

## About this Community Research Guide

The goal of this guide is to prepare young people to take considered action on pressing global issues. Considered action means young people learn about a problem, connect it to the larger system, consider all the complexities of the problem, decide for themselves the best way to address it, and then execute a solution. Through this process young people are prepared not only to take considered action on a specific issue, but to build the skills to take action on all issues that affect them and their communities.

Learners use scientific and socio-scientific investigations to understand their local communities, scientific principles, and innovation possibilities. They then have a chance to immediately apply this information to make decisions that are informed by the results of their investigations. Along the way, young people are prompted to reflect, investigate, think critically, analyze, and build consensus. Engaging in these activities builds important skills of empowerment and agency, open-mindedness and reflection, equity and justice, and global-local interconnection. These sustainability mindsets prepare young people to take an active role in shaping the future of their communities and their world.

### SUSTAINABILITY MINDSETS



Figure 1: Sustainability Mindsets

## A Framework to Discover, Understand, and Act

Throughout the guide, young people are prompted to Discover, Understand, and Act. The three parts of their learning journey are described here.

### Discover

Young people already have a lot of information and opinions about the world around them. In this guide, they are prompted to use that knowledge as an entry point. They will discover what they already know and what questions they might have. They are encouraged to consider different perspectives and priorities. This both empowers young people and provides an immediate relevance and context for their investigations.

### Understand

Gathering new information is a primary goal of science. Using a wide variety of methods to do so helps young people understand the problems related to sustainable communities. They need to understand the problems both abstractly and within the context of their local community. Designing and conducting real-world investigations and interpreting results encourages young people to think like scientists.

### Act

Finally, young people apply both their existing knowledge and their newly gathered information. First, they consider personal changes they could make to help make their communities more

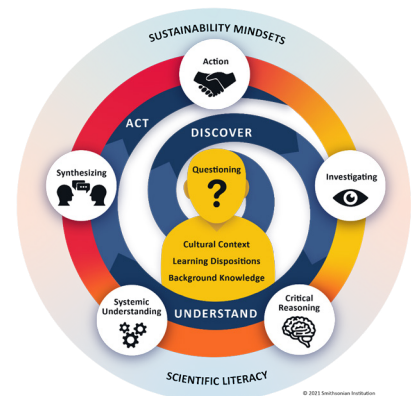


Figure 2: Global Goals Action Progression



sustainable. Then, as a team, young people find consensus on what they *could* do, what they *should* do, and what they *will* do. Teams then take action and reflect on the consequences, both intended and unintended.

## **Pedagogy Shift**

This guide may feel like a big shift from the standard method of teaching. The guide is:

### ***Led by Young People***

To make progress toward a better world, we need the ideas, enthusiasm, and energy of every young person. We need them to help design and build the world in which they want to live. This means throughout the guide young people make authentic decisions about what and how they will learn. Their goal is to understand issues in their own community and take sustainable actions to make their community and their world better.

### ***Driven by Data Collected by Young People***

In this guide, the young people you teach will become action researchers. They will gather information about what sustainable communities mean in their own local spaces. This includes scientific investigations and experiments to understand the problems better, and also using social science methods to understand their community better. Using science and social science helps young people arrive at a sustainable solution.

### ***Focused on Action***

The goal of the guide is to help young people not just learn but also do. Throughout the guide young people will conduct investigations and then use that knowledge to make decisions about the actions that would be best for their community. They will then put those decisions into practice and see the results of their actions.

### ***Customized for Local Communities***

Each community is unique. While the world has global problems, the solutions must work locally. Young people already have tremendous knowledge about their local community. This guide prompts them to use that knowledge and find out new information to figure out solutions that are sustainable in *their* community.

## **Structure of this Community Research Guide**

### ***Parts***

This guide is made up of seven parts. Each part works with the others to help learners understand how to help their community thrive and to put that knowledge to work by taking action.

However, we recognize that time is a limiting factor in many learning spaces. Therefore, the guide is designed flexibly so it can be shortened, if necessary. The learners are guided to do this shortening work themselves at the end of Part 1. The guide prompts learners to discuss with their teacher how much time is available and then make decisions about the best way to use that time.

