

SUSTAINABLE COMMUNITIES!



Part 7:

**How will we act
to help our
community thrive?**

SUSTAINABLE DEVELOPMENT GOALS

developed by



Smithsonian
Science Education Center

in collaboration with

iap **SCIENCE
HEALTH
POLICY**
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Part 7 Planner

<u>Activity</u>	<u>Description</u>	<u>Materials and Technology</u>	<u>Additional Materials</u>	<u>Approximate Timing</u>	<u>Page Number</u>
Task 1: What is the problem we want to take action on in our community?					
<i>Discover</i>	Explore ways in which your community is doing well and ways in which it could be doing better.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<u>Part 2, 3, 4, 5, 6 Organizers</u> (from Task 1 in each Part)	30 minutes	5-8
<i>Understand</i>	Report on problems in your community and consider the connections between the root causes of these problems.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<u>Connected Problems</u> (Task 1)	25 minutes	5-9
<i>Act</i>	Come to a team consensus about which community problem you want to take action on.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<u>Thriving Community Goals</u> (Part 1, Task 3)	25 minutes	5-12
Task 2: How will we try to solve our problem?					
<i>Discover</i>	Imagine different actions you could take to help address your team problem.	<ul style="list-style-type: none"> • Paper • Pens or pencils 		25 minutes	5-14
<i>Understand</i>	Explore ways your possible actions could be more sustainable.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<u>Team Action Plan</u> (Task 2) <u>Community Identity Map</u> (Part 2, Task 1)	20 minutes + investigation time	5-16

<u>Activity</u>	<u>Description</u>	<u>Materials and Technology</u>	<u>Additional Materials</u>	<u>Approximate Timing</u>	<u>Page Number</u>
Act	Come to a team consensus on which action you will take.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<i>Thriving Community Goals</i> (Part 1, Task 3)	20 minutes	5-18
Task 3: How will our team take action in our community?					
Discover	List the steps needed for your action.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<i>Community Communication</i> (Part 2, Task 5)	15 minutes	5-21
Understand	Organize the action steps.	<ul style="list-style-type: none"> • Paper • Pens or pencils 		20 minutes	5-14
Act	Create an inclusive team action plan.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<i>Team Action Plan</i> (Task 2)	25 minutes	5-28
Task 4: Putting our plan into action					
Task 4	Put your plan into action!	<ul style="list-style-type: none"> • Varies, depends on action plan 		Varies, depends on action plan	5-30
Task 5: What did I learn?					
Task 5	Reflect on your action and your feelings.	<ul style="list-style-type: none"> • Paper • Pens or pencils 	<i>My Feelings</i> (Part 1, Task 5) <i>Team Identity Map</i> (Part 1, Task 2)	15 minutes	5-36

* StoryMap extension found at <https://bit.ly/2YdHNqB>

Part 7. How will we act to help our community thrive?

As **action researchers** you now have a lot of information about your **community**. You discovered what is important to you and your team. You understand the science of **sustainable communities**. You understand the way decisions are made. You understand the values of people in your community. And you understand one or more parts of a Sustainable Community. Now you will put those ideas together. In this part you will decide how your team will act to create a **thriving** community. Then you will put those plans into action.

Remember: In this guide you and your team are in charge. You can always change the instructions in the steps to make them work better for you and your team.

Find out More!

For additional resources and activities, please visit the Sustainable Communities StoryMap at <https://bit.ly/2YdHNqB>.

Task 1. What is the problem we want to take action on in our community?

In this task you will decide what problem you want to solve. Start with information from the investigations you did and questions you asked. Now you will **discover** connections between problems in your community. You will use these connections to help you **understand** the causes of problems you identified. Then you will decide what problem you will **act** to help solve.

Discover: *What is my community doing well and what could we be doing better?*

Each community has some things that it is doing well and some things it can be doing better. You probably noticed many of these things as you created your Part Organizer sheets as you worked through each Part. Now your team will work together to make a list of what your community is doing well and what it can be doing better. Then you will look at connections between the things that could be better in your community. These connections will help your team make a list of problems you could take action on.

