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Humans are full of great questions.

These questions lead us, compel us, to engage in an inquiry process that helps us build knowledge and make meaning of our world.

Through this process, we have a golden opportunity as educators to help learners develop the critical skills, strategies, and know-how to become competent learners and critical thinkers. In order to do that, we first must make these *invisible* thinking and learning processes *visible*. That's what the Learning Cycle is all about.

In a nutshell:

The stages of the Learning Cycle represent the *cognitive and metacognitive processes* that help learners create meaningful relevant projects, artifacts, designs and products.

The implication? We need to explicitly teach and support learners as they move through these critical processes.

The Outer Circle

The “outer circle” represents the key stages of a creative process. Each stage supports competency development while learners explore a compelling question or issue and work toward the creation of a product or performance through which learners apply their developing skills and knowledge to an authentic task.

This arc spans 2-8 weeks, give or take, depending on scope and complexity. For early elementary, units may be shorter in length to support high-volume production early on.

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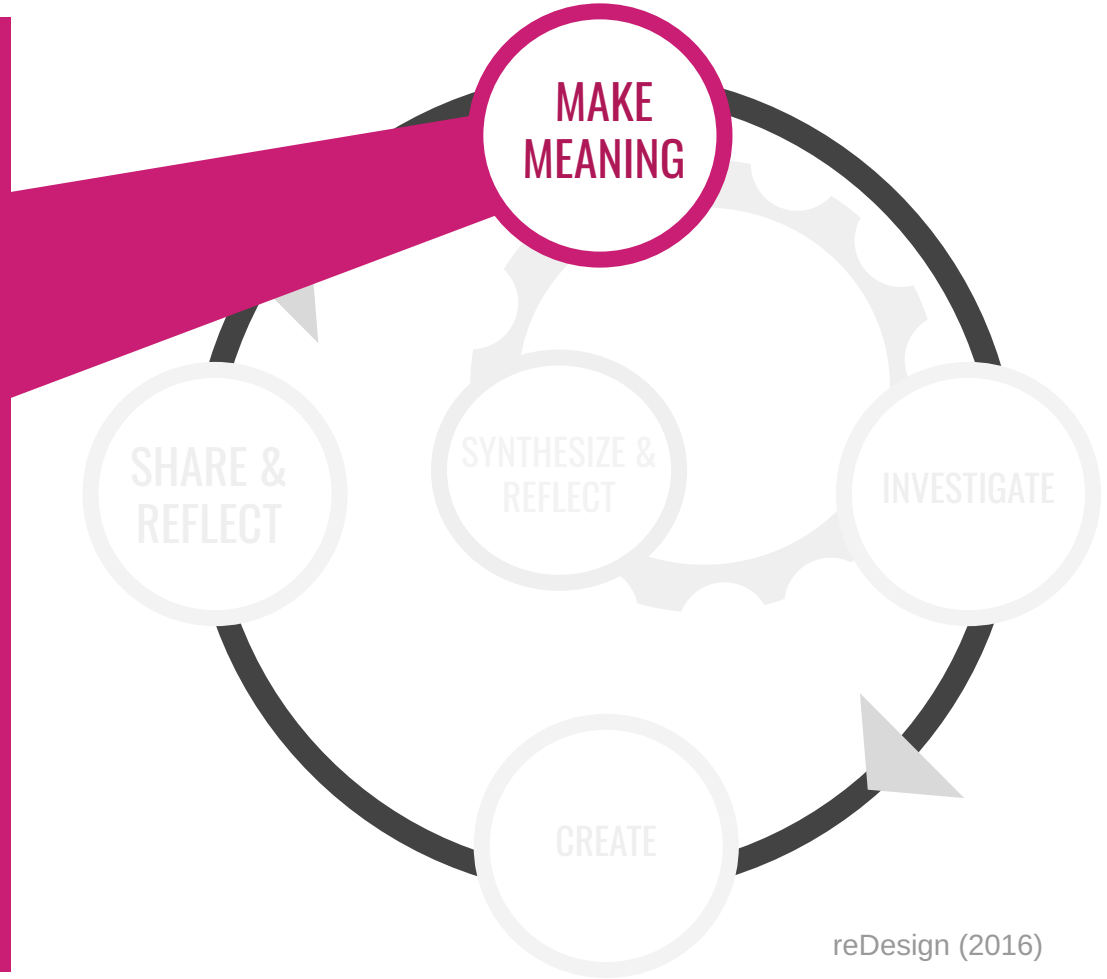
AT THE *PROJECT* LEVEL:

MAKE MEANING

Launch into the cycle with early exploration and context-setting.

