

Create innovative solutions to a pressing social issue.

WE are  **innovators**



CRITICAL THINKING



REFLECTION



ACTION PLANNING



SUSTAINABLE DEVELOPMENT GOAL 12: RESPONSIBLE CONSUMPTION AND PRODUCTION

AN INITIATIVE OF



MADE POSSIBLE BY



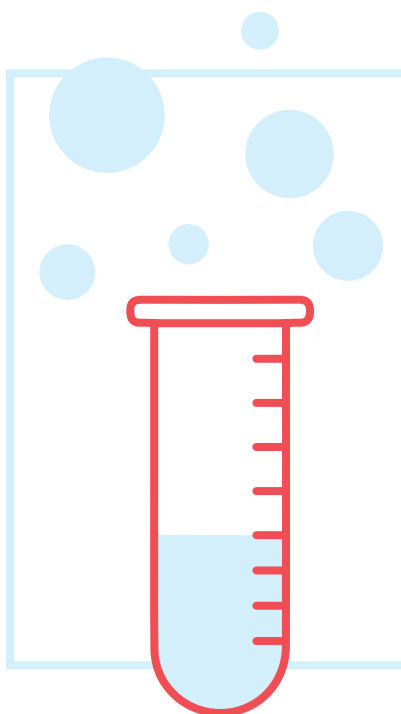
A special thank you to Dow for their commitment to inspiring youth to make a positive impact in the world.

Dow, a proud partner of WE, is dedicated to empowering students with the STEM skills to innovate solutions for today's most challenging problems. Through WE Are Innovators, Dow and WE ignite students' passions for science and technology to change the world.

AWARENESS + INNOVATION = CHANGE

Is there a change you want to see in the world? Everyone—including you!—has the power to innovate creative and inclusive solutions to solve the world's most pressing issues, today and tomorrow. Whether you're passionate about food or plastics waste, protecting nature, or conserving energy, you can be part of the solution and make a meaningful impact in the world that benefits everyone, regardless of backgrounds, beliefs, abilities, lifestyles and experiences.

Through WE Are Innovators, you can build and use your STEM skills to address important issues. Become an innovator and advocate for positive change and raise awareness of the causes you care most about. Take action and help build a brighter future for all!



FACT: STEM education increases science literacy, enabling innovation that leads to new products and processes that sustain our economy.

Ways to Take Action

Rally your classmates and design a new product (e.g., bricks, desks, benches) that benefits everyone, using recycled waste to reduce the creation of new materials.

At School

- Create a system that helps your school reuse and recycle all items such as plastic bottles, minimizing plastic waste and maximizing product life.
- Design a new composting system that will provide fertilizer for the school garden, thereby reducing waste that enters landfills.

At Home

- Investigate how much energy is wasted in your own home due to lights being left on. Create a light timer that automatically turns off the lights when it recognizes that they aren't needed.
- Create a device that can classify if a product is recyclable or compostable, helping your family reduce their waste.

As a Community

- Design a new transportation device or model that provides easier accessibility for individuals in the community with varying physical disabilities.
- Collect any unused materials from buildings and houses in your community to build a greenhouse that can supply food for everyone in the neighborhood.

► Visit [WE.org/weareinnovators](https://weareinnovators.org) for more information and to download resources to help you take action.



Tech for Good Badge

Start a social media campaign to raise awareness of the power of innovation in solving issues in your community. Challenge friends, family and neighbors to contribute an innovative idea and post it online. Don't forget to show us what you're doing using [#WEareInnovators](https://weareinnovators.org).

Go further: Create a platform or website that showcases all of the solutions you come up with. Make it engaging and educational by creating videos and step-by-step guides to help all viewers apply those solutions in real life and help everyone.

In the Classroom

With our Classroom Resources, educators can integrate service-based learning into their curriculum. Download the WE Are Innovators modules at [WE.org/weareinnovators](https://weareinnovators.org) to learn more about inclusive and sustainable innovation, circular economy and nature, food waste, energy and housing, and transportation solutions.

Classroom Resources

Grade Levels

4 to 12

Subject Connection

Science, Technology,
Engineering and Math

Inclusive and Sustainable Innovation

- Develop a scientific approach to solving problems.
- Explore sustainable solutions.
- Embrace an inclusive mindset.

