Lesson 18 - Making It Work

Learning Goals

- Students will begin coding their final projects in Sprite Lab.
- Students will reflect on their work and identify the parts of their code that they need assistance with.

Preparation

- Review students' Draft Algorithm on their Project Planning Sheets before this session. Prepare to return these planning sheets to each student in the group, with specific feedback on how they could adjust their plan to make their project more achievable. (See detailed instructions at the end of Lesson 17.)
- Project Planning Sheet: Make sure that students have access to a printed or digital copy of this sheet. They will work on the **Try** page during this lesson.
- Watch PD Videos #10 and #11 to learn more about how certain UDL and CRP teacher practices are integrated into this lesson in alignment with Project-Based Learning elements.

Links

For teachers:

- **Project Planning Sheet**
- Video #9: PBL Step 5 PD resource
- Video #10: PBL Step 6 PD resource
- Video #11: PBL Step 7 PD resource

Teaching Guide

Warm Up (10 minutes)

Equitable Teacher Practices



7.UDL.b

Encourage students to reflect on feedback and make revisions (model norms that value students' perspectives on this process).



7.CRP.a

Provide multiple types of feedback.

- Distribute reviewed Project Planning Sheets to students. Allow several minutes for students, with a self-selected partner or two, to consider the feedback you have provided and to figure out how they might make adjustments.
 - Circulate through the room and assist students as they interpret your feedback and collaborate with their peers on modifications to their algorithms.

Main Activity (25 minutes)

Equitable Teacher Practices



5.UDL.d Provide tools and resources that structure or scaffold self-management or collaboration.

6.UDL.c Model strategies for persistence and help-seeking.

- Once students are happy with their modified plans, they should begin assembling the sprites and backgrounds they need for their projects. They can search for, create, or import sprites and backgrounds in Sprite Lab. As needed, remind students how to do these things or how to remix a project.
 - Some students may get very involved in the aesthetic features of their project. As needed, remind

them that they can continue to work on the appearance of their sprites and backgrounds after they have substantially coded their project.

- Have each student create a unique name for their individual project.
 - Tell students that while they may continue to collaborate with their peers for inspiration and feedback, they each will need to work on their individual projects in Sprite Lab.
 - Have students begin coding sections of their individual projects in Sprite Lab using the revised algorithm on their <u>Project Planning Sheet</u> as a guide. As needed, remind them they can use and remix code from their peers, in addition to projects they have seen throughout the module.
 - Direct students to the **Try** page of their <u>Project Planning Sheet</u>. They can use this space to write down questions that come up as they work, jot down notes that they might need in the future, or use as scratch space to think through problems.
 - Draw students' attention to the checklist at the bottom of the **Try** page. Encourage them to use this
 checklist as they reflect on their process.
 - Students should spend the majority of the time actually getting their project code to work. Circulate and assist students towards this goal.

Wrap Up (15 minutes)

- Ask students to stop coding and consider the progress they made towards coding their project, based on their planning sheets. With a partner or two, have students discuss these reflection prompts:
 - What parts of my project are working well?
 - What parts of my project might I need to change?
 - What parts of my project do I need help with? Where or from whom can I get this help?
- Have students make notes on their <u>Project Planning Sheet</u> or write a separate reflection list. They will consult this list at the beginning of <u>Lesson 19</u> or the next time they work independently on their projects.

Give anonymous feedback on this lesson. (optional)