

Thomas Newcome invented the first steam engine in 1712, after a decade of testing steam pumps (Zimmerbaun, 2023). It was mainly used to clear water from mine shafts (Zimmerbaun, 2023) as the amount was rising, from 5.2 million tonnes of coal produced a year to 62.5 million tonnes of coal a year (Lancaster University, 2014). This was due to the Industrial Revolution that began in the UK in 1760 and ended in 1840, which later spread to other countries across the world (Britannica, 2023). During this period, many forms of transport were created to transport goods such as iron and coal, such as canals and boats, but mainly trains (BBC, 2021).

By the end of the First World War, the UK had 23,000 miles of rail track and 4,000 stations. There were 1.5 million passengers annually, and the railway had more than 700,000 employers, making it one of the UK's largest employers (Erridge, 2018). On the other side, many machines replaced manual labour, but they also left jobs that required cognitive skills for people (Elliot, 2023). Technology could only do so much in the 19th and 20th centuries, but it has advanced, leading to 1.7 million people worldwide losing their jobs to industrial robots since 2000 (Darina L, 2023).

Technology has had an enormous effect on education, especially during and after COVID-19, which led to lockdowns, meaning schools were forced to close to lessen the spread of the virus. The most effective way to continue teaching, allowing teachers to continue working and avoiding as much disruption as possible, was by using software such as Teams, Zoom, or Google Classroom. This meant that everyone needed access to WI-FI and suitable technology to access the software, like laptops. According to the UK Parliament website, "9% of households containing children did not have home access to a laptop, desktop PC or tablet" (Baker, 2020). This limited their access to education for almost three years. This is extremely similar to before the printing press was created by Johannes Gutenberg in 1436 (Roos, 2019), as it also limited children's access to an education.

Technology has had a positive effect on society and education, as it helps learners reach their full potential. "Educational technology can improve mental and physical health with games, assessments, surveys and other tools" (Morris, 2023) rather than only reading and writing over and over again. It also helps keep learners and teachers up to date and develop new skills (Morris, 2023). This has been beneficial to the economy as learners were able to continue going to further education, such as university, meaning student loans were still being given, which benefited the government greatly by lessening the negative effect on the economy (Mosley, 2020). Due to COVID-19, the use of technology within schools in the UK has increased, with 64% of schools using technology in everyday teaching (Remon, 2022).

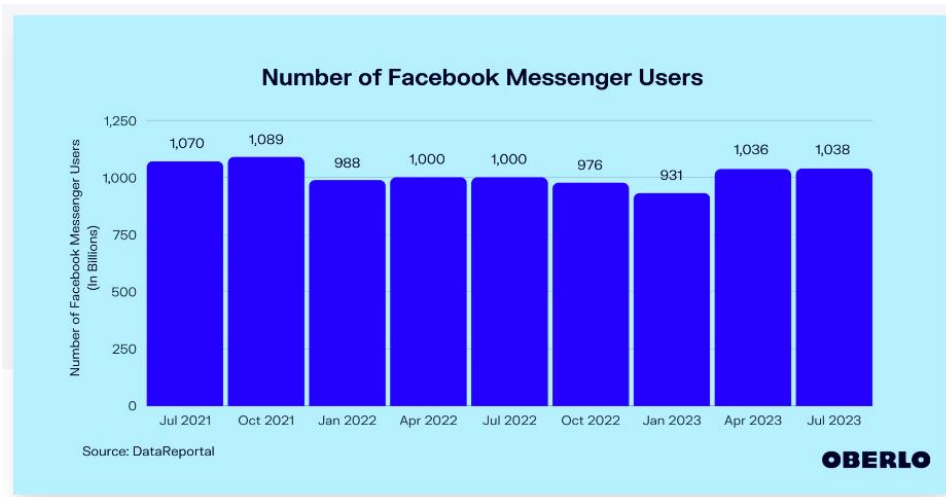
In the UK, 84% of schools reported enhanced student preparation; this is higher than 78% globally (Remon, 2022). Back in the 1960s, Marshal McLuhan, a Canadian "academic who worked on electronic media, predicted the impact social media and technology would have on the masses (Aljazeera, 2019). McLuhan believed "the medium is the message" (2023, Bell), which means that the method and technology with which context is shared affects how it is received (2022, Daphne). This means that a message could be misinterpreted or that the medium that which it is sent determines the type of connection or relationship. An example of this could be that someone could message their work colleague through Messenger or a loved one by text, as it is closer and more personal. McLuhan also believed that technology is an extension of the human body; for example, Google is an extension of our minds (2023, Bell). The way that we think and see the world is determined by how we

communicate (2023, Bell). Social media has been around for 25 years (2020, Maryville) with apps like Facebook, Instagram, and Twitter that connect people from all over the world. They have had many savvier impacts on the world and will continue to do so for generations to come.

All social media apps have been created with these good intentions but get constantly misused and therefore become a threat to communities, especially children. According to 2022 Ofcom research, it is more likely that older children get bullied on a screen than in person (2023, National Children's Bureau). This makes it easier for the bullies, as they are able to hide behind a screen, hide their identities, and pester people with negative and hateful messages. 39% of children aged between 8 and 17 years old have experienced bullying either online or offline, 84% online, and 61% face-to-face (2023, National Children's Bureau). This clearly shows the negative effects that social media is having on societies, as it is allowing people to easily torment innocent and unhappy individuals, which creates a drift and a gap within communities.

