Sustainability Interactive Guide

Introduction

Research shows that students are increasingly interested in pursuing careers that help people and the environment, however, students may not be aware of the range of global issues that exist. Also, students may feel discouraged or overwhelmed by the sheer number and complexity of global challenges. AGI's Sustainability Interactive was created as a way for students to consider global concerns in the context of real-world scenarios. Each scenario is broken down into components so that students can consider what specific issues they are most concerned about.

The Sustainability Interactive helps students assess their concerns as they are defined and described by the United Nations 17 Sustainable Development Goals (SDGs, shown below). The SDGs consolidate global concerns into categories. Also, each SDG is broken down into Targets and Indicators, which are specific, actionable components of each goal, which may help students feel like each goal is more manageable. The Sustainability Interactive can be used as a way to introduce students to the SDGs and how global concerns are being addressed around the world.







































Using the Sustainability Interactive

The Sustainability Interactive has ten scenarios that draw from a variety of SDGs in the context of real-world problems that students may have encountered firsthand or heard about from various media. For each scenario, students are asked to consider, "Which aspect(s) of this scenario are you most concerned about?" Students are given six answer choices, each of which identifies issues that are components of the scenario and that relate to Targets of two or more of the 17 SDGs.

Students can choose any number of answer choices that align with what they are concerned about. As they make choices, the interactive will award two points for an SDG that strongly relates to the answer choice, one point for an SDG that is moderately related to the answer choice, and zero points for any answer choice not selected.



After going through the scenarios, students will get a printable output showing their top SDGs (three maximum, along with their point totals). The report also shows the 10 scenarios and the students' selections. Having students revisit their answer choices and relate them to the SDGs can deepen students' understanding of global issues and how they are broken down into more manageable components. You may want to focus on one or two scenarios that relate most directly to the content you teach to give students practice relating the answer choices to specific SDG Targets.

The breakdown of how each scenario's answer choices (below) show how they relate to specific SDG Targets. This information can be used to facilitate discussions and analysis of:

- Students' results and trends in what their classmates are concerned about.
- SDG Targets and specific work being done to meet each goal, as well as how work toward one goal may benefit or be in conflict with other goals.
- How the SDGs relate to content students are learning about and how related careers apply knowledge to do work toward specific SDGs.

Breakdown of each scenario

- Contaminated Groundwater in an Agricultural Region
- Oil Spill in a Marine Environment
- Ocean Plastic Pollution
- School Inequality in a Developing Country
- Extreme Weather and Climate Change
- Global Energy Demand
- Agricultural Expansion into Forests
- Technology and Innovation for the Future
- Water Scarcity in a Desert Region
- Funding Gaps Threaten Programs Supporting Women and Girls

Discussion questions

- Which SDGs were the ones your answer choices aligned with?
- Which Targets and Indicators are you most interested in? Explain your reasoning.
- What Targets and Indicators do you think would be the easiest to achieve? The hardest? Why?
- Which Targets and Indicators overlap with other SDGs? Explain the connections.
- How do the SDGs you explored relate to what you are learning in school?

Next Steps

Once students have completed the Sustainability Interactive, ask students to use the Career Explorer to explore related geoscience + careers. Use the Career Explorer Guide for guidance to facilitate career, sustainability, and geoscience-related discussions.

