# **Education Systems in the Age of Automation and Artificial Intelligence**

**Student Name:** Sarah Mitchell
 **Student ID:** 2145789
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## **Introduction**

In todays world, technology is everywhere and its changing how we work and live. Artificial intelligence and robots are taking over lots of jobs which means schools need to change too. This essay will talk about how education should adapt to prepare students for the future when robots do everything. I think schools should teach more about computers but also keep teaching normal subjects because people still need to be creative and think for themselves.

The question is whether we should focus on STEM subjects or soft skills. Both are important but its hard to know which one is better. I will discuss different approaches and give my opinion on what schools should do.

## **The Problem with Automation**

Automation is when machines do jobs that people used to do. This has been happening for ages but now its happening faster because of AI. Lots of jobs are disappearing like cashiers at supermarkets because of self-checkout machines, and even some lawyers because computers can read documents now.

This is a big problem because people need jobs to make money and live. If robots do everything then what will people do? Some people say new jobs will be created but others think there wont be enough new jobs for everyone who looses there job to automation.

Education systems were designed for the old economy when people got a job after school and stayed in it for there whole life. But now people change jobs all the time and need to keep learning new things. Schools need to change to help people adapt.

## **STEM vs Soft Skills**

There are different opinions about what schools should teach. Some people think we need more STEM education because technology is important. STEM stands for Science, Technology, Engineering and Maths. If students learn programming and how to use computers then they can get good jobs working with technology instead of being replaced by it.

But other people think soft skills are more important. Soft skills are things like communication, teamwork, creativity and critical thinking. These are things that robots cant do very well so humans will always be needed for these kinds of tasks.

I think both are important but if I had to choose I would say soft skills are more important because they make people more human and creative which robots will never be able to do properly.

## **What Different Countries Do**

Different countries have different approaches to education. Some countries like Singapore focus alot on technology education and there students do well in maths and science tests. Other countries like Finland focus more on creativity and there students are also successful.

In Germany they have a system where students can choose to go to university or do apprenticeships where they learn practical skills while working. This seems like a good idea because students get real experience and companies get workers who know what they're doing.

The UK has been trying to improve STEM education but I think we also need to keep teaching arts and humanities because these subjects help people think creatively and understand the world better.

## **My Ideas for Improving Education**

Schools should teach students how to use computers and understand basic programming but they shouldnt focus only on technical skills. Students also need to learn how to think critically, work in teams, and communicate well because these skills will always be valuable.

I think schools should have more project-based learning where students work on real problems instead of just memorizing facts for tests. This would help them develop both technical and soft skills at the same time.

Universities should work more closely with companies so that students learn skills that employers actually need. Too many students graduate with degrees that dont help them get jobs, which is a waste of time and money.

The government should also invest more money in adult education because people who are already working need to learn new skills too. If someone looses there job to automation they should be able to retrain for a new career.

## **Problems and Challenges**

There are lots of challenges with changing education systems. First, it costs alot of money to buy new computers and train teachers how to use them. Many schools dont have enough money already so this would be difficult.

Second, teachers might not want to change how they teach because they're comfortable with the old ways. Change is always hard for people.

Third, we dont really know what jobs will exist in the future so its hard to know exactly what skills to teach students. Technology changes so fast that by the time students graduate the skills they learned might already be out of date.

Also, not all students are good at technology or want to work with computers. We need to make sure that there are still opportunities for people who prefer other types of work.

## **Evidence from Research**

According to Frey and Osborne (2017), about 47% of jobs in America are at risk of being automated in the next 20 years. This shows that automation is a real threat to employment and education systems need to respond.

## **Conclusion**

In conclusion, education systems need to change to prepare students for an automated future by teaching both technical skills and soft skills, and the government should invest more in training programs.

## **References**

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, 114, 254-280.

**University Honor Code:** I affirm that I have not given or received any unauthorized help on this examination, and that this work is my own.

**Student Signature:** S. Mitchell **Date:** 15/03/2024