

Be the Change You Want to See in Your School!

Every day, engineers create new inventions and products that improve our world. Hybrid cars (cars that use a combination of electricity and gas) were just a daydream before engineers Victor Wouk and Charlie Rosen made them a reality.

Imagine you are an engineer who wants to improve our school. What areas of the school need to be improved? Is our school environmentally friendly? Does our classroom need more organization? Does our lunch line flow smoothly? Does our school's landscaping need attention? Think about your daily activities and what changes could improve them.

Project Tasks

1. As a class, we will discuss the following questions.
 - ♦ What do engineers do?
 - ♦ What is an invention that makes your day flow smoothly?
 - ♦ What about it improves your day?
2. Watch the Disney Channel (2014) video "Friends for Change" (www.youtube.com/watch?v=NyeGqAxEMHE), and answer the following questions with your group.
 - ♦ How did the community work with the volunteers to build the new classroom?
 - ♦ When planning your project with your group, how can you simulate their teamwork?
 - ♦ How important was planning and organization in building the classroom?
 - ♦ What are the first steps you and your group should take when planning your project?
3. Walk around your school to identify possible problems.
4. Begin planning using the "Project Planning Sheet."
 - ♦ Once you have identified a school problem that you would like to solve, create a plan for how to solve the problem.
 - ♦ After the plan has been created, make a list of steps to implement the plan.
 - ♦ Once the steps have been listed, create a poster on Glogster (www.glogster.com) or Canva (www.canva.com) or a video on Animoto (<https://animoto.com>) that showcases the steps of your plan.
5. After the teacher has reviewed all the groups' plans, the plans will be brought to the attention of the principal for implementation. If approved, the posters or videos will be hung around the school for other students to view or broadcasted on the school's closed-circuit TV or digital scrolling screens to play continuously for passersby to view.

Project Planning Sheet

Name: _____

Imagine you are an engineer who wants to improve your school. What areas need to be improved? Is your school environmentally friendly? Does your classroom need more organization? Does your lunch line flow smoothly? Does your school's landscaping need attention? Think about your daily activities and what changes could improve them. Write down your ideas.

1. _____
2. _____
3. _____
4. _____

Select one idea from the list that you think would make the best project. Circle the number. As a group, record why this idea is the best option for this project.

It's time to put your idea into action! What steps are needed to implement your plan? Your plan needs to have at least four steps.

1. _____
2. _____
3. _____
4. _____
5. _____
6. _____

Now that you and your group have a plan, trade your steps with another group for peer review. Edit each other's plans until you believe that they are ready to be put into action.

You are now ready to put your plan to the test! Design and create a poster using Glogster or Canva, or create a video on Animoto to showcase the steps to implement your plan. Don't forget to add a catchy title and attention-grabbing poster or video by adding pictures and other visual aids. After you have created your poster or video, list the sources that you used to create your plan in a Word document.

After each group has hung up its poster in the classroom or broadcasted its video, walk around and vote for the project that you think is the best. You may not vote for your own project.

Scoring Rubric

Group Cohesiveness (ten points)

- Students work together and contribute to the group.
- Students discuss their ideas in a polite manner and do not argue.
- Students equally carry the project's workload.
- Students provide useful feedback for other groups.

Project Details (ten points)

- Students include at least four steps for their plan.
- The plan is practical and can be implemented in the school.
- Steps for the plan are in the correct order.
- Steps include enough detail for the reader to understand.
- Students provide a Word document with a list of their sources.

Poster (ten points)

- The poster includes all the steps needed to implement the group's plan.
- The steps displayed on the poster are easy to read.
- The poster is attention grabbing and visually pleasing.