

Teaching Algorithms and Growing STEM with Sphero



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TAP

The Technology Ambassador Program (TAP) at GGC strives to break the misconceptions of the IT field by providing fun workshops for students of all backgrounds. TAP students design engaging and fun outreach workshops to encourage interest in IT and STEM.

GOALS

The study is geared towards promoting IT as a "cool" or "fun" career path. This is accomplished by creating engaging learning activities such as programming a Sphero robot.

PROJECT DESCRIPTION

- Students will be given an introduction to Sphero
- Students will then get to experiment with Sphero.edu and block coding
- Students will learn about algorithms through relatable examples and apply their knowledge to block coding.
- Students test their algorithmic knowledge by programming Sphero to move through a maze via block coding.



WORKSHOP DESCRIPTION



- Tap Expo
 - College students to move around with a remote control via the Sphero EDU app.
- Super Saturday Series (S3)
 - Geared towards middle school students.
 - Students learn simple mechanics of Sphero and how to guide a robot through a simple

RESULTS



S3 showed amazing results with all the students being engaged and comprehending how to manipulate the robot using block coding. Some went above and beyond to create their own crash animations. For classroom workshops, all the college students enjoyed the workshop with 59% gaining interest in programming afterwards. The TAP Expo showed how our project can fun and engaging. Attendees of the Expo got to use a phone that could control Sphero around our maze or around the room. Some attendees also played a golf game with Sphero within the Sphero EDU app.

REFERENCES

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Interest in Programming after Workshop