Energy and Housing

- Learn how traditional housing designs and building materials deplete resources.
- Explore alternative products and services to address local and global issues.

Food Waste

- Understand how food waste contributes to social, economic and environmental issues both locally and globally.
- Recognize how food waste depletes natural resources and adds to global food insecurity.
- Learn how innovative, sustainable ideas can help everyone.

Circular Economy and Nature

- Learn about how human behavior, attitudes and mindsets about consumption contribute to a sustainable planet.
- Determine how science creates opportunities beyond the original “reduce, reuse and recycle” approach.

Transportation Solutions

- Find out how conventional transportation options have negative impacts on the environment and society.
- Learn how transportation options are unsustainable because of issues of safety, accessibility, and air and water pollution.
- Develop an understanding of how to create sustainable transportation solutions that benefit society as a whole.



Campaign in Action

To promote STEM education and help protect the environment, Kanyanisa proposed an idea to her school: invent a biogas system using food waste. The new biogas system would help the school save on cooking gas costs and generate organic fertilizer for their vegetable farm and garden. Students could also enhance their STEM learning as they built the user-friendly biogas system, and share and leverage this knowledge with other schools and neighboring communities. Because of this innovative idea, Kanyanisa was awarded a \$1,500 grant for her school and a volunteer trip to Ecuador with two of her classmates who also worked on the project.

Get Doing

STEP 1

Investigate and Learn

What local or global issue are you and your group passionate about? From plastics waste to energy conservation, dig into the issues that you see are affecting your community or the world. Use the Issue Cards to explore and learn about the different issues our world faces today, or research your own!

CHECKLIST

- ☐ Check out the Issue Cards or your own research
- ☐ Create an Action Plan
- ☐ Visit [WE.org/weareinnovators](https://weareinnovators.org) for resources
- ☐ Put up campaign posters
- ☐ Print out and distribute the resources
- ☐ Share on social media with [#WEareInnovators](https://twitter.com/weareinnovators)
- ☐ Plan your WE DayX
- ☐ Complete your Campaign Impact Survey
- ☐ Complete your Tech for Good badge survey



What did you learn?

What issues are affecting your school or community? What are the causes and effects? _____

What global issues are affecting the world? What are the causes and effects? _____

How can you advocate for the causes you care about using STEM? _____

STEP 2

Action Plan

With STEM, there are so many possibilities when it comes to making a positive difference in the world! Now that you know more about your chosen issue, it's time to create a plan of action and innovate a solution.

Set Your Goal

What cause or issue will you take action on? _____

What is your STEM idea to tackle your chosen issue? _____

How many people will you need to help you set off your idea? _____

How will you measure your impact? (E.g., the number of plastic bottles recycled.) _____

Assign Roles

Think about what you'll need to bring your innovative idea to life. Based on everyone's individual strengths and passions, decide who in your group will be responsible for each task!

Task	Group Member(s) Responsible
Collecting materials	
Building	
Research	

Design Your Idea

Use this space to design your idea that will make an impact!

STEP 3

Take Action

It's time to create positive social change! With your innovative idea and STEM skills, you and your group can make waves of difference at school, in the community and in the world.

Tip: Share your idea online and encourage others to innovate their own solution using STEM.



Don't forget to share your pictures, updates and success with [#WEareInnovators](#).

Reflect

What are some things you learned about your chosen issue? _____

Did you run into any obstacles when bringing your innovation to life? How did you overcome them? _____

What will you do differently next time? _____

How will you continue to raise awareness of your issue and make a difference? _____

STEP 4

Report and Celebrate

Report

How many people were involved creating your solution? _____

Depending on how you chose to measure your impact, what were your results? _____

Has your educator contacted your WE Schools Program Manager about filling out an Impact Survey? _____

Celebrate

Make sure you celebrate and share the success of your campaign, and reward yourselves for all your hard work.

- Share photos of your actions with your school, community and WE Schools Program Manager.
- Record the highlights of the process in coming up with your solution and create a video.
- Celebrate impacts through a class party, assembly or WE DayX.

Thank everyone who supported your campaign!

Use this space to brainstorm fun ways to acknowledge everyone who supported your campaign.
(E.g., send thank you cards.)