1. Get out all your team's Part Organizer sheets for Parts 2, 3, 4, 5, and 6. If you did not do all the Parts, that is okay, you can just use the information you have.
2. As a team, use the information from your Part Organizer sheets to make a new list of what your community is doing well and what your community could do better. You can write this list, draw it, or record your voices. You will need this list later, so be sure to record it in a way that works for your team. Look at the information you listed in all three columns, *Know*, *Think*, and *Wonder*. Your new list should have two categories: "Doing Well" and "Need to Do Better."
 - a. For example, maybe your team knows that many people in your community take public transportation so the air is not so polluted. Your team would list that under *Doing Well*.
 - b. Maybe your team thinks there is a lot of waste from using plastic water bottles, like the ones shown in Figure 7.1. Your team would list that under *Need to Do Better*.



Figure 7.1: Plastic bottle waste

3. Consider the list of things in the *Doing Well* category. These things might be going well because people in your community took action to solve problems. Someday, the action your team takes could be on this list too!
4. Now your team is going to find connections between the things in the *Need to Do Better* category. The things in this category are problems in your community. Connecting these problems will help you figure out which are most important to solve. Now you will make those connections.
5. First, a team member will share a piece of information from the *Need to Do Better* category. Then a different team member will share another piece of information that connects to the first one and explain how it relates. For example, someone might say:
 - a. "I think that problem is connected to this problem because . . ."
 - b. "I would put these problems together in one group because . . ."
 - c. "I notice this problem happens over and over again in different ways. . . ."
6. You can share ideas in several ways. You could talk out loud or sign to each other. You could pass an object from teammate to teammate to show who is talking. You could roll or pass a string between people to show that ideas are connected. Pick the best way for your team.
7. Show the connections you identified in your *Need to Do Better* category. For example, maybe you noticed a problem about how far some people in your community need to travel to get to green spaces. You also noticed

that this same group of people needs to travel a long way to get to public transportation. If you wrote or drew your list, you might want to draw a line between those two problems to show the connection.

8. You now have a list of connected problems you could take action on in your community. You can label this list *Connected Problems*.

Understand: What are the causes of problems in my community?

In the activity you and your team made a list of things your community could be doing better. Helping to make things better is your team's important job as action researchers. Before you decide how you will make things better, you need to think about the causes of the problems you found. Listing these causes will help you take action in your community.

1. Move into a circle with the rest of your team. You are going to report on problems in your community. This will help you to start thinking about what is causing these problems.
2. Choose one team member to record your ideas.
3. Pick one team member to go first.
4. Imagine you are giving a news report to someone who knows nothing about your community. You can imagine using some of the tools shown in Figure 7.2. The first team member will say, "We are reporting from (put the name of your community in here), where there is a problem. The problem is (state your problem here)." Examine your *Connected Problems* list to help you remember the problems you found.



Figure 7.2: Tools used for news reports

5. Then the second person in the circle continues the report: “Some people in the community think this problem is caused by . . .” and says one thing that might be causing the problem. The second person should use information from their investigations and knowledge of their community to figure out what they think the cause is.
6. The third person in the circle can add another cause by saying, “Yes, and other people think this problem is caused by . . .”
7. The team continues going around the circle and reporting on causes of the problem until your team shares all your ideas. You and your team are almost done with your reporting. There is one more important step.
8. Discuss with your team what you think is the **root cause** of the problem you are reporting about. What is a root cause? Like roots that are under a tree, root causes are all the way under each problem. The best news reports help people understand the root cause underneath a problem. For example:
 - a. Imagine the problem in your community is that people use too much energy.
 - b. Your team reported that one cause might be people leaving the lights on in their homes, like the picture in Figure 7.3. Another cause might be people running machines or other objects that use up a lot of energy.



