



Coding 2.0

What 6th grade scientists have done
since January



In December students...

- experienced coding in the classroom via “unplugged” activities
- examined how coding is related to the scientific method
- participated in the Hour of Code
- wrote letters to Dr. Wiesenthal and Mrs. Sheldon about whether or not coding should be part of the science curriculum

Since January students...

- began their inquiry into the field of robotics using Cubelets
- applied what they had learned about coding to program a Scribbler Robot
- presented what they learned to other teachers
- debated whether or not robots help or hurt our society

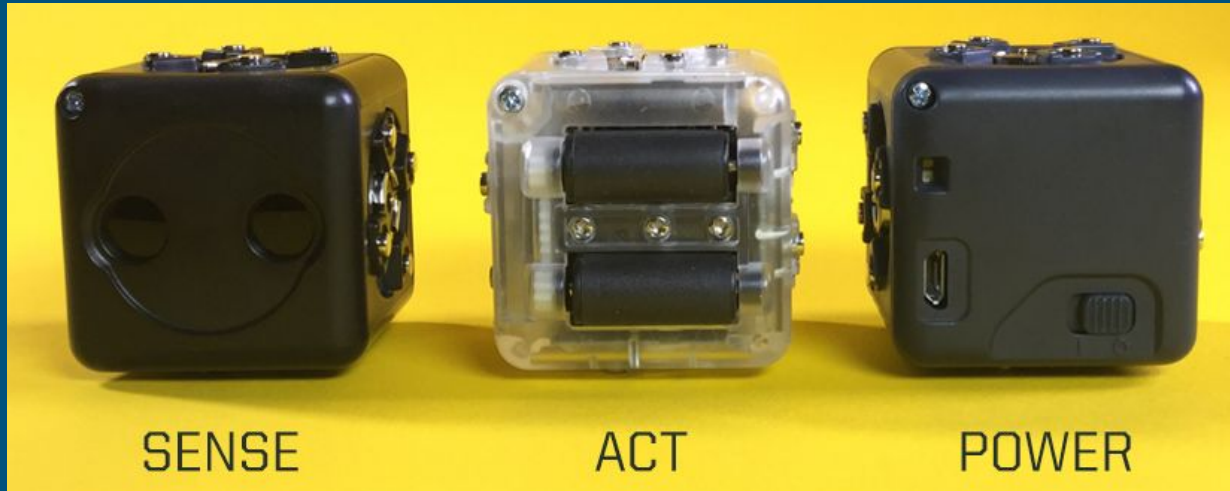
Technology to Go Program

- Program offered by Ulster BOCES
- Allows districts to borrow a variety of devices that support STEAM (Science, Technology, Engineering, Art, and Math) activities
- Robots that they lend include:
 - Cubelets
 - Ozobots
 - Scribbler 2 Robot



Cubelets

- Each cube has its own function and comes preprogrammed
- Students can combine them in different ways to create different robots



Cubelets

Aidan, Sascha and Finn were able to discover the function of additional cubelets as they created a new robot.



Scribbler 2.0 Robot



- Programmable robot
- Communicates via light and sound
- Moves on three wheels
- Uses light and infrared sensors
- Can draw patterns and lines as it moves

Scribbler Robot



Taishan used a graphical user interface (GUI) program to program her robot.

Sharing Learning with Other Teachers



Taking it one step further

- We read and analyzed several articles about the jobs that robots currently do
- We discussed and debated whether or not robots help society or hurt society
- Students developed their own claim and supported it with evidence



From this experience...

Students have learned how to problem solve and persevere



Thank You!

