GLOBAL HEALTH CONNECT

A Card Game for Climate Action

Lesson Guide Booklet

Smithsonian
Science Education Center

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The name Global Health Connect was selected because it captures both the practical and educational goals of the game. The term "global" reflects the international network of local student clubs the game supports, while "connect" emphasizes the critical relationships students explore, between climate hazards, human health symptoms, and actions, as well as the connections among peers worldwide.

STANDARD CONNECTIONS

NGSS Performance Expectation Connections

GRADES 3–5

Natural hazards: A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards, but can take steps to reduce their impact. (ESS3.B-E1)

Cause and effect: Cause-and-effect relationships are routinely identified, tested, and used to explain change. (CE-E1)

Analyzing and interpreting data: Analyze and interpret data to make sense of phenomena, using logical reasoning. (DATA-E2)

GRADES 6–8

Systems and system models: Models can be used to represent systems and their interactions—such as inputs, processes, and outputs. (SYS-M2)

GLOBAL HEALTH CONNECT: A CARD GAME FOR CLIMATE ACTION

Introduction

The Global Health Connect game introduces students to the connections between climate, human health, and actions. Students will play a digital card game that simulates the challenges of protecting against the health impacts of hazards, and working together to take effective action. At the end of this lesson, students will recognize the importance of identifying issues, connecting symptoms, and building strong networks to make actions more effective.

Vocabulary

1. Resource: Something in the community that helps people such as doctor or a club member
2. Hazard: Natural or climate-related event that threatens health or safety
3. Symptom: Something that points to a larger health issue
4. Action: Steps taken to protect and strengthen the community
5. Morale: Confidence of the club
6. Connection: Connections between symptoms, actions, and people that build resilience
7. Global health - an interdisciplinary field of study, research, and practice that focuses on improving health and achieving equity in health for all people worldwide

Materials

1. Digital devices for each student, or pairs of students, to play Global Health Connect
1. Worksheets for each student

Engagement

The teacher will share the following passage with students:

Imagine your community is facing an unexpected hazard, like a flood or a heatwave that puts people at risk. To protect your community, you first need to uncover what the real issue is, understand what symptoms are connected to it, and then work together to take action. Today you'll play Global Health Connect, a game where you discover issues, connect symptoms, and build strong club networks to prepare against hazards.

Procedural Steps

1. The teacher opens Global Health Connect on a shared screen. Students are invited to explore the images before any game play begins.
2. The teacher prompts:
   a. *What do you notice?*
   b. *If this is a game about protecting communities, what do you predict the goal might be?*
3. Students share predictions. Teacher transitions by saying:

   In this game, you'll work through three stages: Discover → Understand → Act. You'll uncover hidden issues, connect symptoms to those issues, and then take action. Just like in real life, your actions will only work if you have enough knowledge, resources, and people to support you. Good luck!

Exploration

1. Students work in pairs or small groups. Students lead their own game, discovering the different game rules, cards, and connections as they go.
2. **Discover** Issues
   a. Students figure out how to reveal hidden issues using Symptom Cards, Climate Indicator, Community Members, and Identify Cards.
   b. Prompt on worksheet: *How did you uncover your first issue? What did you learn about the Issue?*
3. **Understand** what Health Issues cause certain Symptoms
   a. Students experiment with connecting Symptom Cards to revealed Issues.
   b. Prompt on worksheet: *Why do you think symptoms matter? How do you think the Symptom is connected to the Issue? Are you able to connect more than one Symptom to an Issue? Why is this important?*
4. Play **Actions**
   a. Students notice Action cards and how, in some cases, they can't play certain Action cards until they have enough Club Members or high enough Morale.
   b. Prompt on worksheet: *What did you need to play your Action card (for example, Members, Morale, Resources)?*
5. Build Global **Connections**
   a. Students discover how they connect with other clubs.
   b. Prompt on Worksheet: *How did connecting with other global clubs help your team?*
6. Manage **Morale**
   a. Students observe how Morale drops with Hazards and rises with Actions or breaks.
   b. Prompt on Worksheet: *What happened when your Morale got low? What helped you raise it again?*

Explain

1. After about 20 minutes of game play, the teacher gathers the class. Students share what they figured out.
2. Guiding questions:
    a. Why do you think it is important to connect Symptoms to Issues before taking action?
    b. What did you learn about needing other people (*such as club members or global clubs*) to succeed?

