

DYNAMIC REPORT OF STRATEGIC INTELLIGENCE

A look over the main educational news and tendencies of the international landscape



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Source: Strategic intelligence
World Economic Forum



1. Core soft skills

According to The World Economic Forum estimates published in 2020, In the next few years, around 85 million jobs will be lost due to growing division of labor between humans, devices and algorithms but at the same time new opportunities will be created adapted to the new dynamics of production and consumption. For this reason, educational plans cannot remain unalterable or rigid, since the field requires basic soft skills that are transversal to all areas of knowledge such as: creativity, flexibility, problem solving, critical thinking and teamwork.

These skills begin to develop from basic education and are strengthened and refined in secondary education and in universities, as well as in life as an adult in the labor stage; In this way, soft skills are important not only to achieve greater adaptability to future jobs, but to improve the quality of life of individuals.



VoxEU

Addressing the roots of educational inequities by shifting parental beliefs

12th of december 2021

The increase in educational and income inequalities with associated disparities in parental investment in children has been documented in almost every corner of the world. This document presents the results of two field experiments that reveal how changing Parents' beliefs about the role of parental input in the child development can lead to greater parental investment and be a pathway to reduce socioeconomic gaps in girls' and boys' skills





2. Quality Basic Education

According to an UNICEF report, in 2019 more than 175 million boys and girls didn't receive preschool education, and inequality in access remains high.

Although equality in primary education has been achieved in almost two-thirds of the countries, girls continue to be less likely than boys to start secondary education; children with disabilities and the identification as an ethnic minority are other obstacles to accessing the system.

The UNICEF concludes that, in addition to the challenge of increasing enrollment in boys and girls in basic education, we must pay attention to the infrastructures that enable learning, teacher training and to the creation of healthy and safe learning environments, not only during the day school but also outside it, at home.



BROOKINGS

Staffing and compensation are at the heart of building a better early childhood system

1st of December 2021

During the pandemic, many daycare centers experienced financial losses from the decline of children in the service, but as parents return to work, daycares are facing problems providing this service due to lack of staff and difficulty in hiring. Due to the increase in salaries in other sectors, the child care sector has been reduced 10% compared to the moment before the pandemic according to official data. The understaffing has real and direct implications for girls and boys, who benefit from consistent relationships with adults, and for working families who depend on child care to be able to go to their daily jobs. According to a recent survey, a third of these institutions reported having trouble finding staff and a quarter had to reduce hours of operation. This is why some federal funding for early care and education has been put in place, and this represents an opportunity to collect data on child care and learn how financial supports can better stabilize this workforce





3. Continuing Education Programs

According to McKinsey & Company, In Europe and the United States, the demand for physical and manual skills that involve repetitive work is estimated to decline by 30% in the next decade, unlike technological skills such as coding, which will increase by more than half. Career paths are increasingly altered by these disruptions, creating a growing need for lifelong learning, at all ages in and out of traditional schools, even after formal education.



INTERNATIONAL LABOUR ORGANIZATION

The benefits of life-long learning

25th of November 2021

This series of videos highlights the key points addressed in the report "Shaping skills and lifelong learning for the future of work" which highlights the Centenary Declaration and the ILO Governing Body call on skills and lifelong learning. Like the report, the videos are divided into six chapters that examine the role of the ILO and its constituents in enabling decent work through skills development and lifelong learning. The report aims to contribute to the debate on how skills development systems can respond to the crisis and the challenges of today and tomorrow, while creating decent employment, productivity and sustained growth for everyone.





4. Pertinent Post-Secondary Formation

The business sector has been warning about the growing differences between the skills that are in demand and those that the workforce actually has; Governments have defended the need to promote technical talent to increase the competitiveness of countries. The Deloitte report estimates that around 2.4 million jobs in the manufacturing sector will not be filled if changes aren't made. However, the path for this does not seem easy; Given the speed of the changes taking place, A greater collaboration between political sectors, educational institutions, companies and investors is necessary.



RAND CORPORATION

**Social and emotional learning is the
cornerstone**

14th of December 2021

This report provides an illustration of two Opportunity by Design (ObD) high schools in which practices for supporting students' Social and Emotional Learning were implemented schoolwide and integrated into teachers' academic instruction.

5. Educación STEM

Technology has provided an important social lifeline during the time of COVID-19, connecting people to loved ones and jobs, signaling an even greater digitization in the near future. Young people need to develop digital fluency and Science, Technology, Engineering and Mathematics (STEM) skills if they are to be equipped to thrive in contemporary work dynamics. This digital fluency builds on basic digital literacy, adding the ability to apply critical thinking and ethical considerations when using or developing digital technologies and/or data processing.



SPRINGEROPEN

Research on college English teaching based on data mining technology

27th of November 2021

In order to improve the efficiency and quality of college English teaching, the feasibility and the application process of data mining technology in college English teaching are analyzed. The process consisted of making the entire data classification mining process, in turn, it was proposed a new teaching program. Online surveys were used to collect data; and other preprocessing technologies such as data integration, cleaning, conversion and reduction were adopted. With this information, the decision tree was generated using the C4.5 algorithm and the cleaning was carried out. The result analysis decision tree model was completed. Finally, A detailed study of the learning of English by students at the University was carried out. The results showed that the grade rate of students' performance in English increased from 20-30% to 50-60%.

Innovación



6. Educational innovation

Before the pandemic, initiatives were being generated to create educational materials and content in a more technological and intuitive way. Different technology companies like Amplify and Knewton have been digitizing textbooks and creating content based on gamified learning, and others like Coursera, edX and Khan Academy have revolutionized education through massive open online courses (MOOCs). However, many challenges remain at the primary and secondary levels of school, as put by in evidence the pandemic, when more than half of the population in 71 countries did not have access to the internet for remote learning purposes. Also, more innovation is required in the schools curricula, balancing hard skills like reading, writing, and math with soft skills like problem solving and creativity. Therefore, it is profitable to expand the investigation of pedagogy, to make use of data and tests that allow the best performance with all types of groups of students, even those that are difficult to access.



SPRINGEROPEN

Designing gamification for geometry in elementary schools: insights from the designers

17th of December 2021

Gamification, popularly used in marketing and business, has been gaining interest in educational contexts because of its potential to energize otherwise difficult processes. A gamified environment transfers motivational elements of games to learning activities, thus involving children in the learning task and transforming conventional classroom environments into intelligent environments. This article presents the design process of a gamification intervention in geometry at the elementary level, based on Huang and Soman. It describes how insights from various sources helped refine an intervention previously used in a school.