Figure 7.3: Using energy by leaving the lights on

- c. What could be the root cause? It might be that people in your community don't think it is important to save energy. They may not understand where their energy comes from. They may imagine they will always be able to get more energy.
9. Record the root cause or root causes next to the problem your team is reporting on. How will it help your team to know the root cause? It can help you take action that is **sustainable**. Remember that **sustainable action** lasts for a long time. If the root cause of problems in your community is that people don't think it is important to save energy, you might decide to take action on that cause. You might try to educate people about saving energy. You might try to show them what happens when they waste energy. You might help them understand that not all kinds of energy last forever.
10. When the team has decided the root cause of each problem, move on to doing a news report for the next problem.
11. After you finish with your news reports, discuss whether any of the root causes are the same. For example, maybe you noticed problems related to wasting food, energy, and water. Perhaps in all three cases you thought the root cause was a lack of knowledge in the community about why it is important not to waste **resources**.
12. If you notice any root causes that are the same, be sure to record that information. Keep this information, because you will need it in the Act activity.

Act: What problem will we take action on?

Now you will decide what problem your team will act on. You will pick a problem that is important to you, your team, and your community.

1. Take out your *Thriving Community Goals*, and your community, team, and individual **identity** maps.
2. Examine the goals and identities and remind yourself of what you and your team value.
3. Now you will use that information to pick a problem you will take action on.
4. Examine your *Connected Problems*. If there are problems you found that had the same root cause, you can examine those together.
5. As a team, discuss what problems would be most important to take action on if you want to reach your *Thriving Community Goals*.
6. Make a mark next to any problems that everyone thinks are important.

7. There are many problems, but some are very hard for young people to change. Think about what problems you think your team would be able to act on and really make a difference,
8. Make a mark next to problems you think your team could help to change.
9. As a team, discuss who you help when you solve each problem. Think about who you would most like to help. For example, you could choose:
 - a. Helping the most people
 - b. Helping people who have often been left out in the past
 - c. Helping people who need the most help
10. Make a mark next to problems that affect the people you chose.
11. You now have a list of problems with marks next to them. One by one, for each problem, ask the team, “Is this the most important problem to take action on?” You and your teammates can say:
 - a. Yes
 - a. Maybe (if you are not sure)
 - b. No
12. If everyone agrees on the same problem, record the problem. Then you can move on to Task 2.
13. If some people disagree, you need to come to **consensus** as a team. Remember the skills you used to come to consensus in Part 1? You can use those skills again. Here are some ideas. You can choose whatever works best for your team.
 - a. List the good things and bad things about taking action on each problem. Discuss as a team.
 - b. Try to find the same values. Are there some problems that have the similar root causes? Is there a way to combine those problems?
 - c. Build a sense of the group opinion. Each person can mark one problem to solve. This can help you understand which problems are most important to your team. You can discard any problems no one picked.
 - d. Find a slow consensus. Find a partner and as a pair find consensus on which problem is most important. Then in a group of two pairs (four team members) you can find consensus. Then in a group of four pairs (eight team members) you find consensus. Keep adding together groups until you have found a team consensus.

- e. Consider your goals. Examine your *Thriving Community Goals*. Do some problems relate to many of the goals? If so, those might be more important to solve.
 - f. Consider your **impact**. Think about who benefits. Which group are you most interested in helping?
14. Keep discussing your ideas until you come to consensus about the best problem to try to help solve as a team. Record that problem.

Task 2: How will we try to solve our problem?

Action researchers and scientists seek problems, try to understand them, and then solve them. You have thought about problems in your community. You have **investigated** to understand these problems. Now you will have a chance to decide how to try to solve the problem you chose in Task 1. You will **discover** possible actions. Then you will **understand** how different actions might help solve your problem from different **perspectives**. Finally, you will decide how you will **act** to help solve that problem.

Discover: What are some actions we could take?