Extend

1. Students go back to game play and either continue playing their original game or start a new game, this time focusing on strategy. For example:
    - *Is there a strategy you found helpful for protecting against Hazards?*
    - *Is there a way to grow your networks to take bigger actions?*
2. As students continue playing, ask them to think about the following question:
    - *How is what you are doing in the game (connecting Issues, Symptoms, Actions, Hazards, Clubs, and Morale) similar to what your community would need to do if it faced a real hazard?*

Evaluation

1. Students complete the Global Health Connect Worksheet, reflecting on:
    - *What was one hazard you faced? What were some of the Symptoms and Issues that connected to this Hazard?*
    - *Pick one Action card. Why do you think this Action would be effective?*
    - *How did Issues, Symptoms, Actions, Hazards, and Morale all interact in your game? Draw or describe the connections.*
    - *What card from the game reminds you of something in your local community? Explain your answer.*
    - *Imagine a new card for this game. It could be a Symptom, Issue, or Action card. What would it do, and how would it affect the other parts of the game?what would it help you do? How would it impact the other parts of the game?*
2. Students engage in a class discussion based on the questions above and share responses to the questions, sketches, or reflections

Evaluation Rubric

Concepts & Practices	Indicators of Success	Indicators of Difficulty
Natural Hazards: A variety of natural hazards result from natural processes. Humans cannot eliminate natural hazards, but can take steps to reduce their impact. (ESS3.B-M1)	Students describe how connecting symptoms, issues, and actions can reduce hazard impacts.	Students describe hazards only as random setbacks.
Analyzing and Interpreting Data: Analyzing data to make sense of phenomena using logical reasoning. (DATA-E2)	Students use Symptom and Issue cards as data to uncover hidden issues and justify the actions they want to take connected to a hazard.	Students fail to explain how symptoms, issues, and actions are related to a hazard.
Cause and Effect: Cause-and-effect relationships are routinely identified, tested, and used to explain change. (CE-E1)	Students explain how hazards cause lower morale and can block actions, and how preparation with Symptom and Issue cards that are connected to actions can change the outcome.	Students describe only the effect of losing club morale or blocked actions without identifying the cause.
Systems and System Models: Models can be used to represent systems and their interactions—such as inputs, processes, and outputs. (SYS-M2)	Students describe how issues, symptoms, actions, hazards, and club morale interact as parts of an interconnected system.	Students treat each card as an isolated move without noticing how each affects the other parts of the system.

GLOBAL HEALTH CONNECT WORKSHEET

Name: _____ Date: _____

Engage

1. Look at the opening images from Global Health Connect.
    a. What do you notice?

2. If this is a game about protecting communities, what do you predict the goal might be?

Explore

(Play the game in pairs or groups. Answer these questions as you progress through the game.)

3. **Discover**: How did you uncover your first Issue? What did you learn about it?

4. **Symptoms:** Why do you think Symptoms matter? How do you think the Symptom is connected to the Issue? Are you able to connect more than one Symptom to an Issue? Why is this important?

5. **Actions:** What did you need to play your Action card (for example, Members, Morale, Resources)?

6. **Connections**: How did connecting with other global clubs help your team?

7. **Morale:** What happened when your Morale got low? What helped you raise it again?

Explain

8. Why is it important to connect Symptoms to Issues before taking Action?

9. What did you learn about needing other people (such as club members or global clubs) to succeed?

Extend

10. Is there a strategy you found helpful for protecting against Hazards?

11. How is what you are doing in the game (connecting Issues, Symptoms, Actions, Hazards, Clubs, and Morale) similar to what your community would need to do if it faced a real hazard?

Evaluate

12. What was one Hazard you faced? What were some of the Symptoms and Issues that connected to this Hazard?

13. Pick one Action card. Why do you think this Action would be effective?

14. How did Issues, Symptoms, Actions, Hazards, and Morale all interact in your game? Draw or describe the connections.

15. What card from the game reminds you of something in your local community? Explain your answer.

16. Imagine a new card for the game. It could be a Symptom, Issue, or Action card. What would it do, and how would it affect the other parts of the game?

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