- ★ **Explore the product/project; preview task expectations and/or success criteria**
- ★ **Determine topics, and/or generate questions**
- ★ **Explore the Inquiry Frame: Activate schema and build background knowledge**
- ★ **Determine audience, purpose, and format**



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AT THE ***PROJECT*** LEVEL:

INVESTIGATE

Deepen knowledge through inquiry and prepare for the "Create" stage.

- ★ **Analyze multiple perspectives, methods, or claims**
- ★ **Study the work of experts**
- ★ **Gather and structure new information to support your purpose**
- ★ **Work with numerical data**
- ★ **Formulate a main idea**

AT THE ***PROJECT*** LEVEL:

CREATE

Demonstrate new knowledge and skills through the creation of an authentic product or performance.

- ★ **Outline**
- ★ **Draft or prototype**
- ★ **Give and receive feedback**
- ★ **Revise and edit**
- ★ **Test and iterate**
- ★ **Finalize final product**

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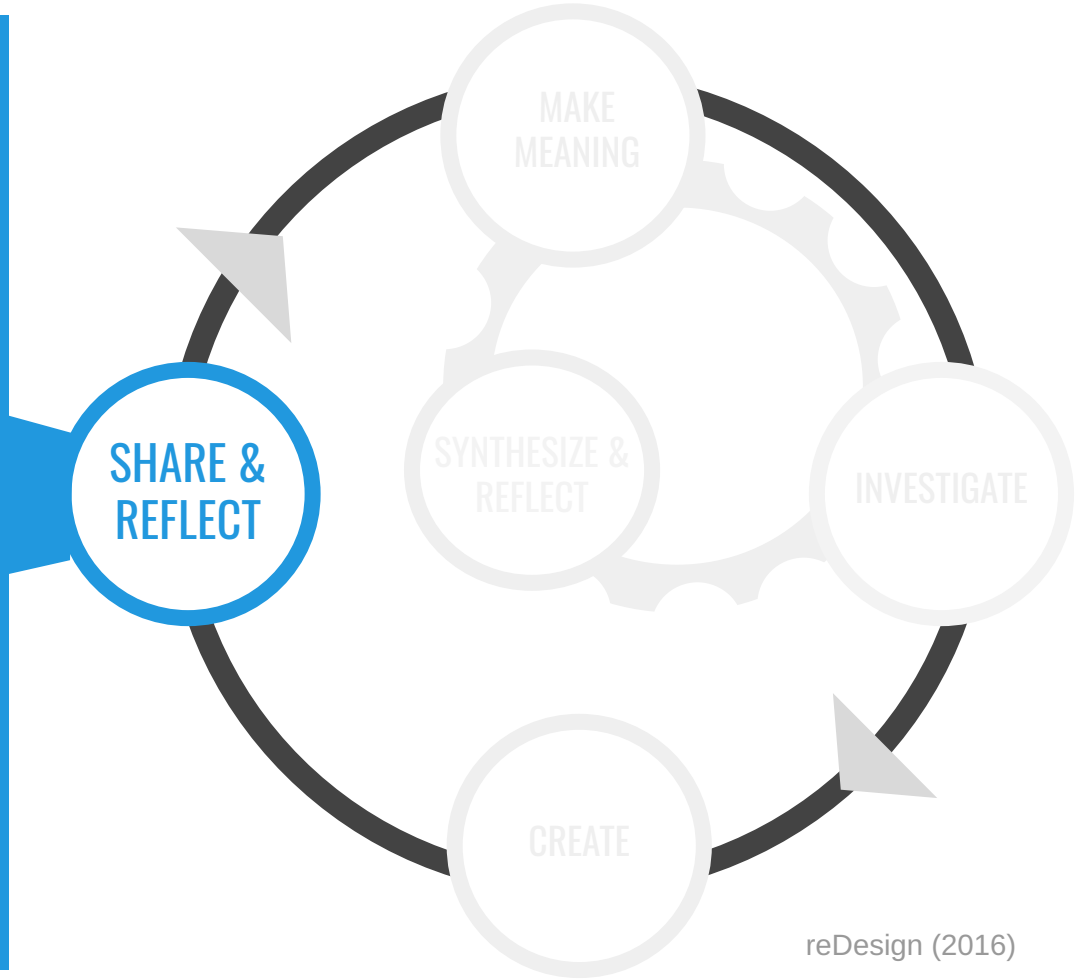
AT THE *PROJECT* LEVEL:

SHARE & REFLECT

Share your work with others and reflect on the learning journey.

