Chasing the Fashion Footprint
Climate Action Project Planner

DETAILED PROJECT PLAN

The project: In this project, students will propose to peers their personal commitment to climate change, using data, and show the individual and collective impact of such actions.

TEACHER TIP || Questions to ask when planning to roll-out this project*:

	Prior Knowledge: *What prior knowledge (if any) do my students have about the fashion industry, climate change, carbon emissions and carbon footprint?*
Authentic Audience: *How familiar are my students with one another? What kind of culture will I need to build in my classroom before students can see their peers as their authentic audience for this project?*	
	Context in Place: *What types of examples can I make sure to bring in so that my students see their individual actions as making a direct impact on their community and place?*
Project Management: *Will students work independently? How can I still encourage collaboration? What challenges in managing this project do I foresee happening?*	

*Project-based learning vs. traditional lesson planning: *In the midst of project-based learning, students are actively doing the work, learning, creating, and inquiring – eventually heading towards their end goal or product. Often misunderstood is that the organized chaos of what you might see in a PBL environment is carefully and intentionally designed by the teacher well before the project begins. The questions above should allow you to set the stage for student learning to unfold in the following project. Anticipating student questions and areas of need will help you to feel planned and ready in advance of a project.*

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Essential Question:	How can my small choices have a bigger, collective impact on the environment?

Skills and content needed to answer the Driving Question: *Refine these skills and content standards to the scope and need of your project. This project is designed to be interdisciplinary – but if you don't teach a subject, it doesn't mean that that skill or standard can't still play a role in the experience! – These selected skills and content will be supported throughout the project with activities, formative assessments and additional resources.*

Skills	Content/Standards
- Data collection - Self-reflection - Data visualization - Research - Communication - Collaboration *Add other skills to practice in this project*	**NGSS MS-ETS1-3 Engineering Design** Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success. **NGSS MS-ESS3-3. Earth and Human Activity** Apply scientific principles to design a method for monitoring and minimizing a human impact on the environment. **NGSS MS-ESS3-4. Earth and Human Activity** Construct an argument supported by evidence for how increases in the human population and per-capita consumption of natural resources impact Earth's systems. **CCSS.ELA-LITERACY.RST.6-8.7** Integrate quantitative or technical information expressed in words in a text with a version of that information expressed visually (e.g., in a flowchart, diagram, model, graph, or table). **CCSS.MATH.CONTENT.7.RP.A** Analyze proportional relationships and use them to solve real-world and mathematical problems. **CCSS.MATH.CONTENT.7.EE.B.4** Use variables to represent quantities in a real-world or mathematical problem, and construct simple equations and inequalities to solve problems by reasoning about the quantities. **CCSS.ELA-LITERACY.CCRA.W.7** Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation. **CCSS.ELA-LITERACY.CCRA.R.7** Integrate and evaluate content presented in diverse media and formats, including visually and quantitatively, as well as in words. **Add or remove standards to practice and assess in this project*

Activities, Products, and Assessments: *Below you will find the proposed activities, student products, and assessments for this project. Refine them to match the scope and need of your project, making sure that they align with the skills and content you chose to drive from in the previous section.*

Final project & summative assessments:

Proposal to peers of their personal commitment to climate change, using data.

Teacher Tip: Present the project calendar early on to show students where they are headed. *Students should know what is expected at the end from the beginning of the project. Use the templates provided to plan out the scope and sequence of the project. Include students in this process.*

Fast Fashion

What is fast fashion? What is the impact of the clothes we wear?

Launch the project with a gallery walk of shocking images and statistics about waste – clothing focused. Use the following resources as a starting point:

Gallery Walk resources:
- [Fashion Facts](#)
- [Fashion's Information Problem – Vox](#)
- [14 Facts about Sustainable Fashion – Rubicon](#)
- [The Story of Microfibers](#)

Generate questions using a Visual Thinking exercise: [I see, I think, I wonder](#)

Fast Fashion (n): clothing designs that move quickly from the catwalk to stores to meet new trends. It has an enormous environmental [footprint](#) for both its production and disposal.

Explore the answers to the questions raised during the gallery walk by watching the film clip that this project is inspired by: "Taimane on the Road", a clip from Episode 2, *A Climate for Change*
- *Students will learn about the individual choices that Taimane and her band make while on tour in California*

Complete the [Gallery Walk Reflection](#)

Students conduct [*Data Collection #1: What are you wearing?*](#) to get an idea of what impact the clothes they are currently wearing has on the environment.
- Students look at the tags on their clothing
- For each piece of clothing with a tag, students put a dot on a map of where that clothing was made

What to collect from students:
–Students complete the [Gallery Walk Reflection](#)
–Students conduct [Data Collection #1](#)

Type of assessment:
–Formative

Skills and content:
–Data Collection

–Self-Reflection

- - Paper map
    - Digital map (using Google Earth Projects)
- Look at the class data and reflect as a group on what the data says about their clothing choices
- Discuss the takeaways from Data Collection #1.

My Habits and Choices

What are my current habits and choices when it comes to fashion? What can my closet tell me about my fashion footprint? What habits and choices can I improve?

