



Source: Strategic intelligence World Economic Forum



EDUCATION IN THE WORLD

Dynamic report of
strategic intelligence

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

With the purpose of contributing to the strengthening of post-secondary education in the City, Sapiencia carries out a tracking of the initiatives and the processes related to education in different international scenarios, through the Strategic Intelligence (SI) tool of the World Economic Forum. This brings the possibility to learn and identify projection opportunities for the educational processes of the city.

Some findings of the examination made between April 27th 2023 and May 23rd 2023 are shown in this report below.

1 ESSENTIAL SOFT SKILLS

Soft skills are related to the implementation of a combination of social and communication skills, aptitudes and the ability to approach others, 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 and post-secondary education, as well as in adult life in the workplace. They are important not only to achieve greater adaptability in future jobs, but also to improve people's quality of life.

Taking into account the importance of strengthening soft skills, Sapiencia has included, within its offer of the Arroba Medellín digital citadel, different courses focused on contributing to the well-being of individuals inside and outside work scenarios, also has included tools to improve the different skills of people, as well as fundamentals for entrepreneurship.

Some international news articles that are related to the training of soft skills are shown below.



Why skills-first hiring is the solution to the global talent shortage

World Economic Forum
April 27th 2023

During a period when employers in many industries are struggling to fill open positions, having a degree requirement in the United States automatically eliminates the 64 percent of working-age adults who do not have a college degree. This translates into imbalances between labor supply and demand. For this reason, a skills-based approach to hiring can help companies find and attract a broader talent pool to fill these positions over the long term. Such practices also provide opportunities for non-traditional candidates, including those without college degrees, women, and underrepresented groups, which can boost diversity and upward mobility.



Financial Literacy Month May Be Over, but the Message Isn't

Knowledge at Wharton
May 16th 2023



Wendy De La Rosa, Wharton marketing professor, joins Wharton Business Daily host Dan Loney to talk about her research on financial literacy, personal finance education, and interventions. She shares that financial education programs in K-12 schools are best when education is coupled with experiential learning. She concludes with the importance of just-in-time financial interventions, where the intervention comes up at a time when people can take the action recommended

2 QUALITY EDUCATION

Education is one of the tools that offers more and better opportunities to break the circles of poverty of millions of people and create better possibilities for just and democratic societies. Although progress has been made to improve access, quality, continuity and permanence in education, new local and global challenges constantly arise, such as the appearance of the COVID 19 pandemic, emerging migratory processes in different territories and the maintenance of wars as way of conveying differences and conflicts. These conditions have made it difficult, as stated in the fourth objective of the Sustainable Development Goals (SDG) to guarantee an inclusive, equitable and quality education that promotes learning opportunities throughout life, for everyone.

Sapiencia is committed to the democratization of knowledge in the Special District of Science, Technology and Innovation of Medellín, for this reason it has a wide range of programs including scholarships and forgivable loans, which allow access and permanence of students at different levels of post-secondary education, providing programs focused on a professional level (EPM Fund, Participatory Budget, best athletes and best graduates) and Postgraduate studies (Extending educational frontiers, Enlaza Mundos, Advanced Training) and specialized continuous education with training in Specialized Talent.

Below there are some international news articles regarding quality education



Countries face a \$100 billion finance gap to reach their education targets

World Economic Forum
April 27th 2023

According to the UNESCO report (2023), titled "Can countries afford their national SDG 4 benchmarks?" It is concluded that the pandemic and cuts in education financing are affecting the ability of many countries to advance educational objectives, specifically in meeting Sustainable Development Goal (SDG) No. 4 of guaranteeing inclusive, equitable and quality education. In this scenario, teacher financing is one of the highest priorities, since triple the number of existing preschool teachers is required in low-income countries and twice as many in lower-middle-income countries. Another important challenge that the document highlights are the barriers to bringing digital education to everyone. It estimates that, in the case of lower-middle-income countries, the former need 183 million dollars to connect schools to the network, install Internet, providing shared school devices and adapting the education offered.

