STEM Teaching & Careers

The world is evolving and so are careers. Today's workforce needs are not the same as they were 20 years ago. Back then technology was just beginning to influence the world and the economy was very different.

20 years ago, Google did not exist. Google was invented in 1998. You could not just quickly look up an answer to anything, you had to do research in the library and use microfiche. What now takes seconds took hours. Not only does Google provide us with products that we interact with daily, but Google has also created thousands and thousands of jobs. In 2020 alone, Google created 500,00 new jobs and each job comes with its own skills and requirements to do the job.

Video calls were not a priority 20 years ago. COVID-19 increased the demand for video calls and the company Zoom took advantage of that. Due to the pandemic Zoom had an increase of 74.64 % in employment.

App designers did not exist 20 years ago. Apps were invented in 1997 when the Nokia 6110 included a built-in version of "Snake" the basic arcade game. We have come a very long way since then. Today we have apps for just about everything, we have apps for controlling the technology in the house, communicating, and tracking our health. Each of these apps needed a lot of varying skills to be made. These skills and the demand for these skills were not needed 20 years ago.

The world's needs were very different 20 years ago, but why are we still teaching the same way? This is just creating a huge skills gap because there are STEM jobs but no skilled workers to fill them.

The K-12 education system first appeared in the early 19th century. Over the years the system has been revised but never changed. The environment has changed, the economy has changed, the needs of the

workforce have changed, and what we know about the universe and everything in it has changed but why have the school system foundations not changed?

STEM Education allows students to think for themselves to solve real-world problems (which employers are looking for) STEM Education unites science, technology, engineering, and mathematics for children to see the connection between the content areas to solve everyday problems. According to Studies Weekly, STEM Education improves student learning in these 5 ways: honing scientific processing skills, increasing critical thinking, mastering problem-solving, improving self-efficacy, and inspiring new possibilities. To read more from Studies Weekly click here!

When we think about STEM, think beyond the understanding of the content areas but the power of learning essential skills. The world is evolving, and STEM is at the center of how we teach and how we learn. STEM Education is the future of learning.

References

- 2022. [online] Available at: https://www.thenina.com/how-many-jobs-have-been-created-by-google/ [Accessed 30 August 2022].
- ago, 1., 2022. 10 job titles that didn't exist 20 years ago. [online] Ladders | Business News & Career Advice. Available at: https://www.theladders.com/career-advice/10-job-titles-that-didnt-exist-20-years-ago [Accessed 30 August 2022].
- Education Week. 2022. When Did Science Education Become STEM?. [online] Available at: [Accessed 30 August 2022].
- Encyclopedia Britannica. 2022. *Google | History & Facts*. [online] Available at: https://www.britannica.com/topic/Google-Inc> [Accessed 30 August 2022].
- Google.com. 2022. *Before you continue to Google Search*. [online] Available at: https://www.google.com/search?q=the+definition+of+school&oq=the+definition+of+school&aqs=chrome..69i57j0i22i30l8j0i15i22i30.4167j1j7&sourceid=chrome&ie=UTF-8 [Accessed 30 August 2022].
- HowStuffWorks, Science, Myth and If, 2022. What If There Were No Google?. [online] HowStuffWorks. Available at: https://science.howstuffworks.com/science-vs-myth/what-if/what-if-no-google.htm [Accessed 30 August 2022].
- Johnson, L., 2022. *The History of Mobile Apps Inventionland*. [online] Inventionland. Available at: https://inventionland.com/blog/the-history-of-mobile-apps/#:~:text=In%201997%2C%20the%20Nokia%206110,consider%20the%20first%20mobile%20app. [Accessed 30 August 2022].
- Macrotrends.net. 2022. Zoom Video Communications: Number of Employees 2019-2022 / ZM. [online] Available at: https://www.macrotrends.net/stocks/charts/ZM/zoom-video-communications/number-of-employees> [Accessed 30 August 2022].
- National Library of Australia. 2022. *What is a micro fish?*. [online] Available at: https://www.nla.gov.au/stories/blog/what-microfish#:~:text=The%20Oxford%20Dictionary%20defines%20microfiche,used%20by%20family%20history%20researchers. [Accessed 30 August 2022].
- Throwbacks. 2022. 30 Things That Didn't Exist 30 Years Ago That We Can't Imagine Living Without. [online] Available at: https://www.throwbacks.com/30-things-

that-didnt-exist-30-years-ago-that-we-cant-imagine-living-without/> [Accessed 30 August 2022].