



2021 NJ TSA MIDDLE SCHOOL TOPICS/DESIGN PROBLEMS
February 25-March 2, 2021

Completed entries must be emailed to tsachall@tcnj.edu.

Challenging Technology Issues

Topic: Standardized Testing

Essays on Technology

Digital Communication has become a part of all levels of our daily lives. And, most recently, an integral part of our socially distant world. Corporations of all sizes use digital communication to conduct business. Educational institutions use digital communication to conduct virtual learning between students and teachers and to communicate with parents. And, digital communication has become a primary tool for staying in touch with friends and family.

Participants are required to write an argumentative essay discussing different forms of digital communication, and the positive and negative effects of digital communication on the following subtopic:

personal life

Leadership Strategies

It is assumed that our school's TSA chapter will be strengthened through the support of local businesses and industries. Currently, there is little participation of these groups. How might we change this?

Technical Design

Porch Pirate Challenge

Because of the COVID-19 pandemic, more people than ever are shopping online. More than 25 million Americans have their packages stolen right from their doorsteps each year. In a recent survey, 14% of the people who responded indicated that they had had a package taken from the front of their home. Although this problem gets a lot of media attention each year during the holiday season, the problem continues throughout the year. The world's largest online retailer, along with several major shipping companies, are anxious to hear about possible solutions to the problem.

Your challenge is to design a safe and simple mechanical and/or electronic system that homeowners can use to help prevent the theft of packages delivered to their homes.

Prepare a portfolio that includes each step of the technical design process loop. You do not have to build a model of the system, but its design and use must be explained through text and hand-drawn sketches, as explained in the 2021 Middle School Virtual Competitive Events Guide. The design portfolio must be sent as a PDF attachment to tsachall@tcnj.edu by 5pm on March 2, 2021.