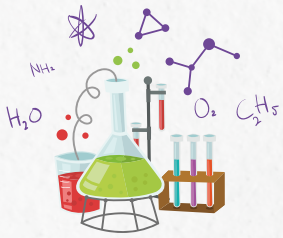

Science and Education

The adaptation of educational systems to the future requires that educational programs adjust to the 21st century requirements and to new scientific developments.

"Science encompasses many different disciplines, however, all scientific fields have one thing in common, they are driven by curiosity, the desire to discover new things and determining objective truths through repeatable methods of solving problems. The developments and the new scientific discoveries have helped humanity advance, everyday the impact of research extends increasingly beyond the walls of laboratories to society and innovative solutions are created for the great challenges of today, from pandemics to climate change" (WEF, 2021)

In this sense, STEM education (Science, Technology, Engineering and Mathematics) and innovation in the educational sector are highly related to the scientific developments that are emerging faster and faster in today's world. The consultation and the analysis of the academic production that is being done in these fields, their interrelation and the key trends that affect them are of the utmost importance for understanding where the educational sector in the world is going.

How do we connect science with education?

To wake people's innate curiosity helps, among other things, to make visible the potentially positive impact of science and its contribution to evidence-based decision-making, which could inspire a broader and more diverse range of potential young scientists. Therefore, the more advanced the science, the more important science divulgation efforts in schools and universities, in public exhibitions, and through the social media accounts of prominent scientists and institutions. **Involving the academic community with science** is essential in their training. Having a greater trust and a greater understanding between scientists and society can help ensure a future in which objective and unbiased truths guide the decision-making at personal, national and global levels.

Additionally, **collaborative and multidisciplinary research** should be encouraged, given that broader approaches allow us to solve larger and more complex problems. Scientific progress can have a broader positive global impact through international collaboration. For this reason, for the next generation of scientists, it will be essential to incorporate the perspective of companies, artists and civil society. Collaboration among the interested parties and a multidisciplinary approach are key for the educational programs adapted to the future, since they can enable students to develop critical thinking and expose them to multiple cultural perspectives.

Likewise, the scientific community must be free to think, contradict, experiment and communicate with each other and with the public in order to improve our collective body of knowledge. However, the scientific literature is not always available to the entire scientific community, sometimes the high costs of publishing or accessing international journals makes knowledge inaccessible for some parts of the scientific public. For this reason, **in the creation of knowledge**, the exchange of research and the knowledge capacity should be promoted in low-income countries, especially in the southern hemisphere.

Finally, **creative and disruptive leadership** in science must be promoted. Scientists can move entire societies forward as they make new discoveries, experiment with new technologies, and rethink innovation. However, scientific creativity is particularly needed amid the potentially puzzling changes brought about by the Fourth Industrial Revolution. Science can be taught in more creative ways during the students' formative years, in ways that enhance their perspective and give the next generation a genuine desire to become innovators and inventors. By striving to provide such education for everybody, along with the essential basic skills, a global line of committed and inspired scientists can be formed.

This Issues Note is based on the collective intelligence of the World Economic Forum network to explore the key trends, interconnections and interdependencies in the educational sector. It was found that between February and May 2021 the most relevant critical search factor for the topic of Education and Skills was Science.