



PROJECT TITLE: Harvesting Sustainability: Cultivating a Greener Future

COURSE: Biology Honors

INSTRUCTOR: Ms. Wimberly



## DRIVING QUESTION

How can sustainable farming practices contribute to a greener and more resilient future for farms?



## PROJECT SUMMARY

Students will take on the role of a farmer applying for grant funding to solve a real farming challenge using sustainable practices. Students will choose a farm profile, research the farm's challenges, select a sustainable solution, and write a thoughtful, well-structured grant proposal. The goal is for students to learn how real-world farmers seek creative and sustainable ways to grow their businesses and care for the environment.



## REAL-WORLD CONTEXT

Students act as farmers applying for an agricultural grant to fund a sustainable project. They will model their written grant from a real grant application and present their proposal to an audience consisting of students, a local farmer, and a county extension agent. The project connects to students through the sustainability and community impact pieces, showing how science and problem solving apply to real world challenges.



## PRODUCTS & AUDIENCE

Students will create a thoughtful, well-structured written grant proposal with a visual aid to present the proposal to the audience.



## STUDENT REFLECTIONS

- “This project helped me improve in my research skills, providing reliable sources. and providing valuable information. It gave me a boost in something I wasn’t so strong in and at the end of this project, I felt more comfortable in researching.”



## NC PORTRAIT OF A GRADUATE SKILLS GAINED

COLLABORATION

COMMUNICATION

LEARNER'S MINDSET

CRITICAL THINKING

PERSONAL RESPONSIBILITY



## TEACHER REFLECTION

“The Harvesting Sustainability PBL allowed students to play the role of a farmer requesting grant funds to complete a project on their farm that helps it be more sustainable. Students were given a list of hypothetical North Carolina farm profiles to choose from, which included the challenge it is facing. Students then researched sustainable solutions and materials that were needed to complete the project, developed a budget, and wrote a grant application. They worked very well together, and they used their time efficiently. They did a great job of delegating responsibility within the group. I was especially proud of their resilience when our work time was shortened by school delays and cancellations. They really stepped up to complete the project on time so we could watch their presentations and still have enough time to prepare for our Biology EOC. Overall, areas that could have used improvement are the depth of their research and the detail of their budgets.”