Principal's Report Richmond Grade School Paul Augustyn June 28, 2017

Interdiscipinary Unit

Each year Richmond Grade School participates in an activity called "One Book One School" where all the grade levels read the same book during the same time period. This year, Mrs. Walker chose a book called <u>The Wild Robot</u> for this experience.



Traditionally, while classrooms are participating in the "One Book One School" program, students engage in activities in the library connected to the book. Since this year's book was about a robot that gets stranded on a deserted island, these afore-mentioned activities revolved around coding and robotics. Through the use of books, video clips and iPad apps, Mrs. Walker discussed the history of robotics, brainstormed practical uses for robots, and even showed some examples of robots being developed for use in the near future.

In addition, Mrs. Walker and Mrs. Stacey got together and discussed how teaching coding fit nicely into this "One Book One School" shared experience. Using the Code.org website, Mrs. Walker introduced coding through the use of the "unplugged" activities while Mrs. Stacey taught the basics of coding by having the students (K-5) complete the online challenges.





We were also able to purchase 12 coding robots called Dash from a company called Wonder Workshop. These robots were used in the computer lab with grades 1-5 to teach coding and explore the world of robotics. This is how they were used:

1. Students in grades 2-5 used an app to control the robots called Blockly. This app allowed students to write the code in order to complete 10 different areas of challenges to get the robot to accomplish different tasks such as driving through a maze, tell a Knock-Knock Joke, or perform an ice skating/dance routine. These activities not only teach coding but also incorporate math and science skills such as problem solving, velocity, measurement, angles, and averaging.





- 2. Students in grade 1 used a different section of the app to complete "teacher led" activities to teach them how to make the robot do simple tasks like move forward/backward, turn right/left, change light sensor colors, say Hi, etc.
- 3. As a culminating activity, students played a game called "Capture the Kingdom" with Mrs. Walker in the library. This game combined math skills such as problem solving, adding, and angles with coding and robotics. The object of the game is to move your robot from one end of the playing grid to the other collecting points along the way. The team with the most points at the end wins.
 - a. Teams take turns moving their robot on the playing field. Each team needs to work together to decide which spot on the playing grid they want to land and then write the code to get there. They collect points by picking up the playing card clipped inside section of the playing grid they landed on.
 - b. They repeat these steps for a total of 4 turns. On their 5th turn, they should be writing the code to have their robot land in their opponents "Kingdom" box. The game ends after round 5.
 - c. If both teams make it to the "Kingdom" box on the opposite end of the playing grid, they add up the points on their playing cards. They team with the highest points wins. If one team makes it and the other doesn't, the team that made it automatically wins no matter how many points the other team collected.







17-18 School Year Registration

Preparation for online registration continues. Online registration will take place July 10 through July 28. Instructions for registration will be emailed to parents as in the past. The process as a whole will be very similar to last year.

School Events

Field Day went very well. After some very concerning forecasts we had great weather. Students stayed with their grade level teacher this year and completed 11 different stations throughout the day. The stations included team building, relay races, balloon pop, water activities, ninja obstacle course in addition to a regular obstacle course and tug of war among others. The students really enjoyed the school provided lunch of hot dogs and chips. Thank you to all the parent volunteers, without their participation the day couldn't take place. Thank you to Kathie Sembach for her usual great organization.