

“School classrooms look the same across history and across countries. But is the classroom the best way to educate future generations in the 21st century? What would the ideal education system look like?”

From the music and archery of Ancient China, to the astronomy and botany of Classical India, education has always been sculpted to fit a century, a society and a purpose. Primitively, it was merely the informal transmission of culture and values, but it soon became an instrument of national development- a way to cross real-world barriers. As time passes, chalkboards have turned into interactive whiteboards, one-room schoolhouses have turned into extensive buildings and the current curriculum is deemed the most qualifying. And now, considering this rapid advancement, we are led to question whether the classic classroom is the best way to educate future generations in the 21st century. In a period when technological and scientific advances are abundant, must we stick to an education system that was designed for the early Industrial Age? What would the ideal schooling system look like? And how does the curriculum, teaching method and classroom format play a role in it? In order to explore this image of an ideal education, I will conduct research on our current system and other diverse ways of schooling. I will analyze how technology and the outdoors are being utilized in schools globally. By gathering elements of different schooling methods that I like, I will paint a picture of how a futuristic schooling system should appear.

Harbouring a broad curriculum, top-ranking universities and sufficient resources can give an education system a stable image, but the mental health of staff and students is just as important. In a report published by OFSTED in 2019, 54% of teachers said that their job negatively impacts them, while 1 in 10 primary and 1 in 7 secondary students suffered from a diagnosed mental disorder. Many say that the competitive nature and importance of examinations in schools can induce this, therefore, this point is noteworthy when thinking about an ideal education. Starting from the mere age of 6, the UK puts students under academic testing, printing the results in a national league table. On the contrary, places like Estonia, for example, focus early education on developing social and emotional skills, in order to make students ‘school-ready’. Consequently, Estonian students outperform students in the UK massively. To put it more simply, the building of skills, rather than the memorization of content, should be prioritized in early education (such as in nursery). This is a point that I will restate, further along the essay.

Now that we have discussed the typical education system, I will delve into other diverse forms of schooling, highlighting the reasoning behind them so I can incorporate these ideas into my description of a model schooling system.

The famous philosopher, Jean Jacques Rousseau, once insisted that formal education was, like society itself, inevitably corrupting; education should enable the “natural” and “free” development of children, he had argued. This view may have led to the development of informal education and methods such as ‘unschooling’-a form of self-directed learning. We will discuss scenarios where unschooling has been a successful substitute for formal education, deducing the reasoning and results behind them.

Firstly, we'll follow the case of Peter Gray, a research professor in psychology. Having been educated by the traditional school system himself, Peter was skeptical about admitting his son to Sudbury Valley school (SVS), after he had begun to misbehave at his previous one. SVS is, essentially, a school where children simply goof around. In other words, pupils choose their activities; from making mud pies and building with cardboard boxes, to watching TV and drawing. Yet, many receive higher education. How does a child go from making mud pies to studying at a university? Scott (Peter Gray's son) attended Boston College and even wrote an article about his transition between the two very different schooling systems. Referring to his article, most students at Boston College were accustomed to being told where to go and what to do, while directing oneself was Scott's norm. Rather than being taught how to find answers, Scott had never known any other way. Perhaps it is this independence, this sense of 'doing things, rather than being told how to do them' that successfully prepares children for the outside world.

Additionally, this notion could be further entertained by the concept of homeschooling. Homeschooling, another form of informal education, involves a one-to-one interaction with a parent and child. Primarily, most parents try formal methods of teaching, as that's the only approach they know. However, many become more inclined to informal methods, after they notice how the child would pursue their own interests in their freetime. After trying different alternatives, the majority of parents decide that an informal curriculum is the best path for their child. Critics emphasize that an unstructured schooling environment can result in poorly educated children, but new research claims that an informally schooled child is no more likely to fail than a formally schooled child. As for skills such as reading, research shows that although the age at which homeschooled children learnt to read ranged from 18 months to 16 years, a homeschooled woman who began to read in her teen years received higher education. In light of this information, it seems as though allowing a child to learn at their own pace, fueled by their own curiosity, is the best way to allow natural development.

To put it more simply, it is said that in formal education systems, school is like jumping through a series of hoops. These hoops are accomplishments, such as to earn a good grade. Learning, on the other hand, is simply a facilitator for this. Meanwhile, in informal education systems, a child chooses to learn when they are motivated. Learning is a goal, not a facilitator. This view is important, as an ideal school should value learning over a grade.

After evaluating the ideologies behind different schooling systems, I think it important to understand how technology and the outdoors can be utilized in school. Perhaps this concept, of manipulating all our resources to our benefit, will be something we need in the future.

Technology. It's grown significantly since its introduction. We have gone from using radios and compasses to 3D printers and AI. And now, technology is almost everywhere we look, from homes to streets, transport to work. Over time, technology has made its use more evident in schools. We have interactive whiteboards, laptops, iPads. But what about schools all over the world, who are using technology as a substitute for basic resources? In many schools, such as

some in Japan, exercise books have been replaced with a single tablet. Rather than carrying a number of books to class everyday, all academic notes are stored on a device, which creates a reliable platform for revision.

This use of technology can also make children independent from a very young age. The 'flip-the-classroom' technique has been growing in popularity since it was introduced. Rather than learning at school and completing homework at home, the flip-the-classroom idea proposes for students to watch lectures, research and understand a lesson online at home, while homework is completed at school. A teacher isn't a knowledge-keeper, but rather a facilitator, a guide. Even though instructions are delivered online and children are required to understand independently, results show that students can complete tasks with little adult intervention. This process can relate to Sugata Mitra's hole-in-the-wall computer experiment. Mitra dug a computer into a wall in the slums of Delhi, trying to experiment with the idea of self-learning. He was amazed to find that children learned how to operate the computer rather quickly, in a matter of a few days, with no guidance. This leads us to believe that in the future, communication and independence will be indispensable skills, while technology can encourage the development of them.

