



# Pathways to Resilience Action Projects - Community Resilience Expo

# **Setting the Stage**

The final component of the HEART Force curriculum involves students using their knowledge of hazards, their community and resilience to take action to improve the resilience of their own communities. HEART Force provides three pathways for these resilience action projects (each of which can serve as the experiential learning project required for the Seal of Climate Literacy).

- Host a Community Resilience Expo
- Take part in community service projects
- Advocate for policy change

This document goes over what to consider when planning a Community Resilience Expo.

The Community Resilience Expo is one pathway toward a resilience action project for the HEART Force curriculum culmination. In this pathway, students will share what they've learned about real-world resilience strategies in a community setting. The Expo event is meant to be an opportunity for students to share their learning with an authentic audience and participate in the community-level conversation about resilience. If the community isn't talking about resilience currently, the Expo can be an opportunity for students to start the conversation.

The HEART Force Team at CIRES Center for Education, Engagement and Evaluation (CEEE) is available to assist you in making community connections, thinking about logistics, and helping however we can. Modest funding for each school Expo is available from HEART Force; please contact the CEEE team if you would like to request funding for your expo (ceee@colorado.edu).

In all pathways, we encourage you to invite local experts into the classroom to be guest speakers or to be interviewed. See our resource on <u>contacting community experts</u> for guidance on finding and bringing experts into your classroom.









Sub-Unit Overview	
Grade Level	Middle/High School
Instructional Time	1-4 weeks (total time needed)
Standards Alignment	NGSS: MS-ESS3-2, HS-ESS3-1 CDE: MS3.ESS.GLE9, HS3.ESS.GLE9
Anchoring Phenomenon	Effective community planning can increase the ability of a community to be resilient and respond to and recover from hazards more efficiently.
Driving Question	What strategies can we use to make our community stronger if we experience a wildfire, a drought, or a flood?
Learning Goals	<ul> <li>Students will develop ideas based on their knowledge of hazards, their community, and resilience in order to increase resilience in their community.</li> <li>Students will present their ideas to engage in dialogue with community members about resilience.</li> </ul>
Instructional Strategies	<ul> <li>Project Based Learning is a strategy used for the entire Expo curriculum, in which students learn by working for an extended period of time to answer a driving question that pertains to a locally-relevant issue. PBL Works (formerly the Buck Institute) is a go-to resource for learning more about Project Based Learning.</li> <li>Design Thinking or the Design Process is a structured framework used to identify challenges, gather information, generate potential solutions, refine ideas, and test solutions. The framework has its roots in entrepreneurial and engineering professions. For more resources, check out Design Thinking for Educators, Stanford's d.school K12 Lab network, and John Spencer's Launch Cycle resources. In the Expo curriculum, teachers can choose to use the design process in a design challenge, or choose an alternate pathway and have students communicate existing resilience plans.</li> </ul>







# **Expo Sub-Unit Overview**

The HEART Force Expo curriculum is built towards one question: "How can we help make our community stronger if we experience a [wildfire, drought, or flood]?"

During this sub-unit, students can choose to communicate existing plans (about 1 week of instructional time) or design their own resilience strategy for local resilience efforts (about 2-3 weeks of instructional time).

The following sections provide guidance for planning the Expo sub-unit:

- Communicate Existing Plans Instructional Sequence
- Design a Resilient Future Instructional Sequence

The <u>HEART Force Unit Overview</u> gives a roadmap of lessons available and provides several example instructional calendars for different time frames and lesson sequences that work for your classroom and schedule.

Once you decide which instructional sequence your class will utilize, the following sections provide guidance for planning the expo itself:

- Student Presentation Guidelines
- Planning the Community Resilience Expo:









# → Communicate Existing Plans Instructional Sequence

In this instructional sequence, students will learn more about their community's plans for hazard mitigation, emergency preparedness, and/or resilience. Students will then choose a specific topic to focus on, learn more about existing plans through individual research, and develop a product to communicate the plan to their peers and/or their community.

Lessons to include in this sequence are:

- 1. Colorado Resiliency Framework Story Map Lesson (50 min)
  - (wildfire)
  - (flood)
- 2. Exploring Local Hazard Mitigation Plans Lesson (50 min)
- 3. Community Resilience Expo

Encourage students to choose a particular topic to focus on communicating in their presentation. Each Hazard Mitigation Plan should outline Goals and Objectives for Hazard Mitigation. Students can choose an objective from this list to research and present, or choose one of the sectors from the Colorado Resiliency Framework to focus on (see the Colorado Resiliency Framework Lesson).

