

project creation | prototype



learning goal

Have increased self-efficacy and feel more empowered to design and build new and meaningful AI artifacts.

students will ...

- Create a full plan for their project, detailing the project components
- Make prototypes in Scratch and Teachable Machine
- Engage in community member review of their work
- Revise their concept to create a final set of prototyped materials

key vocab

n/a

prior knowledge

- Students should have selected their final idea in the Ideation step.

materials setup

- Ensure students have access to Scratch and Teachable Machine.

warm-up | independent | 5 min

Have students reflect:

- What's a prototype? Why are they helpful?

Prompt students to share their responses.

intro | whole class | 2-3 min

Introduce students to the prototype stage. In this step, groups will create basic Scratch projects and Teachable Machine models based on the idea they selected.

At the end of this step, students check in with their community members for feedback and evaluate if they would like to continue with their idea or choose another to move forward with.

teacher notes

Because students have to think big-picture about their project, the prototyping stage is a great chance to catch where students need more support or review.

planning | sma groups | 10-15 min

Prompt students to plan their project, filling out their student workbook with the different parts of the project they will need to build, describing how each part functions.

prototyping | sma groups | 45-60 min

Dividing up the work between themselves, groups should create their prototypes. At the end of this time, groups should have basic versions of their Teachable Machine models and Scratch projects.

presentation | sma groups | 10-15 min

Students present their work to their community members, noting feedback in their student workbooks.

re action | independent | 5-10 min

Have students reflect on the prototyping process in their workbooks or using an assessment card.

teacher notes

These prototypes should be very simple proofs of concept. A successful prototype demonstrates their idea to the community member and reveals to students complexities they need to consider during the actual build stage.