3 CONTINUING FORMATION PLANS

Due to the constant changes that the productive sector is going through, it is necessary to provide training that allows the updating of knowledge, skills, attitudes, rules and concepts for people of all ages, which implies continuing education inside and outside traditional schools.

Revolution and the Transformation of Learning (C4TA), where training is given to the population of the city in different programs and levels as specialists in various technological processes. The focus of the second citadel @Medellín is virtual education, where online programs of Post-secondary Education, Education for work and Specialized Talent are also offered.

Sapiencia runs a disruptive continuing education program, through the launch of two university citadels, one physical and one virtual, the first of which is the Citadel of the Fourth

Below there are some international news articles related to continuous training programs:



4 ways micro-credentials¹ and skills-based hiring can help displaced workers access jobs of the future

World Economic Forum
May 1st 2023

Digital transformation, automation and globalization are creating a shortage of skilled workers and an unprecedented need for reskilling² and upskilling globally. The World Economic Forum's most recent Future of Jobs Report (2023) predicts that 61% of workers will need to update their skills between now and 2027, and 4 million new roles will be added enabled by technology to the global workforce in the same time period. In this scenario, microcredentials are designed to prepare people without a college degree or prior work experience to enter well-paying and in-demand digital careers in approximately six months without necessarily needing to obtain a college degree. The text highlights four (4) ways in which these can help the workforce, among them: 1) Industry leaders expand these microcredentials to train the workforce in digital jobs. 2) Skills-focused hiring combats labor shortages and increases diversity in the workplace. 3) Generates new innovations in online learning and helps to have more suitable candidates to work. 4) They build a system of cumulative credentials that allow adults to improve their performance.

¹ Popularly known as digital credentials or digital badges, they are a form of certification that focuses on specific skills and achievements rather than granting a traditional degree or diploma. For example, competency training.

² Reskilling is understood as "professional retraining" and refers to the training of employees to fill different positions in which they normally perform. Organizations make use of this when they do not have external people to fill certain vacancies.



The Learning Relay: Education to Employment to Lifelong Learning

World Economic Forum
May 3rd 2023



In this video, experts and decision makers on education talk in a discussion at the World Economic Forum (2023) about the challenges that education faces given the new and changing demands for skills that they have experienced in their countries, coming from the business sector. This situation forces us to think about new ways of permanently educating, going from transitioning or strengthening formal education in cycles to constant education throughout life.

4 PERTINENT POST-SECONDARY EDUCATION

The need to modify the curricula has been expressed by some representatives of the business sector and the graduates, since there is a gap between the knowledge acquired in the educational processes and the skills required in the business world, as a result of the different technological changes that occur in the world. For this reason, it becomes necessary to have joint effort between the actors of the educational society to reduce this gap and the risks that derive from it.

tion of Post-Secondary Education. In this way, the public policy for post-secondary education (PPEP for the Spanish acronym) is being built, which consists of establishing a system that integrates Secondary Education, Higher Education, Training for Work, and Specialized Continuing Education, through a modular and sequential training model associated with the National Qualification System and its components, to achieve the highest degree of training according to the needs, interests and potentialities of the people, the productive sector and society in general.

In 2020, Sapiencia modified its mission purpose through Decree 019, which has made possible to lead the formulation and the implementation of programs, plans and projects for the consolida-

Some international news articles regarding pertinent post-secondary education are shown below:



Affirmative action and the future of college admissions

Brookings institute
May 24th 2023



The Brown Center for Educational Policy at Brookings, USA, held a virtual event on May 23, titled "Affirmative action and the future of college admissions" with prominent education experts, exploring the history of affirmative action in higher education, analyzing how affirmative action fits into a broader system of admissions criteria and the likely impact of US Supreme Court decisions on university enrollment, with recent cases. It concludes with the importance of generating actions that allow the inclusion of more people with different approaches to increase diversity within the campuses.