- ★ **Practice or rehearse**
- ★ **Present, publish, and/or perform for an audience**
- ★ **Reflect on the full inquiry and creation experience**



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The Inner Circle

The “inner circle” structures learning experiences. It reflects a “gradual release of responsibility” approach (Pearson & Gallagher, 1983), with adaptations for math to ensure productive struggle (Kapur, 2014) precedes explicit instruction.

These learning experiences are purposefully and directly connected to the larger arc (outer circle), such that successful, recursive movement through this inner cycle enables progress through the four stages of a project.

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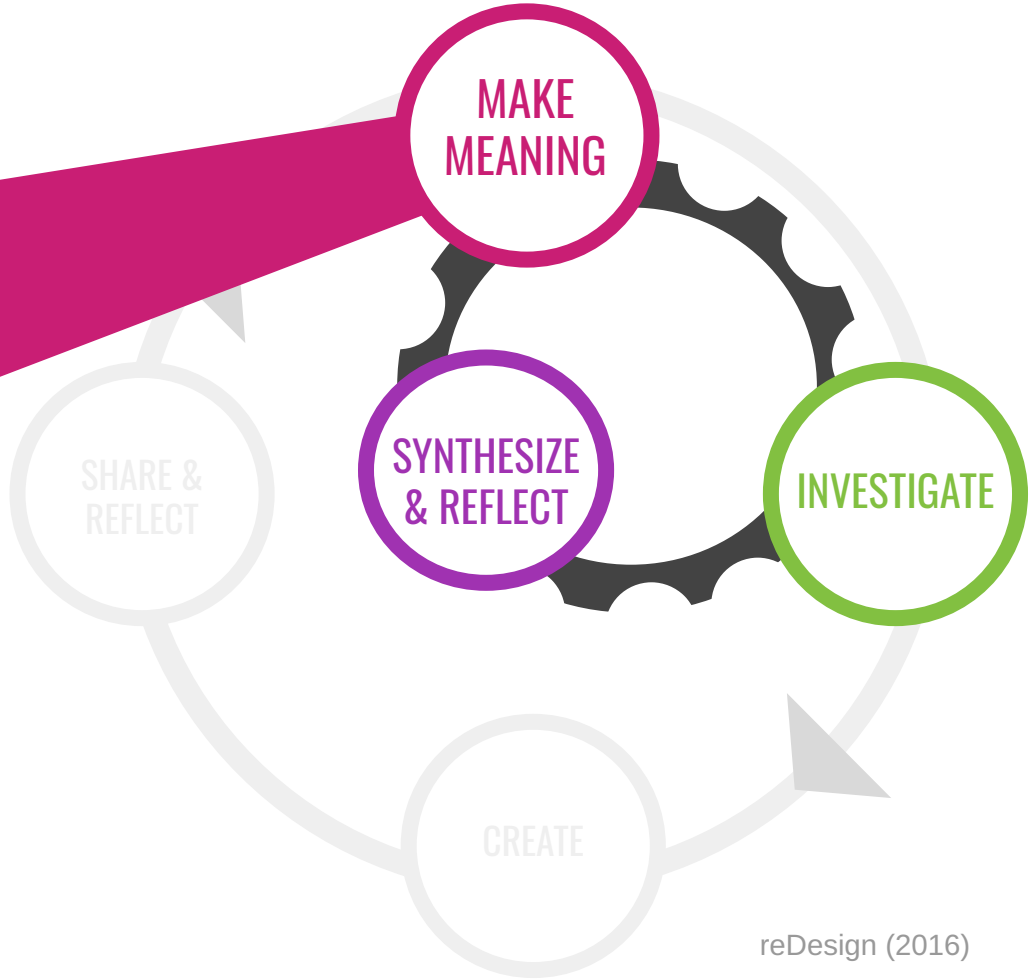
AT THE *LEARNING EXPERIENCE* LEVEL:

