

Unit – Ethics in CS

Essential Questions:

How should ethics play a role in our decisions when using computers?

What is an individual's responsibility to act ethically?

What is the government's responsibility to define ethical behavior?

Lesson #5 – Automation

Objectives - SWBAT identify the ethical concerns of automation in the industrial world.

Supporting EQ: How will automation affect the job landscape of the future?

Standards (Rhode Island Computer Science Standards)

3-RC-CU-1 Evaluate the ways computing impacts personal, ethical, social, economic, and cultural practices.

Overview

Do Now: What is a job that exists now that did not exist 50 years ago?

Activity: Students will read an article on the advantages and disadvantages of automation. They will pick a job that is at risk of being replaced by automated machines and decide if this will be beneficial or detrimental to society, and analyze the potential fallout of that job being eliminated.

Notes

After the Do Now, students can discuss the various jobs that no longer exist and can discuss what happened to people who did those jobs. Some sample jobs are travel agent, bowling alley pinsetter, switchboard operators, lamplighters, etc. After this discussion, students will read an article on the advantages and disadvantages of automation. They will choose one particular job that is being steadily replaced by automation that is mentioned in the article and decide if this is beneficial or detrimental to society. Students will choose a side of Save the _____ or Automate the _____ and provide supporting evidence to defend their position.

Students will post their opinions on a Padlet dedicated to each job mentioned in the article. Students will post on one side or the other, outlining potential fallout, alternative opportunities, and other societal changes. After the debate, students will choose one point from each side as the best argument for that particular side and explain why they believe it is the best argument.

Handouts

<https://www.britannica.com/technology/automation/Advantages-and-disadvantages-of-automation>

In-Person Learning Alternative:

Students can work in small groups and create posters reflecting both sides of the argument.

Resources

<https://www.britannica.com/technology/automation/Advantages-and-disadvantages-of-automation>

Google Form:

What was the best argument for Saving the _____? Why?

What was the best argument for Automating the _____? Why?

Assignment/Assessments

Students will post on a Padlet and partake in a debate, then will identify and explain what they believe is the best argument for each side, submitting via a Google form exit ticket.