Preparing Arts/Social Science Graduates in Sri Lanka for Jobs

London School of Economics and Political Science
May 28th 2023

Arts and social sciences courses in Sri Lanka's public universities have been widely criticized for being designed with little attention to current labor market demands. The issue has gained greater importance after the economic crisis that continues to disrupt the lives of its citizens. Like several other countries, higher education has continued to be delivered online since the beginning of 2020 and has unsurprisingly seen a reduction in student participation, learning loss and an increase in isolation. What is the best way to equip and guide students, preparing them to pursue their future careers? To understand this question, specialized researchers carried out a case study in mid-2021. This text presents some of the most relevant findings and conclusions such as the gap between industry demand and what is taught in undergraduate, programs and the application of knowledge of the needs of the labor market to the ways in which evaluation is carried out to students.

5 STEM EDUCATION AND DIGITAL FLUENCY

STEM education consisting of those areas of knowledge related to Science, Technology, Engineering and Mathematics, currently is presenting a high demand in the world of work, leading to plan how can students be equipped to acquire these skills that are necessary and transversal to all areas of knowledge. This digital fluency builds on basic digital literacy, adding the ability to apply critical thinking and ethical considerations when using or developing digital technologies

acquisition of skills for the so-called industry 4.0, which includes software development, programming languages, automation and intelligent manufacturing, among others, that allow a greater articulation with the technology industry. Likewise, a dissemination and awareness strategy is carried out to promote women's access to post-secondary education programs related to the software valley.

Some international news articles about the actual landscape of STEM education are listed below:

Sapiencia, through the Talento Especializado program offers a series of free and modular courses focused on these areas, which allows the



We need to discuss what jobs robots should do, before the decision is made for us

Robohub
April 29th 2023

The social distancing forced by the pandemic led us to rely on technology to a degree we never could have imagined, from Teams and Zoom to online banking apps and vaccine status. Society is now faced with an increasing number of decisions about our relationship with technology. For example, do we want our labor needs to be met by automation, migrant workers, or a higher birth rate? This is an important time to discuss our relationship with technology and what roles we want robots and AI to take on in our collective future, before decisions are made that may be difficult to reverse. For the author of this article, it is important to identify what robotics and AI can teach us and one way to frame this dialogue is to think about the various roles that robots can play in the present and in the future.



She can too: upskilling³ girls today for the digital jobs of tomorrow

World Bank Blogs
May 9th 2023

Digital technologies are reshaping economies and, with them, the skills needed to succeed in the jobs of the future. However, with women and girls persistently underrepresented in education and careers related to Information and Communications Technology (ICT), experts conclude that more can be done to break down the barriers that stand on their way. The text highlights actions that can be taken, such as addressing gender stereotypes in the classroom, for example, with books that highlight the stories of women who have been successful in fields traditionally dominated by men. It also refers to training girls so that they can create technological solutions to real-world problems, create connections with mentors and role models, among other actions.

³ This term, which is understood as the "improvement of existing skills," refers to the training of a professional in new skills and competencies that promote updating and greater productivity in their role, promoting mobility in companies.



Why EdTech⁴ must prioritise research and innovation from the Global South

Foro Económico Mundial
04 de mayo de 2023

Taking into account the rise of the term EdTech and its implications on issues such as public education and educational technology, the Edtech Evidence movement was born, which promotes the learning of boys and girls through the use of appropriate technologies. One of the challenges that arises in this issue is the latent differences between the global north and south, due to the preference given to the north in terms of costs and coverage. Therefore, policymakers and funders must remember that evidence shows that if EdTech is introduced into an unequal innovation system, its impact could equally be unequal.

⁴ Term used when referring to technology for education or educational technology. It consists of developing teaching-learning processes from a technological perspective or promoting the use of technologies such as software, applications, online platforms and electronic devices, in educational contexts.

