UNIT 6 OVERVIEW

THE "BIG IDEA"

In this final unit, students will build on their creative computing experiences by engaging in the design of an open-ended project of their choosing. To help you and your students tackle this open-ended design experience, we were inspired to frame this unit as a hackathon. With its ethos of embracing just-in-time learning and problem solving, encouraging iterative planning-making-sharing, and celebrating a connected and collaborative environment, the hackathon is an ideal creative computing culminating experience.

School is done but
some students do not
seem to notice.
Busy debugging
their #scratch game.
A team effort.
@Sheena1010

LEARNING OBJECTIVES

Students will:

+ be introduced to the format of a hackathon event
+ demonstrate knowledge of computational concepts (sequence, loops, events, parallelism, conditionals, operators, data) and practices (experimenting and iterating, testing and debugging, reusing and remixing, abstracting and modularizing) by defining, developing, and presenting a personally meaningful, self-directed project
+ have multiple opportunities for collaboration by working in peer teams, sharing skills, and giving and receiving multiple rounds of feedback

KEY WORDS, CONCEPTS, & PRACTICES

+ hackathon
+ design sprint
+ project pitch
+ unfocus group
+ showcase

NOTES

+ This unit can accommodate either independent or collaborative group projects. Pick one option or allow students to choose.

WHAT IS A HACKATHON?

"Hack" has a negative connotation to some – but it has a long history of standing for playfulness, curiosity, persistence, and creativity. One of our favorite definitions frames "hack" as "an appropriate application of ingenuity". With this definition, what better capacity for young learners than learning how to "hack"?

A hackathon takes the playful ingenuity of hacking – and situates it in an intensely focused and time-limited context. In this unit, learners will brainstorm an idea, develop a project, and showcase a final prototype using an iterative plan-make-share cycle.

Hackathons provide excellent opportunities for learners to invent their own personally meaningful and relevant projects to work on, which can be developed as independent final projects or in collaborative teams. It is a chance for students to demonstrate their knowledge in Scratch, expand upon current skills, and develop and test ideas within a collaborative, creative, flexible, and playful learning environment.

HOW DOES IT WORK?

Throughout the duration of the hackathon, students will engage in iterative cycles in which they **PLAN**, **MAKE**, and **SHARE**. This iterative cycle encourages students to engage in meaningful acts of ideation, creation, and reflection.

PLAN

What do you want to work on? Brainstorm ideas and prepare a plan of action!

MAKE

Design and develop project creations with resources and help from others.

SHARE

Share your project with others and gather feedback to guide your next steps!

POSSIBLE PATH

The hackathon-inspired activities for this unit are designed to challenge students to build up a more complex project within an open-ended and collaborative learning environment. All of the important culture-building we've been doing – encouraging risk-taking and persistence, recognizing failures as learning opportunities, focusing on process over product, and cultivating a culture of cooperation and fun – culminates in this unit.

To help you get started, we have included a suggested sequence of activities that follow the plan-make-share design cycle.