In this learning moment, students are introduced to the **project, project calendar, and rubric**. They will generate questions they have about the project and complete a 2nd round of data collection that helps them take a closer look at their **habits and choices.**

- **Introduce the Essential Question:** *How can my small choices make a bigger, collective impact on the environment?*
- Introduce the **project calendar** and the **rubric** for the final product that students will be working towards.
- Generate questions that students might have about the project and write them on the board or on chart paper. **Revisit these questions throughout the project.**

Assign the "at-home" challenge: *Data Collection #2: What's in your closet?*
- Thred-Up's Fashion Footprint Calculator

Students complete Impact Reflection #1

What to collect from students:
–Students conduct Data Collection #2
–Students complete Impact Reflection #1

Type of assessment:
–Formative w/ feedback

Skills and content:
–Analyze data (NGSS MS-ETS1-3 Engineering Design)

–Apply scientific principles (NGSS MS-ESS3-3. Earth and Human Activity)

Zoom Out Experience

What is the impact of the clothing industry on my island?

Set up a field experience. The experience should be an opportunity for your students to see large amounts of visible waste *(i.e. H-Power on Oahu)* or discarded, second-hand items *(i.e. Goodwill or a local thrift store).*

Explore solutions to reducing fashion footprints.
- What can you do? – Sustain Your Style
- 5 ways you can reduce your family's fashion footprint – Today's Parent
- How to minimize fashion pollution – Teen Vogue

Individually or in teams, have students brainstorm and conduct further research on what types of individual actions can decrease their fashion footprint. Use the

What to collect from students:
–Students complete the Brainstorm sheet to get their initial ideas down, practicing design thinking skills to change their own behaviors.
–Students complete the Impact Reflection #2

Type of assessment:
–Formative

brainstorm sheet.

Students complete Impact Reflection #2

–Conduct research (CCSS.ELA–LITERACY.CCRA.W.7)

–Construct an argument supported by evidence (NGSS MS–ESS3–4. Earth and Human Activity)

Teacher Tip: This is a great time to give students voice and choice in how they will complete their projects. *Using the project calendar, have students create their own timelines and establish agreements in their feedback groups.*

Project Work Time

Is my plan going to make an impact on my own behaviors? How will I show my data visually?

Provide time in class for students to work on their individual or team action plans.
- Students can use the presentation planning template to guide their project work

During work time, set up **mini-lessons** so students can learn new skills they'll need to incorporate into their final product:
- How to create a visual with their data (i.e. graphing)
  - *Tip: use data that the whole class has compiled data to demonstrate to students how to create a visual.*
    - Canva
    - Animaker
    - NCES Graph Maker
- Presentation prep
  - **Prepare to present!** Students can prepare in different ways.
    - Practice with a partner
    - Fishbowl practice presentations
    - Mock presentations

What to collect from students:
–Students create a data visualization and complete their presentation plan

Type of assessment:
–Formative (for feedback)

Skills and content:
–Collaboration

–Analyze proportional relationships (CCSS.MATH.CONTENT.7.RP.A)

–Use variables to represent quantities (CCSS.MATH.CONTENT.7.EE.B.4)

–Conduct research (CCSS.ELA–LITERACY.CCRA.W.7)

–Integrate and evaluate content (CCSS.ELA–LITERACY.CCRA.R.7)

–Integrate quantitative or technical information

visually.
(CCSS.ELA–LITERACY.RST.6–8.7)

Teacher Tip: Giving and receiving feedback. *Feedback is an essential part of Project–Based Learning! To be able to give and receive feedback is a skill that can be taught and practiced. If your students are new to peer critique, start small: provide sentence starters, show examples, and have them reflect on how the feedback they received impacted their work.*

Getting feedback

What can I do to improve my plan? Does my plan connect to the essential question of the project? How can I give my peers feedback that will improve their plans?

Giving and receiving feedback from peers.
- If students are new to giving and receiving feedback, show the video **Austin's Butterfly,** and review what Kind, Specific and Helpful feedback looks like.
- Ex: have them pair up as they finish to give and receive feedback from one another. They should complete a feedback form (or index card) for each person they give feedback to, and receive one in return.

While students are working, you can also conference with students. This is a chance for you to meet with students in groups or 1–1, with the project rubric in hand. Think of it as a *final check–in* before the final project is complete. You may need to remind students to take a step back to the research stage.

Consider asking students:
- *How does this connect to the essential question?*
- *What part of the rubric do you think you still need to include in your project?*
- *What peer feedback did you receive that was helpful?*
- *What other information does your plan need to include?*

Remember to give time for students to address the feedback they've received and make revisions to their final project!

What to collect from students:
Students submit their final data visualization and presentation plan

Type of assessment:
Formative (for feedback)

Skills and content:
–Collaboration

–Reflection

Sharing the Learning

How can I share my action plan with others? What do I need to do to stay committed to my plan?

Set up an opportunity for students to share their learning. This might be done internally, in the classroom, or with a class of younger peers. Presentation options can vary:
- Whole class presentation
- Small group presentation + discussion

What to collect from students:
–Collect the Final Product to assess from students
–Students complete the Project Reflection after the presentation

Type of assessment:
–Summative + Formative

	Skills and content:
● Presenting in pairs + feedback *The goal of the presentation is for students to share their learning and their action plans, thereby committing to a change in behavior.* Students complete a **Project Reflection.**	–Reflection –Communication –Integrate quantitative information visually. (CCSS.ELA–LITERACY.RST.6–8.7) –Construct an argument supported by evidence (NGSS MS–ESS3–4. Earth and Human Activity)

Assessment Tip: *Determine before the final presentation day whether you will assess the final projects/presentations before or after the public presentation. If you decide to wait until after, students can be given a chance to reflect on how the public presentation went, make any final changes and then submit to you for assessment.*