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STEM PD Proposal

1. Coding Integration in K-8 Classrooms
2. My school recently received resources for coding instruction, Dash and Dot robots, that are not being used. I believe that despite my school seeking an increased STEM emphasis, coding has not been integrated due to lack of confidence and awareness of resources for classroom integration.
3. My proposed audience includes teachers at my K-8 school who are interested in learning more about integrating coding into their lessons. My target group is the first grade team, comprised of six individuals. These teachers instruct in all subject areas in first grade. They teach a total of 50 students.
4. Dash and Dot robots are very versatile in integrating subject-area standards. Math standards related to adding and subtracting, comparing shapes, counting, and using a ruler apply. Language arts standards in the realm of using language for specific purposes, developing understanding of word meanings, and making meaning from illustrations fit. Science standards in keeping records, asking questions, sorting, and those that relate to computational thinking all clearly apply.
5. I plan to ask the first grade team to allow me to speak during part of their weekly planning meeting. This meeting is held in the lead teacher's classroom. This classroom has 6 iPads which I have requested to have the Blockly app downloaded on to.
6. I hope to have the teachers examine the robots and get them out of the boxes, and for them to become familiar with the software and the curriculum support tools available. I'd also like to introduce them to some of the resources I explored in the Coding, Robotics, and 1:1 devices course. In addition, I'd like to give them a link to a few resources from NASA's site that I feel would be useful.
7. I plan to follow up by offering to plan for and set up a series of centers which allow small groups of students to become familiar with the robots and how to use them. I'd also like to offer a series of follow- up lessons which integrate coding with the math, science and language arts curriculum. I'll also ask the teachers to email me any comments or questions they may have.