You have decided what problem your team will take action on to improve your community. Now you need to decide what type of action you want to take.

1. As a team, take out a piece of paper or create a digital document. Title it Team Action Plan. On the first line write or draw the problem your team is going to work to make better. You can label this part “Problem.”
2. On the next line write or draw the causes and root cause of the problem, which you identified during your problem news report in the Task 1 Understand activity. You can label this part “Causes.”
3. Next, record your ideas about who is affected by your problem. Think about if it is mostly people of a specific age, or people who live in a specific place, or people who have another thing in common. You can label this part “Who Is Affected.”
4. Now look at some of the ideas you had under your *Wonder* columns of your Part Organizer sheets. Are there any ideas there that might help you take action to help solve your problem? If so, record those ideas. You can label this part “Actions.”
5. If you can think of any other actions, record those under *Actions*.
6. If you are having trouble thinking of actions you can take, here are some ideas:
 - a. Personal change: Change something in your daily life or home, for example, riding your bike to school instead of an adult driving you in a vehicle.
 - b. Change at home: Make changes with the people who live in your home, for example, start composting food waste (as shown in Figure 7.4) instead of throwing it away.



Figure 7.4: Composting food waste

- c. Class or school change: Encourage changes at your school, for example, making the shared outdoor space more accessible or exciting.
- d. Communicate with your community: Help the community understand the problem or change their behavior by designing posters, composing songs, recording podcasts, making public service announcements, setting up a social media campaign, or using other ways to communicate.
- e. Government change: Try to change what your local or national government is doing, for example, write letters to officials or speak at local government meetings to share your concerns about your problem.
- f. Global change: Collaborate with others around the world who are worried about the same problem. For example, join a group that works together to make the air cleaner.
- g. Come up with your own ideas!

Understand: How will we make our action sustainable?

Remember there are different perspectives or ways of thinking about problems in your community. Actions may help solve a problem from one perspective, but not

from another. Sustainable actions need to consider **social**, **environmental**, **economic**, and **ethical** perspectives. Considering the needs of as many people and perspectives as possible makes the actions you take more sustainable.

1. Take out your Team Action Plan.
2. Consider the actions you listed. Would each action help solve your problem from:
 - a. A social perspective? For example, helping to build relationships between people.
 - b. An environmental perspective? For example, helping to make the air cleaner.
 - c. An economic perspective? For example, making it easier for people to earn money.
 - d. An ethical perspective? For example, making your community fairer.
3. Make a mark next to each action that shows from which perspectives it helps. You can use abbreviations, symbols, or whatever works best for your team. An action may help solve the problem from one perspective or more than one perspective.
4. Think about the actions and perspectives you have written down. What can you change about your actions so they help solve the problem from more than one perspective? Make those changes now.
 - a. For example, maybe your action is picking up plastic bottles that are polluting a nearby river, like the one shown in Figure 7.5. This action mainly helps from an environmental perspective.



Figure 7.5: Polluted river

- b. Could you add a social perspective by encouraging community members to work together to pick up the bottles so that the shared space around the river becomes better for socializing?
 - c. Could you add an economic perspective by clearing bottles near a tourist area so it looks nicer and people will go to the restaurants there?
 - d. Could you add an ethical perspective by making sure that your action is fair? Maybe you pick up bottles all along the river, not just in some places.
 - e. In a perfect world, each action would help from all four perspectives. That might not be possible. Just do your best.
5. Take out your Community Identity Map. Use it to remember all the different people in your community.
 6. Think about how your community members might feel about your action ideas. As a team, discuss for each action:
 - a. Who does this action help?
 - b. Are there people who are left out? If so, what could you change about the action so it does not leave them out?
 - c. Does this action hurt anyone? If so, what could you change about the action so it does not hurt them?
 - d. Are there things that might happen when you take this action that you do not want to happen? If so, what could you change about the action so they don't happen?
 - e. Are there other ways you want to change any action so it will work better?
 - f. Make any changes you feel are needed.
 7. In a perfect world each action would make your whole community better. Sometimes that is not possible. Just do your best.

