This planning packet aids in designing maker-centered learning progressions—sequences or collections of learning experiences that build on and integrate with one another to support learners to arrive at an overarching learning goal.

This packet draws on the principles of backward design developed in the Understanding by Design® framework but introduces a specific focus on integrating making into learning progressions. Making can support shortand long-term learning goals in many different ways, by helping learners to develop initial understanding, build on or deepen understanding, or apply understanding. For tips on using any of the above approaches in your own activities, check out the Approaches to Maker Education resource. The three templates included—Learning Progression Map, Activity Planning Card, and Learning Assessment Card—work together to offer structure to:

- Formulate the guiding questions and core understandings your learners will tackle and develop throughout
- Plan and document individual activities
- · Identify where and how making will enhance learning along the way
- Determine how to make the signs of learning visible in order to assess learning

# LEARNING PROGRESSION MAP

- ✓ Set big-picture goals for your learning progression.
- ✓ Formulate essential questions and enduring understandings your learners will tackle and develop throughout.
- ✓ Assemble and arrange cards to visually map the relationships between learning experiences.

# **ACTIVITY PLANNING CARD**

- Create multiple activity cards to plan and document making and learning.
- Document, capture, and collect individual activities.
- Identify where and how making will enhance learning along the way.

# LEARNING ASSESSMENT CARD

- Determine how to make signs of learning visible in order to assess learning.
- Plot how you and learners will capture signs of learning.
- Determine how you and learners will use what you've captured to assess learning against the goals you set.

## SET THE OVERARCHING GOAL

Your progression will support learners to address many questions and achieve multiple related understandings. How can you distill these questions and understandings into one question and one understanding?

#### **Core Understanding**

What lasting understanding will this progression develop?

#### **CHART THE COURSE**

Now plan out your progression. You can start by sketching out an overview or jump directly into planning individual activities and assessments using the **Activity Planning Cards** and the **Learning Assessment Cards** — print out, mix, match, and move them around.

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**Overview** 

#### **Guiding Question**

What question will learners be investigating?

#### **DETERMINE SPECIFIC LEARNING GOALS**

What learning goals will you set for your learners to develop core understanding? How will the different kinds of learning goals integrate with one another? Are there themes, cycles, or routines of work that thread these goals together?

**Content** (e.g., ratios in math)

Skill (e.g., pattern recognition or soldering)

Mindset (e.g., critical thinking or collaboration)

#### **SPECIFIC LEARNING GOALS** (CONTENT, SKILL, MINDSET)

What are the learning goals of this activity?

# **NARRATIVE + FACILITATION**

Describe your activity. What structures, scaffolds, and supports will you create to guide your learners toward the learning goals? How will you facilitate learning in the moment?

## **MEDIA OF MAKING**

What tools, materials, and media of making will support your learners to arrive at the learning goals?

## APPROACH

How will making support the learning in this activity? Choose one approach from the Approaches to Maker Education resource.

#### WHAT LEARNING GOALS WOULD YOU LIKE TO ASSESS?

These can relate to a specific activity or to the learning progression in general.

# **ASSESSMENT PLAN**

What assessment tool(s) will you use to capture evidence of learning related to your learning goals(s), whether in a specific activity or for the learning progression in general? Consider who is assessing and being assessed, what is being assessed, when and where assessment takes place, and how assessment captures and delivers signs of learning.

# HOW WILL YOU USE THIS EVIDENCE?

Describe how you'll use or apply your assessment.