

# Bridge-Building and Resilience

We know STEM activities provide excellent opportunities for 'hands-on, minds-on' learning. Additionally, STEM-related concepts often parallel social emotional teaching. Research shows it is helpful to the learning process when we use hands-on programming to form connections that reach across topic areas. The following activity demonstrates how to explore the concept of social and emotional strength and resilience through a fun, simple bridge-building activity.

## Social Emotional Learning

### Competency:

- Self-Awareness/Social Awareness

### Connection Keys:

- Hands-on equals minds-on

### Purpose:

- Define the concept of resilience.
- Create a physical example of resilience.
- Discover ways participants are resilient and explore how to increase resilience.

### Materials:

- Popsicle sticks
- Masking Tape
- Scissors
- Straws
- Gap to build bridge over
- Weighted object(s) for testing
- Zoom whiteboard (if Virtual)

### Success Indicators:

- Participants can identify ways they can build their resilience and strength in their daily lives.
- participants can define resilience in physical and emotional terms.
- participants share that they enjoy building and testing their bridges.

## Activity

- Prompt participants to use materials from home OR provide kits for building together virtually.
- Share your screen and use the whiteboard feature to draw a bridge together, stopping at various points to discuss features of the bridge related to strength and resilience.
- After completing the drawing, give participants the opportunity to work on the STEM activity of building and testing their bridges with weights, hot wheels cars, or other objects.
- Ask participants to share their building progress along the way and use struggles and successes to make connections between the processes of building strong bridges and building their psychological strength.
- Sample discussion questions include:
  1. *Bridges help people travel safely over rivers, roads, and canyons. What bridges do you build in your life? Why?*
  2. *Support beams help keep a bridge from collapsing under stress. What are some of your support beams? How do those things/people help you when you feel you are collapsing or stressed?*
  3. *Sometimes bridges fall and we have to rebuild them. Tell about a tough time when your feelings just felt too heavy.*
  4. *Special materials help to hold each part of a bridge together. Share some connections that help hold you together.*
  5. *How do you 'bounce back' when tough things happen?*

For more information and activity resources visit <https://u.osu.edu/4hjournal/>

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