Act: How will we take action?

Your team is ready to decide what action you will take.

1. Think quietly to yourself about the actions you have listed. Ask yourself:
 - a. Does the action help fix the root cause of your problem?
 - b. Is this an action your team can take? Think about your time, any costs involved, and whether everyone can participate.
 - c. Would you be excited to take this action?

2. As a team, discuss the actions you have listed. Get rid of any actions that would not be helpful or that you cannot do.
3. Take out your *Thriving Community Goals*. Discuss which of the actions will be best for helping your community move toward your goals.
4. Pick the best way to come to consensus for your group. You can use any of the ways you used in Part 1, earlier in Part 7, or come up with a new way.
5. Use your consensus-building skills to decide what action your team will take.

Task 3: How will our team take action in our community?

You and your team have picked an action that will make your community better. As action researchers, your next task is to plan exactly how to take that action. You will **Discover** the steps you think are most important. Then you will **Understand** the steps your team would like to take. Finally, you will **Act** as a team to build an action plan to carry out in Task 4.

Discover: What are the steps needed to take action?

The first thing to do when planning an action is to figure out the steps that are part of that action. Your action could need permission from someone. Your action could need your team to do some things one day and other things another day. Your action could take place in several areas. All of these ideas could be different steps in your action plan.

1. Think quietly to yourself about the steps that could be part of the action your team picked.
2. Write, draw, or use another way to record your ideas on small pieces of paper. Each piece of paper should have one step. You will share these pieces of paper in the Understand activity. If you would like, you can also make a list of your ideas on a computer, phone, or other device. Just make sure these ideas can be shared with others.
3. Take out your Community Communication paper from Part 2, Task 5. Use it to remember the best ways to communicate with your community.
4. Think about how you will tell the community about your action. Record the steps involved. Remember, if people feel like they are a part of something they may be more likely to help. Telling the community about what you are doing can help make your action better.
5. Think about how you will measure the way your action is making your community better. Record the steps involved. For example:
 - a. Could you ask people in the community if they feel like the action helped?
 - b. Could you count how many people or living things you have affected?
6. Write your name next to any steps you would like to help with.

Understand: How can we organize our action steps?

You have thought about what your team needs to take action. But it is also important to find out what the other people on your team are thinking. Then you will need to organize your ideas as a team.

1. Have each team member place their pieces of paper from the Discover activity on a table or another surface. This will help your team share their steps. Your team can also share their steps on a computer or other device using a program like Padlet or Google Classroom.
2. Read through the steps from your teammates.
 - a. Did you notice any steps that were similar to yours?
 - b. Do you think your team is missing any steps?
3. Start to organize your team's steps. You can move the pieces of paper around as you do this. Thinking about your team's steps will help you decide how you will take action.
 - a. Group any similar steps together.
 - b. Remove any steps that you don't think are needed to help your team take action.
 - c. Think about how each team member will help. Put their names with the steps they would like to help with.
 - d. Think about what steps might be missing. Add those steps.
4. Start putting the steps in order. For example, what do you think the team needs to do first? Place that piece of paper before all the others.
5. Make a list of things you need to help you take action.
 - a. What materials do you need?
 - b. How much time do you need?
 - c. Do you need an adult to help you get permission?
6. Keep these steps and the list of things you need for the Act activity.

Act: What will we put in our action plan?

In this activity you and your team will create your action plan. You will use this plan in Task 4 when you take your action in your community. Think back to the steps you and your team organized in the Understand activity. Now you need to turn those steps into an action plan.

