

What We Did	How We Did It	Why We Did It
<p>[Breakout #1] Do Good Projects: Empowering Students as Agents of Change Students engage with justice-centered phenomenon before creating a community-facing project to educate an audience and/or advocate for change. Students engage in argument using evidence analyzed in class and position themselves as change makers through their "Do Good" Project.</p>	<ul style="list-style-type: none"> ● Introduce a justice-centered phenomenon: How can science be used to advocate for social justice issues? What social issues might be of interest and developmentally appropriate for students in my classroom? ● Evidence Collection: What data exists that sheds light on the issue? How can science be used to investigate an issue? How can data be used to inspire change? ● Class Discussions: How can the collected evidence be used to educate the public and/or advocate for an issue? ● Do Good Project: How can student voices be used to advocate for change? 	<ul style="list-style-type: none"> ● Recognizing the role of science in social justice: oftentimes, social justice issues are thought to be more appropriate for social studies classrooms. It's important to highlight the role of science, specifically data and evidence, in recognizing and addressing social issues. ● Empower Students to be agents of change: "Do Good" Projects challenge students to use their learning to educate an audience and/or advocate for change. Student voices are lifted by creating a product specifically for their community. This empowers students to recognize that they too can be change-makers in our society.

Do Good Projects: Empowering Students as Agents of Change

What are “Do Good” Projects?

“Do Good” projects are community-facing assignments that challenge students to engage in argument from evidence to educate a specific audience about an issue related to social justice. The rubric shown here can be used to assess student projects which may vary in modality such as public service announcements, letters to persons of power, social media posts, etc.

Why Use It?

This form of assessment aims to engage students with NGSS science and engineering practices, namely engaging in argument from evidence and obtaining, evaluating, and communicating information, while also positioning students as agents of change when it comes to social injustice. This can also help students recognize the role of science in social justice.

How Can They Be Used in My Classroom?

1. Identify a Social Justice Phenomenon that is developmentally appropriate and of interest to students
2. Engage Students in Data Analysis that allows them to draw conclusions related to the issue. Evidence should present how different groups or identities are affected by the issue and may also include evidence to support that the issue is a reality in our society.
3. Discuss As A Class how the evidence can be used to advocate for the issue or educate others. Encourage students to recognize that this evidence would change how people may view or feel about the issue.
4. Assess With Do Now Projects by presenting students with a rubric and asking them to create a product with a specific goal, relevant to the issue and their new learning. Have students use evidence to support their stance.

Do Good Rubric			
Category	Explanation	Points	Feedback
Target Audience	PSA has a target audience that is obvious to the reader or viewer		
#Purpose	The purpose of the PSA is clearly accomplished by creating a unique hashtag. The message is clearly understood and thought-provoking.		
Social Justice	Purpose of the PSA connects to a social injustice issue in their target audience		
Do Good	Describes an action that can be taken by the audience to make changes in their community to address the identified social injustice.		
Evidence	Scientific data is used to support the purpose of the PSA as evidence of the issue and/or the effectiveness of the “do good” action.		
Visuals	All video, illustrations, photographs, and drawings add to the purpose and interest of the PSA. Images create a strong connection between the message and audience.		
Originality	The PSA is creative and original. It shows that you have made this message your own.		
		Total	

Example 1: Skin Cancer in People Of Color

Students engaged with a case study of a young Black female with melanoma to address body systems (HS-LS-12), the cell cycle and mitosis (HS-LS-1-4) and DNA mutations caused by environmental factors (HS-LS-3-2). Students analyzed data related to melanoma diagnosis rates by race, biological sex and age, and compared them to mortality rates. Students read articles about the lack of representation of bodies of color in medical textbooks and Johnson & Johnson’s *Illustrate Change* initiative. Students were then assessed through a Do Good Project. Scan the QR code to see a student sample project.



Dear EPA,
I would like to propose a plan to make beneficial use of the parkside site in Manchester, CT for the people and the environment. The plan is called "Parkside". It is primarily a park that includes a green-roofed cafe, pond, playground, tennis court, community garden, rest areas, and green streets. The cafe offers a space for people to fill their stomachs and quench their thirst with a variety of delicious foods.

It manages stormwater, reduces temperature, energy use, and clean biodiversity, protects human health, and conserves natural resources beneficial for recreation and improves one's well-being. The community can improve health and increase access to fresh foods down to chat with others. The green streets manage and filter storm biodiversity, provides clean water, and lower healthcare costs through also increases biodiversity and is pleasant to watch as the living organisms, if not all of them, help to ultimately slow down climate change while taking the people and the environment into great consideration.



Sincerely,
Student

Example 2: Urbanization and The Nature Gap

Students engaged with a local phenomenon, a redevelopment plan that aimed to convert a vacant retail complex into a local park or other greenspace. The redevelopment plan had been rejected and students were tasked with advocating for its funding or designing a new plan for the local government to consider. Students analyzed data related to differences in access to clean drinking water, clean air, public parks, and open spaces by race and socioeconomic class on a national scale along with data related to mental and physical health as it relates to the nature gap. Students were then assessed through a Do Good Project. Scan the QR code to see a student sample.

STEM Teaching Tools: #30, #67, #71, #83
Other Phenomenon Ideas: sex verification in athletes, fatphobia, the water crisis, food insecurity