition, Criez realized students would need more academic support if they wanted to be competitive
- Sehome created a pathway: Computer Science ->Engineering ->Electronics beginning in 9th grade.
- The curriculum includes Robotics, Applied Physics (I and II) and Robotic Engineering

- The students learn to use Solidworks modeling software, which is what Boeing uses.
- Kids choose where they go and how far they go – optional to compete or not
- They have added several more opportunities to compete, district- and state-wide
- Plans are underway to build up a robotics pre-cursor program at the middle schools – KMS and FMS currently participate in the FIRST Lego League

Comments from community mentors:

- The Robotics competitions teach kids how to fail and not quit.
- They learn how to take frustration and ambiguity and turn it into challenge and excitement.
- Students work as a team, members having specialties such as fabricating or programming – they learn from each other, and also build teamwork skills.

Ralph asked the 7 Robotics students that were present: “What would you like to say to the district’s technology decision-makers?”

- Several students commented that having programming classes would be a HUGE advantage. Students currently teach themselves the necessary programming and then share with their fellow students.
- They would like more classes, upgraded classes, more stepping stones.
- The word needs to get out about the Robotics program so more students can get involved
- Students need to know that the Robotics class/pathway is an option to other science classes
- They need access to the necessary tools – robotics gear, machining tools
- Students need to see the big picture of what is out there – what the possibilities are – where these skills can take them
- They currently have 4 district laptops. When a new or upgraded software program needs to be installed (which is frequently) there is a very long wait time/cumbersome process. Most students try to bring their own laptops instead.

To read more about the Sehome Robotics Team, visit <http://www.sehomeseamonsters.org>

Subcommittees:

Members were excused to classrooms for subcommittee work for the remainder of the meeting.

Meeting ended at 5:00