Grade 8 Science
Unit 4: Systems in Action

Impacts of Automation

Last period we looked at how automation has changed the production of a product. In doing that task we started to look at the impact that automated systems can have on the world around them.

Today we will look at the impact of automation on society, on economics, and on the environment.

I will hand out a card to each of you. Do not show it to anyone, do not tell anyone what it says. This card represent a point of view, a perspective from which you will think about a situation that I will reveal to you on the next slide. Once I reveal the situation, I would like you to start thinking about how the situation would affect you in this role. How would it make you feel? How would it change your life? Is this a good thing or is this a bad thing? Write down any and every thought you have, as we will have a discussion about this later this period.
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A big name company has just purchased a large plot of land in a small, tight knit community. The town has a relatively low population, but it is very self-sufficient in that it meets its needs very independently. The residents of the town mostly make their living from the production of a very specific product, and do well with this because the materials needed are found in large supply very near the community, and the skills needed to hand craft the product is something that has been passed down through generations. Some residents are involved with supply, others with manufacturing, and others still with sales and distribution of the product.

The new company moving in has large corporate backing, which has allowed it to purchase very high-end automated machinery to manufacture the same product from which many of the local businesses make their living. The new company plans on a very high scale production, and is willing to replace current materials with other, cheaper materials, if they feel they can reduce production cost. The machinery involved will need people to monitor and repair, but most of the production will be automated.

How will this affect you?

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At this point I would like you to pause. I will be coming around to put you into groups. The people in your group will be people with the same card as you. One of you will be without a group, and will come see me.

Please sit with your group and discuss your thoughts. Keep in mind, that you could actually have different perspectives on the situation.

In three minutes we will be calling a town meeting. At this point, I would like to tell you who will be present at that meeting.

You have the last three minutes to think about how the other groups may feel, and things they may say that you might want to dispute.
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And, now, I would like to call a town meeting.

- Our mayor will run the town meeting, he/she is in charge.
- The mayor will call upon those who wish to speak. He/she may also ask for your input on a situation.
- You will keep your comments and discussion points appropriate and polite.
- I, as the town’s record keeper, will be monitoring and recording the input of each participant at the meeting.

Mr./Mrs. Mayor, I turn the floor over to you.

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What were the biggest points of disagreement amongst the different people involved in this situation?

Did we have any points about which people felt relatively mutual?

Who is most likely to benefit from this situation?

Who is most likely to affected negatively by this situation?

Is there anything, you feel, that could be done to alter this situation, to come to a compromise, that would make all parties involved happy?

Please come prepared, with a calculator, to write your test next period.