

# Integrating Making into Instruction: *Beginning Robotics and Programming*

## Dash and Dot (ages 6+) and Cue (ages 11+)

Students are introduced to the ideas of robotics and programming through utilizing the robots of Dash, Dot, and Cue. The robots can use seven various apps that work through demos, challenges, and puzzles and also allow opportunities for free play. Students connect to the technology skills of block-based coding, text-based coding, voice detection, sound recording, infrared emitters (IR), object detection, programmable LEDs, and also have the ability to save programs.



Dash & Dot



Cue

## Aligned ISTE Standards

Standard 4 – Collaborator - Educators dedicate time to collaborate with both colleagues and students to improve practice, discover, and share resources and ideas, and solve problems.

Standard 5 – Designer - Educators design authentic, learner –driven activities and environments that recognize and accommodate learner variability.

## Applicable Maker Technology or Materials

Wonder Workshop

[www.makewonder.com](http://www.makewonder.com)



## Observations from the Field

Wonder Workshop has a variety of in-app challenges that are available free from the Apple App Store, Google Play Store, Microsoft Store, and the Amazon App Store. These challenges provide students hundreds of hours of STEM learning that is both fun and engaging. Students problem solve to give Dash, Dot, and Cue voice commands, explore loops, events, conditions, and sequences. Through the utilization of these beginning robots, students do not only learn about code but also engage in open-ended learning that teaches technology knowledge that is simple and accessible. Students gain confidence and creativity in their tech skills!



Scan the QR codes to download activity materials!



Want more information? Please contact  
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