However, I must accept up to a certain degree that there are other ways of practising these skills, rather than spending screen-time. Forest schools are nature-based communities and make use of the outdoors, rather than technology. Typically based in woodland environments, they promote a relationship between the learner and nature. Fostering resilient and independent learners, these schools encourage taking supported risks, exploring in a secure environment and devising plans for how to tackle activities. Pupils are taught how to care for themselves, once again, promoting independence. Meanwhile, the results indicate that pupils at these schools are capable of achieving outstanding GCSE and A-level results.

So, it seems as though both informal and formal, online and nature-based education can teach a learner. The only difference is a student's willingness to learn, and the effect learning has on them, in terms of mental health. Now, using all of these ideas, ideologies and information, I will construct a detailed description of what I believe an education system should look like in the future. I will gather elements from different schooling systems, which we have just discussed, and split my ideas into three main sections: the ideal curriculum, teaching method and classroom format.

Since the introduction of the Education reform act of 1988 (in England and Wales, followed by Northern Ireland in 1992), the national curriculum has changed from the basics of numeracy and literacy, to a wide array of subjects. And now we must ask, what's next? Personally, I believe that the curriculum of the future will be more accelerated, as one might describe. During early education, such as in nursery, school will be focused around building social and emotional skills while acquiring basic language and numerical knowledge. As we have previously highlighted, skill development during early education has proven to be beneficial. Subsequently, in primary years, they will move from learning colours and numbers to solving algebraic equations and writing narratives. They will learn, not only the basics of science, but science that today's 8th grader studies. Many criticize how the UK's education system requires children to choose their GCSE subjects and future job quite early, but by allowing a primary student to acknowledge the content

in every subject, we are giving them an opportunity to understand the amount of effort a subject requires, and the job opportunities it concerns. A primary student will be equipped with the knowledge and experience of someone who is halfway through secondary education. Highschool will present new digitally-focused subjects, as well as the most advanced kind of science and maths. Extra-curricular activities could include astronomy, coding or other STEM-related subjects. Soon, pupils will be introduced to a more personalised curriculum- one which allows them to take deeper dives into subjects that interest them. Playing to their strengths and interests, students will learn to not only answer textbook questions, but to tackle real-life problems, such as overpopulation and global warming.

So, we have discussed what future generations may learn in an optimal education system, but now we must discuss how this content will be taught. A curriculum cannot serve if the teaching method is not adequate. As I see it, elements of the 'flip-the-classroom' technique, which we've previously discussed, would be ideal here. Students will be assigned a topic to research at home- they'll spend their time watching videos, skimming through websites and making notes or drawing diagrams. In the classroom, students will spend the start of the lesson comparing notes with their peers and assisting those who are confused. Afterwards, a teacher will run through the topic, solidifying and enhancing the students' knowledge. The rest of the lesson will focus on applying this knowledge to real-life situations or completing worksheets where this topic is relevant. As for revision, I propose that all notes are summarised and stored online on a single device, during the last half hour of the lesson. This way, a student can revisit their reliable notes whenever they feel the need. Now, how frequent and significant will tests be in the future? According to our observations, putting emphasis on the importance of exams can be damaging to mental health, but how can strengths and shortcomings be identified without them? In my opinion, every month, a short assessment should be taken. The content of this assessment will be of last month, and the current month. Not only will this be a form of revision, it will also normalize exams, and make grades seem less determining.

As indicated by our findings, a student learns best when they are motivated. Hence, we cannot expect a pupil to absorb such complicated content while being enclosed within four dark walls and a door, sat at a desk which faces towards the front of the class. In my judgement, the ideal classroom of the future may vary depending on the subject, the age group and the school. But all in all, it must be bright, comfortable and well-ventilated. Some classrooms may have rising seats in an amphitheatre-style, with a large, interactive screen at the front of the class for presenting. There may be more windows than walls, sufficient heating and fast internet. An alternate design could promote more collaboration. A bright well-lit classroom could harbour different types of seating areas- chairs by the windows with cushions, grouped-together tables at the rear and individual desks in one corner. Classes could have living plants, desks upon desks of computers or reading corners. Virtual reality could make geography a striking experience, while in languages, teachers could freely contact schools in different countries. However, in the words of Micheal Horn, a co-founder of an institute: "In the future, we won't have 'classrooms.' The enemy of the future of the classroom has arguably been that phrase: "the future of the classroom." It locks us into a model of believing students will be sorted by age and sit in a room together with one teacher in the front." We must not lock the word 'classroom' into an image of four walls and a door. Classes

could take place on large balconies, on gardens or on trips, as in the future, I am sure schools will have easier access to places such as museums or art galleries and elsewhere. The possibilities for the growth of education are infinite, and it is important that we explore them.

So, is the traditional classroom the best way to educate future generations, after all? I don't think so. The relationship between education and the workplace has been questioned immensely in the last century- it is said that 65% of students who entered primary school last year will work in jobs that we have never even heard of, from nanotechnology to biotechnology to something entirely bizarre. To keep up with this constantly evolving future, we must have a more advanced curriculum and a more welcoming environment where it will be taught. The generations after us will have to solve unseen problems; they must be equipped with the knowledge, experience and skills to do so. They must honour our education and, one day, add to it.