# → Design a Resilient Future Instructional Sequence

In this instructional sequence, students will use design thinking to develop resilience strategies for their community. Design Thinking, or the Design Process is a process used by engineers, entrepreneurs, and change makers around the world to solve problems. The Design Process can be utilized on a rapid scale and completed in a few hours or can be stretched out to last a few weeks in the classroom.

Lessons to include in this sequence are:

- 1. Design a Resilient Future Design Challenge (66-235 minutes)
- 2. Colorado Resiliency Framework Story Map Lesson (50 min)
  - (<u>wildfire</u>)
  - (flood)
- 3. Exploring Local Hazard Mitigation Plans Lesson (50 min)
- 4. Community Resilience Expo

The Design a Resilient Future Teacher Guide gives thorough instructions on how to facilitate a Design Challenge in your classroom. As you run the challenge, make sure to take advantage of the additional resources linked in the Teacher Guide, and be flexible to meet students' needs as they take ownership of their learning.









#### → Student Presentations Guidelines

No matter the format of your community resilience expo, students will be asked to communicate their learning. Students have several options to present their ideas. Give students options for their final product that fit best with the chosen format of your Community Resilience Expo. Use the questions below to guide their presentation:

- What is the mitigation goal or objective?
- What steps are being taken to reach the objective? Who is responsible for leading the effort?
- Why is this objective important?
- What challenges might planners encounter in reaching this objective?
- How can community members help?

Suggested formats and guidelines for presentation formats:

- Oral presentation: Give a 3 to 5 minute presentation. Use visual aids (e.g., slideshow) as needed, and make sure that all members of your group contribute equally to the presentation.
- Poster: Create a poster using a tri-fold board, or an academic poster (32" x 46", ~\$10 printing cost at a blueprint printing store) to illustrate your ideas. Prepare a short presentation (2 to 5 minutes) to explain your idea using the visuals on your poster.
- Video: Create a 3 to 5 minute video to pitch your idea. Use engaging visuals, interviews, and/or skits to convince your audience to adopt your idea.
- Website: Create a website to show and tell people why your idea should be adopted in the community. Use engaging visuals, and create a resource for community members to learn more about resilience in their community.
- Local media: Write a Letter to the Editor to pitch your idea to the public, and explain why building community resilience is important.
- Podcast: Create a podcast or radio spot to highlight the importance of your idea. Include interviews with local experts, if possible.
- Oral history: Collect oral history from residents who have been in your community a long time
  and who have experienced some sort of hazard. Develop a podcast or a short pamphlet to
  highlight their personal stories and create a resource for community members to learn how to
  respond to hazards in the future.









# Planning the Community Resilience Expo

### **Community Resilience Expo Format Options**

- Community event at a public venue (school, library, community center)
- Presentation at a local city council, county commissioner, or planning committee meeting (reach out to local planners and government officials before you begin the unit to learn about local efforts and to see if there are any planned events or projects that students could participate in and/or present at)
- Presentation at a school board meeting
- School event during lunch or assembly time. Invite local experts and community members to participate.
- Write a newspaper article or see if students can be interviewed by a local radio station. Note:
   This option may not be ideal as it doesn't provide an avenue for feedback for students, but it could be a great opportunity for students to share their ideas community-wide.

# **Community Resilience Expo Activity Options**

- Student presentations (posters, presentations, video presentation)
- Presentation by local expert (a local community planner, a representative from the U.S. Forest Service, a faculty member from a local university, etc.)
- HEART Force game: Students could facilitate a round of the HEART Force game for their classmates and/or community members
- Community discussion: Students could facilitate a community discussion about resilience. For
  example, ask attendees to create a list of community resources/skills available in case of an
  emergency (e.g., the fire department has five sets of ham radios, Bob has a chainsaw, Rick has
  a four-wheeler, Gina has a generator, etc.). Or consider using the World Café format to facilitate
  the discussion.
- Career fair: Invite local professionals who may think about resilience in their daily job to come talk to students about what their job is like.

#### Community Resilience Expo Logistics to Consider during Planning

- Who would you like to invite (e.g., students, other teachers, administration, parents, younger students (consider inviting local elementary students to the Expo), community members, local government officials, local experts)? We suggest reaching out to these folks as soon as possible
- How will you get the word out about the event? Will you send invitations? Will you post an event listing in the local newspaper?
- Where will the event be held?
- What time of day will the event be?
- Will you have food or snacks at the event? What would you like attendees to take away from the event? What is one thing you'd like them to remember?
- Do you have any sort of budget available for the event? Could you ask your administration for funding? (Note: Limited funding for Expos is available from the CIRES CEEE team. To learn more, email ceee@colorado.edu).





