2B Class Project

Second Grade Students

2/2/26

Cardboard Shoes: Can We Make Shoes That Last?

In our classroom, we worked on an engineering project called Cardboard Shoes and asked ourselves: Can We Make Shoes That Last? In this project, my second grade students explored how everyday materials can be used to solve real problems. We chose cardboard because it is easy to find, can be recycled, and is strong enough to test new ideas. We learned that many engineers use recycled materials when they design and build things, especially when they want to help the environment.

The purpose of our project was to see if cardboard shoes could be strong enough to wear during second grade recess. We also talked about how some people around the world do not have shoes and recycled materials could help them. Before we began, students made a prediction that the cardboard shoes would last for one week if they were built carefully.

Students traced their own shoes on cardboard to make soles and then added sides, toes, and tongues to create shoes. They used glue, fabric, and shoelaces to hold the shoes together. After building the shoes, students tested them by wearing them during recess. One shoe stayed together, and one shoe fell apart. This helped students understand that good design and strong building choices are important.

Through this project, students learned that engineers do not always get things right the first time. They must test, observe, and improve their designs. Using recycled materials also helped students learn how reusing items can protect the Earth and reduce the amount of waste we produce. According to the Environmental Protection Agency, recycling helps save resources and keeps materials out of landfills. Students also learned that working with recycled materials supports creativity and problem-solving skills, which are important parts of the engineering design process they use in our STEM Lab.

Overall, this project helped students see how engineering can be used to solve real-world problems while also helping people and the environment.

Bibliography

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