1. You will record your action plan so everyone on the team can use it. You may want to add it to your Team Action Plan document. Your team can record your action plan in whatever way you would like.
 - a. Write
 - b. Draw
 - c. Create a storyboard that shows the steps in order
 - d. Type the plan on a computer, phone, or other device
 - e. Record your team saying the steps
2. Remember the steps and materials you chose in the Understand activity. Use that information and this checklist to help you record the following:
 - a. The steps your team would like to take
 - b. The order of those steps
 - c. Who will help with each step (it might be more than one person)
 - d. When and where you will take these steps
 - e. How you will communicate your action plan to the community
3. Think about what you will do if your plan doesn't work or you run into another problem (for example, an adult in your community says you need permission and you don't have it yet). Record these ideas as part of your action plan.
4. Remember to create an **inclusive** action plan. Being inclusive means everyone on your team can participate in some way. You may need to make changes to the plan so that everyone feels safe, comfortable, and able to help. Those changes are okay! They are part of being a good action researcher and a good teammate.

Task 4: Putting our plan into action

You finally have arrived at the most exciting part of action research! You ***Discovered*** your own knowledge and values. You used science and **social science** investigations to ***Understand*** the problems of your community. Now it is time to ***Act!***

1. Put the plan you created in Task 3 into action.

Task 5: What did I learn?

Great job! You took action to make your community better! In this task you will reflect on the action you took with your team. **Reflecting** means thinking carefully about something. You will also reflect on your role as an action researcher in this Community Research Guide. Why? Reflecting is something all action researchers do. Reflecting helps you figure out what worked and what didn't work about your action. It helps you take even better action in the future.

1. Find a place to rest that is quiet and comfortable. Start by closing your eyes, if that feels comfortable for you. Breathe in slowly through your nose. Let your belly and chest expand with air. Breathe out slowly through your mouth. Push out all of the air that was in your belly and chest.
2. This exercise helps your brain get ready to reflect. Repeat it as many times as you would like so you can feel ready.
3. Gather with your team. You are going to reflect on your action together.
4. Get three large pieces of paper. You can also do this activity by talking out loud or sharing ideas online.
5. Label each piece of paper with one of the following questions:
 - a. "What went well?"
 - b. "What could have been better?"
 - c. "How did our action make our community better?"
6. Write your answers on each piece of paper. Let everyone on the team add their answers.
7. Read the answers from your teammates. Notice what you agree with. Notice what surprises you.
8. Talk with your team to answer this next question. Use what you wrote on the three pieces of paper to help you answer.
 - a. What would you do differently if your team planned another action?
9. Now you will take some time to think about how you have grown as an action researcher.
10. Take out the *My Feelings* paper from Part 1, Task 5. Remember, you thought about:
 - a. What worries me about being an action researcher?
 - b. What excites me about being an action researcher?
 - c. What do I hope I will learn about my community?
 - d. What do I hope I will learn about the topic of sustainable communities?

- e. How do I think my team will work together?
 - f. Do I feel ready to take action to make my community better?
 - g. How do I hope I will feel at the end?
11. Think about your answers. Then record your thoughts about:
 - a. If I had to answer these questions now, how would my answers change?
 - b. What did I do in this guide that surprised me?
 - c. What was hard for me to do?
 - d. What are the most important things I learned?
 - e. What makes me the proudest?
 - f. How have I changed?
 12. Come back together with your team.
 13. You will create a final identity map. This identity map will help you understand how your team has changed after finishing this guide.
 14. Pick one person on the team to lead the discussion.
 15. Have the team leader write the word “Team” on the board or on a piece of paper. Circle it. You can look at Part 1 for an example.
 16. The team leader will start by sharing one way they changed while doing the *Sustainable Communities! Community Research Guide*.
 - a. For example, maybe the team leader says, “I feel more able to change my community.”
 17. The team leader will write their item on the team identity map.
 18. Then the team leader will ask other team members to share how they have changed.
 19. Write each item on the team identity map.
 20. Repeat until all members of the team have shared and added one item to the team identity map.
 21. Quietly consider the team identity map. It shows how your whole team has changed since the beginning of this guide. These changes are important. We hope your changes make it easier for you to take action in the future.