Online grooming has also become a problem on social media. According to the NSPCC, in the last six years, there were almost 34,000 online grooming crimes against children recorded in the UK (2023, NSPCC). In 2022 there were 6,350 sexual communication with a child offences recorded; this is an 82% increase since 2017/18, when this offence came into force (2023, NSPCC). Many could argue that children's childhoods are being shortened or even taken away, as many children of any age can create a social media account, meaning they have full access to the internet. This allows them to be fully aware of everything negative that is happening in the world, such as wars and politics. This isn't something young children need to know; they deserve happiness and innocence from the world. Many streaming platforms, such as YouTube and Netflix, have created children's accounts, which limit what they can and cannot see (2023, Heckscher). This has a negative effect on societies as there is constant tension surrounding children, shaping them into negative and argumentative people.

Despite all these negative aspects of social media, there are also some extremely beneficial uses. Messaging apps, such as WhatsApp and Facebook Messenger, are extremely useful as it allows people from all across the world to stay connected. WhatsApp is the most used social messaging app in the world, with more than 2 billion users worldwide (2023, McLachlan). Facebook Messenger is the second most used, ranking first in 16 out of 100 countries (2023, March). As of July 2021, there are 1.07 billion users across the world (2023, Oberlo).



(2023, Oberlo)

By looking at the following graph, it clearly shows not only the growth of Facebook Messenger users throughout 2021 and 2022 but also how many people rely on it to keep in contact with other people worldwide. This would have been impossible before social media was created.

Social media gives billions of people across the world the chance to become members of online communities and share their interests. An example of this is K-Pop. In 2012, there were an estimated 9.26 million fans worldwide; this has grown to 178 million in 2022 (2023, Lewis). This could be due to social media apps such as Tik Tok and Instagram, where tens of thousands of people post about their favourite K-Pop idols and companies, and idols themselves post to keep their fan base up-to-date, and create a closer relationship with them. Separate social media apps have also been created to do this. Wevers is an extremely popular app, which is a “social media and video content platform created by HYBE Corporation” (2023, Statista Research Department). It was created in 2019 and already has an average of 9.5 million monthly active users (2023, Music Business Worldwide). The group BTS has 22 million fans on Wevers, which is the highest fan base on the app (2023, Statista Research Department). By having so many different types of social media apps that allow fans to have easy access to something that makes them happy and hopeful, it definitely helps their mental health.

Social media plays a strong and important role within the economy worldwide, especially during COVID. It was used to launch new products to respond to lockdown and the changing environment, such as selling online and delivery options (2020, Sutherland). In April 2020, Superdrug began their same-day delivery service for UK customers, meaning that anyone within an 8-mile radius of a store would still be able to buy their products and receive them the same day (2020, Bargh). This was all thanks to technology and social media enabling them to inform their customers.

Small businesses have also benefited from using social media, as it allows them to promote their products. Tik Tok has helped almost 5 million businesses “seeking expansion and success” within the US (2023, TikTok). This is all possible due to TikTok creating

‘TikTok shop’ in 2023 (2023, Winter), which allows an average of a billion monthly active users (2023, Dias), it has even got its own hashtag, #TikTokMadeMeBuyIt, which has garnered over 59.8 billion views (2023, Winter).

With technology constantly changing and evolving, AI has been becoming a bigger threat to jobs. It is predicted that 375 million jobs will become obsolete over the next decade (2023, Kolmar). The jobs most likely to be affected are those that require automation, such as repetitive tasks and data collection (2023, Kolmar). Almost half of all companies already use some sort of AI (2023, Kolmar). Jobs with the lowest risk of AI replacing them are nurse practitioners, physician assistants, and mental health counsellors (2022, USCareer Institute), all requiring human emotion. On November 1 and 2, 2023, international governments, experts in AI research, and leading AI companies gathered in the UK to host the world's first summit on AI safety (Department for Science, 2023). Due to the potential frontier AI models hold for economic growth, wider public benefits, and scientific progress, they also hold huge risks if not developed responsibly (Department for Science, 2023). This is needed to ensure the safety of the public and jobs.

After looking at the Industrial Revolution, it's clear that technology has many effects on education, societies, and economies, good and bad. This seems to be repeating itself due to constant technological advances.

It's clear that technology has become a main tool used in education, especially since COVID. It can be used to complete assignments by doing research easily, but is it making students lazy? Only 20 years ago, students still had to go to the library and read a book to do their research. Today, it only takes a Google search. Due to many schools, colleges, and universities going online, this is taking away an extremely important skill: socialising.

McLuhan had already predicted, 35 years before social media was created, that it would have a negative effect on communication, relationships, and societies. Little did we all know that this wouldn't have been the worst of it. Social media has been misused for hiding identities, stealing identities, and targeting individuals, mainly innocent and young children. If used correctly, it has also become extremely useful in order to help people connect all across the world and create online communities where people can escape reality and find some sort of hope and comfort.

Technology, especially social media, has been extremely beneficial for economies. It has helped expand businesses worldwide and created more jobs. More people have had a chance to start their own businesses with apps like TikTok and Etsy. On the other side of this, does this mean that people who go to further education to earn qualifications to start their own businesses are wasting their time, if anyone can do it online?

Technology is progressing extremely fast, especially over the past 20 years. AI's are continuously improving and expanding not only tasks but also the jobs they are able to do. Does this mean that humans might not be able to or need to work? If so, how will this affect the economy if people aren't earning money due to this? How will society be affected if small communities like the workplace are torn apart, or even worse, completely dismantled?

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