A Technology Enrichment Experience for Grades 6-8

The Comp-U-Dopt STEAM Team Program is a mystery themed project-based enrichment program that helps students explore how technology is used to solve real world problems. In this program, geared toward students in grades 6 to 8 in middle school, students put on their detective hats to solve the mystery of an art heist. At the end of the program, each participant receives a refurbished laptop computer to keep.

**Science** – Using sonar technology, students learn how to measure the distance between objects with sonar sensors. Using micro:bits and breadboards, students engage in MakeCode software to solve their first detective task of determining how the heisters were able to escape the museum with a sculpture.

**Technology** – Students will understand the basics of image representation drawing with pixels based on a digital code. By learning how to convert text to binary, students not only learn how to send information digitally, but are exposed to the different parts of computer hardware assembly. To solve their second detective task, they must reassemble the computer that the art heisters disassembled.

**Engineering** – Students explore how engineering is used to move heavy objects by creating a machine that can do the work for you. Utilizing a variety of hardware and MakeCode software, students will build a robotic car to solve their third detective task of recreating the getaway vehicle.

**Arts** – By creating and designing images in 3D using Tinkercad, students engage with imaging software to solve their fourth detective task of 3D printing a replica of the stolen art sculpture. All individually and uniquely created 3D designs will be printed on a 3D printer for students to take home.

**Mathematics** – Students engage with geolocation to track coordinates in Google Earth to determine where he heisters are located. For their last detective task, they use Scratch coding to create their own video game.

Bring Comp-U-Dopt STEAM Team to Your Students

For this semester-long after school enrichment program, partners must provide a site manager. Sites must also provide wireless internet access as well as dedicated classroom space with flexible physical space for activities. Comp-U-Dopt will bring the rest!

As part of our mission to provide technology access and education to underserved students free of charge, we ask partners to cover some of the hard costs of supplies. **A 15-student license includes:**

- 25 hours of programming, two hours a week for 12 weeks
- Experienced Comp-U-Dopt trainer to facilitate lessons on-site
- All supplies and technology needed for the program
- A refurbished laptop for each student to keep

Interested in bringing this program to your campus? Email us at info@compudopt.org

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