Congratulations!

You finished the *Sustainable Communities!* Community Research Guide!

All of us should be trying to do what we can to change ourselves and our world for the better. Maybe you took a big action. Maybe you took a smaller action. Maybe it had a big impact. Maybe it had a small impact. The most important thing is that you did something. When you take action to make your community better, you create the world you want to live in. You and your team are changing the world, one step at a time!

Never underestimate the power of a small group of committed people to change the world.

In fact, it is the only thing that ever has.

—Margaret Mead

Glossary

This glossary can help you understand words you may not know. You can add drawings, your own definitions, or anything else that will help. Add other words to the glossary if you would like.

Action researchers: People who use their own knowledge and information they find out from their community to make decisions and take action on important issues

Community: A group of people that have a place or other thing in common

Consensus: A balanced decision that works for everyone in the group

Economic: About money, income, and use of wealth

Environmental: About the natural world

Ethical: The fairness of something

Identity: Characteristics that make up each person or thing

Impact: The effect one thing has on another.

Inclusive: Making sure no one is left out

Investigate: Find out more information

Perspective: A specific way of thinking about the world around us

Reflecting: Thinking carefully about something

Resources: Materials we use to meet our needs

Root cause: The reason underlying a problem

Social: About the interaction of people in a community

Social science: Study of human communities and interactions

Sustainable: A balanced, long-term approach to social, environmental, economic, and ethical concerns

Sustainable action: Actions that can continue for a long time and take into account many perspectives

Sustainable community: A group that balances the needs of living things and the resources available in a way that does not hurt future generations

System: Something made up of parts that work together

Thriving: Something that is working or growing well

Other words:

Meet Heidi Gibson, Your Sustainable Communities Guide Developer



Meet Heidi Gibson. Heidi (*Hi-dee*) was the main person writing this guide. She talked with lots of researchers to get information. However, like anyone, she has her own perspective. You have learned it is important to consider the perspectives of your teammates and research mentors. Perspectives affect what we think and how we think. It is also important to think about the perspective of the writer.

This can help you understand why the guide was written the way it was. Considering the source of information is always a good idea.

Heidi has degrees in biology and international education. However, she also has knowledge and perspectives that come from other parts of her identity. Since you have been reading a lot of what Heidi has written, it is important to know who she is. To help you, Heidi filled out an identity map, just like you did in Part 1. Heidi's identity map includes the following things.

- Purpose is to help young people realize their power to transform the world
- Past jobs include laboratory research, civic education, international development, and diplomacy
- Grew up and lives now in Arlington, Virginia, USA
- Husband is Scottish and they lived there as a family, so that feels like her second home
- Also lived in Germany, China, Malawi, and Fiji
- Two children, ages 15 and 12
- Six siblings
- Loves being outdoors, especially the beach
- Walks around her garden looking at what is growing every day
- Enjoys travel, reading, singing, and being with family and friends
- Likes learning new things—cultures, ideas, languages, skills

Before you finish the guide, think quietly to yourself about Heidi's identity map.

- What questions do you have about the way the guide was written?

- What perspectives does Heidi have that might have made her write the guide the way it is?
- Are there things you would include that were not included?

Do you want to tell Heidi what you would change about the guide? Email her at scienceeducation@si.edu. She'd love to hear from you!

References

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Smithsonian Science for Global Goals (SSfGG) is a freely available curriculum developed by the Smithsonian Science Education Center in collaboration with the InterAcademy Partnership. It uses the United Nations Sustainable Development Goals (SDGs) as a framework to focus on sustainable actions that are student-defined and implemented.

Attempting to empower the next generation of decision-makers capable of making the right choices about the complex socio-scientific issues facing human society, SSfGG blends together previous practices in Inquiry-Based Science Education, Social Studies Education, Global Citizenship Education, Social Emotional Learning, and Education for Sustainable Development.

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