STEM Takes Flight Professional Development Workshop

Post workshop practices

Topic: Team Building and Soft Skills for the Web

Presenter(s): Terri Lane

Date: June 2018

Lesson Timeframe: (Does this activity take place during one class period or over a series of class periods?)

Takes place during one class period. The class period is 6 hours and 30 minutes long. The second half of the class (after lunch) for 2 hours and 30 minutes was used for the Lesson.

STEM Takes Flight Workshop Resources Used: (List any NASA websites, missions, or other resources that you gained from the workshop that you may have used in your lesson. Describe any strategies from the Paper Sat activity that you used in your lesson—communication protocols, team management strategies, or other strategies.)

Materials:

Paper SAT activity materials

PowerPoint presentation was shared and briefly explained to give the students an understanding of why the activity.

Penny Activity

Team management strategies were replicated as close as possible to the "STEM Takes Flight Workshop" Paper SAT activity.

Researched Google on Scrum Master

Please explain why these workshop materials were used in this lesson:

These materials were used to build 21st century workforce or learning skills. They were also used to have pictures and videos to add to the course web site so the students' parents could see activities they completed while at Governors School 2018.

Teacher level: (If this activity were to be presented by another faculty member, what knowledge would the faculty member need to know?)

The teacher would have to know how to code in HTML, CSS3, and host a web site.

Paper SAT walk through.

Student level: (What prior knowledge do students need to have in order to be successful with this activity?)

Students need to be able to add an image file and video file to a web site. They would also have to know how to upload files to a server to be published out to the world.

Learning styles/intelligences supported:

Students with a 3.0 GPA or above. Students dedicated to learning to code.

Overview of the lesson:

Lesson Objectives:

Capture images and videos, build Cube SAT, take a chair flight.

Lesson Content (Warm-up activities/review; Instructions; Follow-up activities):

The penny activity was used during a previous class meeting, so the students could get to know each other. This activity was also beneficial, so the teacher could learn how the students interact with one another and which ones were more likely to take on a leadership role.

Assessment (How will you know the lesson was successful?):

Students will code and incorporate videos and images of the Paper SAT activity into their class web site.

Approximately how many students do you anticipate this activity impacted?

Nine students (8 students and 1 Teaching assistant enrolled at a 4-year university) immediately. Potentially more because the web site was shared with all 250 Governors School students and their guest for the final presentation. The activity will have a futuristic impact since the web site will continue to be hosted on a web server.

Additional comments:

The 7 students worked as one group to build a CubeSAT in the specified amount of time. They learned about themselves whether or not they are leaders. How to work together as a group and get specific aspects of the activity completed in a specified amount of time. The students enjoyed having the scrum master and following the directions that were laid out by the scrum master. During the activity the pictures and videos were taken by the teacher or teaching assistant for the purpose of adding to the class web site.

Web site from the class

http://www.mecciststudents.org/GovernorsSchool2018/