MAKE MEANING

- ★ Activate prior knowledge and cultural references
- ★ Orient learners to the lesson's purpose and success criteria
- ★ Introduce new material, while explicitly teaching skills and strategies (i.e., metacognitive modeling, explanation, demonstration, or inquiry method)



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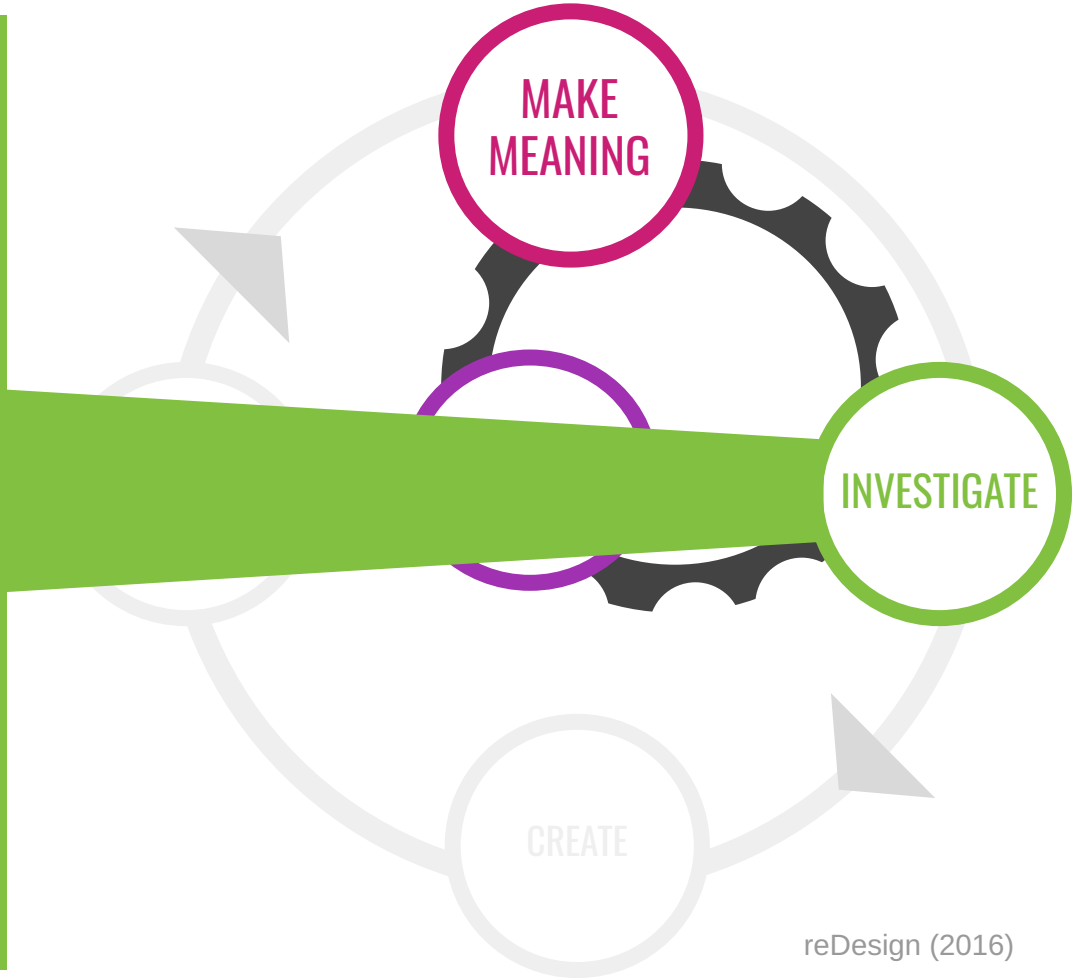
AT THE *LEARNING EXPERIENCE* LEVEL:

INVESTIGATE

- ★ **Learners practice and apply new skills and concepts**
- ★ **Learners collaborate with others while make meaningful decisions about their learning time**
- ★ **Teacher facilitates check-ins and conferences with students, gathering real-time data and providing timely, individualized supports**



