

COMPUTATIONAL THINKING ACTIVITY

Purpose: The purpose of the Computational Thinking Activity is to:

- Apply what you have learned in EDU 211;
- Develop an activity(ies)/ learning experience(s) you can use with children;
- Integrate computational thinking into your work with children.

Task: Create learning experience(s) to use with children that embed computational thinking – decomposition, patterns, abstraction, algorithms, and debugging.

Steps: Follow these steps to create learning experience(s) that embed computational thinking:

1. Review the elements of computational thinking -- decomposition, patterns, abstraction, algorithms, and debugging.
2. Reflect on your work with children, when/ how/ where can you embed computational thinking?
3. Review examples of activities that integrate computational thinking from each module and session.
4. Brainstorm learning experience(s) that align with your work with children and integrate computational thinking
5. Ensure you have included the 5 elements of computational thinking in your learning experience(s)?
6. How will you share the learning experience(s) with your peers?

This activity has 2 parts.

1. Developing an Activity
2. Sharing your Activity

Developing an Activity

Create a learning experience(s) you can use with your students which embeds computational thinking. The experience(s) should:

1. Be learning experience(s) you can use with your students
2. include all components of computational thinking – decomposition, patterns, abstraction, algorithms, and debugging
3. list the learning outcomes & how they will be measured
4. identify the materials needed for the learning experience
5. describe the steps of the learning experience
6. you can develop 1 learning experience, or more, but if multiple learning experiences are planned they should be linked/connected
7. The format to submit your learning experience can be a paper, video, graphic, digital, etc.

Presenting Activities

After creating the activities, you will share them with peers in our learning community.

The Self-Assessment Checklist below describes how your Computational Thinking Activity will be assessed at the end of the course.

Self-Assessment Checklist, if you can answer 'yes' to all questions below, you will earn 1 point:

TASK	DOES THE LEARNING EXPERIENCE:	Y/N
ACTIVITY	Align with your role/ work with students (curriculum, age of students, etc.)?	
LEARNING OUTCOMES	Include learning outcomes and how they will be assessed?	
RESOURCES	Include the materials & steps needed for the learning experience?	
ELEMENTS OF COMPUTATIONAL THINKING	Include the computational thinking elements – decomposition, patterns, abstraction, algorithms, and debugging?	
SHARING	Share the activity with other members of the learning community in a clear, coherent, manner?	