### ***Tasks***

Within each part there are five tasks. Each task helps learners examine a different aspect of the topic they are exploring. Within each task, there are three activities, which correspond to the Discover, Understand, Act framework. Discover activities focus on existing learner knowledge. Understand



activities focus on gathering new information. Act activities focus on analyzing and applying that new information to make decisions. Tasks also include perspectives and stories from experts around the globe, so students can connect with the work of real-world scientists.

## Using this Guide

### Roles

#### *The Learner's Role*

Learners are the decision-makers of the guide. They will decide what information they need and what the information they gather means. Then learners use that information to decide and implement actions.

#### *The Teacher's Role*

This guide may be challenging for learners, since they may be unfamiliar with their role. Learners may need assistance in deciding what to do. Support and help them, but do not decide for them. Be patient. There are no right answers to the big questions posed by the guide.

### Adapting the Guide for Your Context

#### *Different Ages*

This guide is designed to be used with young people between the ages of 8 and 17. This large range is deliberate to give access to these ideas to as many young people as possible. If you teach learners who are on the younger end of the age range you may need to support them a little more. For example, you might need to:

- Explain more complex words or topics.
- Promote listening and tolerance in group discussions.
- Support group decision-making.
- Help them plan investigations in their community or accompany the teams on their investigations.
- Help learners think through the feasibility of the action they plan.
- Present alternate ways of capturing ideas. For example if the guide suggests that learners write, but that is too difficult or is inappropriate for your learners, they can always draw, act out, or just talk about their ideas.

If you teach learners who are on the older end of the age range the language of the guide might seem a little simple. However, older learners who can understand more complex ideas will be able to develop a more nuanced view of the problem and come up with more extensive solutions.

All young people should be able to engage with the guide in a way that is developmentally appropriate for them.

#### *Different Resources*

We have assumed that you have very basic classroom resources, such as a class board (blackboard or whiteboard), paper, and pens/pencils. If it is not possible to capture learner writing, you can always have learners act out or discuss their ideas. If you do not have the capacity to print out a Community Research Guide for each learner, you or learner leaders can read the guide out loud from a single print or digital copy.



## ***Accessibility***

This guide is designed to be widely accessible. The language, tone, and format attempt to be as inclusive as possible to reach learners with a wide variety of learning styles. However, learners with specific needs may need teacher support. As mentioned earlier, the guide activities can always be adapted to fit learner abilities, either by you or by the students themselves.

## ***Extensions***

For each part and many tasks there are additional activities, videos, and resources available digitally. They can all be found at the *Sustainable Communities!* storymap at <https://bit.ly/2YdHNqB>.

## **Teams**

Much of the research, decision-making, and acting is designed to be done in teams. However, these teams can range in size from a group of two or three learners to the whole class. As a teacher, this is something to consider before beginning the Community Research Guide.

If you have motivated and responsible learners who need minimal teacher support, you may want to break your class into small teams. Smaller teams will allow individual learners to share their opinions and have more of an impact on team decision-making. With smaller teams, the experience can be more customized to the interests of the individual learner because there are fewer interests represented.

If you have learners who need more support, you may need to keep the class together in one team or have one team for each adult in the class. If you have only one team per adult, an adult can help support learners directly while they are engaging in activities such as conducting investigations and making decisions. However, because the team is larger, individual learners will have less of a voice in decision-making and less impact on group actions.

Alternately, if you have a group of learners with mixed abilities, you can design groups that bring together learners with different strengths. These types of groups can help learners support one another rather than immediately turning to an adult for support.

If you are uncertain whether a small or large group is most appropriate for your learners, you may want to wait and observe them during Task 1. In Task 1 in the Understand activity, learners break into groups and conduct investigations. If learners are able to complete this task independently with fairly limited teacher support, they would probably be successful in a small group. If learners need a great deal of help to complete this activity, you may want to structure group size so they can have more focused adult support throughout the Community Research Guide.

## **Getting Started**

We recommend you give the young people you work with the Student Letter to read. You also may find it useful to read through each part of the Community Research Guide in its entirety before beginning that part. We suggest you encourage your learners to be excited about this new learning adventure. Be prepared to be enthusiastic about their ideas.