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AT THE *LEARNING EXPERIENCE* LEVEL:

SYNTHESIZE & REFLECT

- ★ Learners are prompted to consciously connect old and new understandings, and articulate new insights
- ★ Learners demonstrate and/or reflect on evidence of meeting the learning target
- ★ Learners reflect on their experience, decision-making, use of strategies

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RESOURCES FOR
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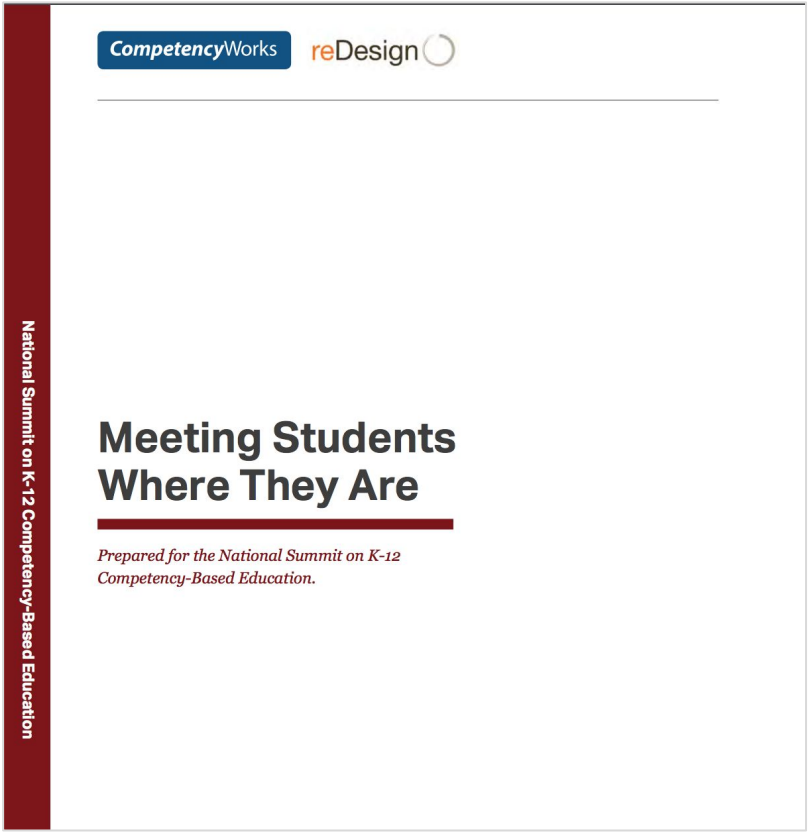

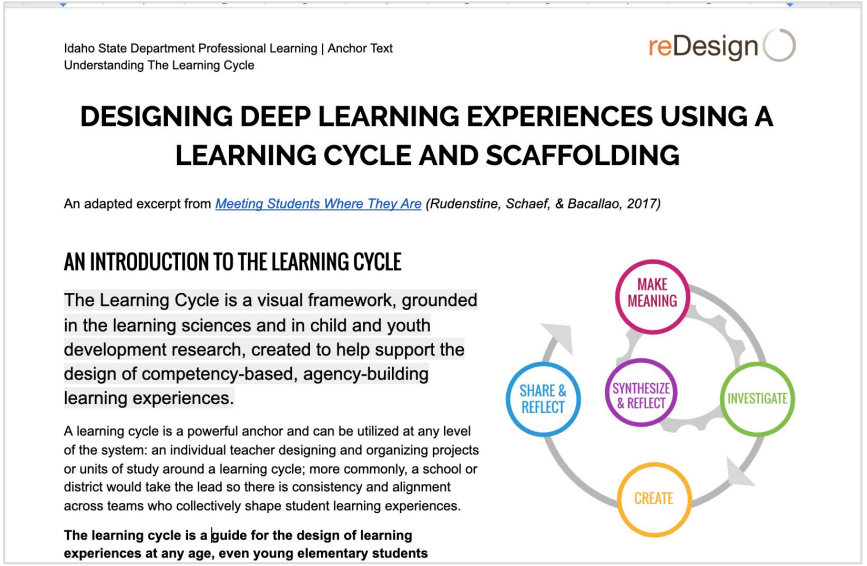

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