6 EDUCATIONAL INNOVATION

Educational processes have been undergoing changes, which were accelerated after the pandemic and the mandatory use of virtual education, making it necessary to think about education in the short, medium and long term. Educational technologies are emerging around the world, and this represents great opportunities to improve access to education, but also poses challenges in terms of its application and evaluation. In this way, research in pedagogy is relevant, which can demonstrate the performance of the different technologies: their applicability and monitoring for all students, even those with specific needs

From the Sapiencia Observatory, information search strategies are carried out that allow identifying the main technological initiatives that are carried out at an international level, in order to communicate and transfer knowledge that is useful to experts and/or decision makers, such is the case of the dynamic reports and the issues notes.

Below there are some international news articles about educational innovation:



Map of good practices in digital education in the Americas.

American States Org
April 30th 2023



In this interactive system there is a map of the American continent where you can observe and learn what good practices in digital education have existed by country. Additionally, there is the report from the Organization of American States and ProFuturo Foundation (2023) "Digital Education in the Americas: good practices to inspire" which presents initiatives that schools in various countries in the region have carried out to incorporate digital technologies in processes and practices in the classroom, as pedagogical tools that promote learning. The prominence of practices and experiences in Colombia is striking.



Virtual reality and collaborative learning: a systematic literature review

Frontiers
May 18th 2023



Research on the potential of virtual reality for continuing education has been advancing, however, research on its support for collaborative learning is limited in scope. As remote collaboration and distance learning become increasingly relevant to education (especially since the COVID-19 pandemic), it is important to understand the potential of virtual reality for collaborative learning. The text highlights five different possibilities: 1) it is an efficient tool to engage and motivate students, 2) it supports distance learning and remote collaboration, 3) it provides multi and interdisciplinary spaces for both learning and collaboration, 4) helps develop social skills and 5) adapts to paradigms and approaches related to collaborative learning.

7 THE FUTURE OF WORK

The world of work is changing rapidly and it is necessary to design new healthy work models to channel this change towards the creation of stronger livelihoods and sufficient co-guarantees. Job creation was already high on the global agenda before the global pandemic disrupted labor markets in different territories. In this context, the education sector recognizes that is needed an articulation with the different actors in society that elaborate policies that can help, ideally, both workers and their employers. The best approaches will take into account changing demographics and changing work roles, and use disruption as a means to design workplaces that are truly responsive to the needs of everyone

Sapiencia offers programs focused on improving the employment profile of its beneficiaries in order for them to transition more harmoniously into the labor market. For this, it has provided a wide range that is responsible for covering the most pressing needs of the labor market and the 4.0 industry in the short and medium term. Thus, it offers disruptive courses on technological megatrends that will impact the vast majority of jobs, such as: Artificial intelligence, Data Science, Blockchain, among others.

Here are some international news articles related to the future of work



The future of jobs: 2 experts explain how technology is transforming 'almost every task'

World Economic Forum
May 1st 2023

The World Economic Forum's Future of Jobs Report 2023 concludes that most technologies will have a positive impact on employment in the next five years. "Virtually everyone is in the same boat, whether it's a factory or frontline worker or a knowledge worker sitting behind a desk. "Technology is changing the way almost every job task is done," said Jeff Maggioncalda, CEO of online learning company Coursera, about the challenges employers and job seekers face in a world of work of rapid transformation. Together with the director of the World Economic Forum Saadia Zahidi, they discuss the most important conclusions of the report, which are presented in the text as trends that most affect the labor market, which include: sectors with greater projection, more in-demand skills by employers and ways to improve reskilling in people, among others.



AI is helping to identify skills gaps and future jobs. An expert explains how

World Economic Forum
May 1st 2023

According to the World Economic Forum's Future of Jobs Report 2023, 6 in 10 workers will require training by 2027. Brynjolfsson and his colleagues at the Stanford Digital Economy Lab are using artificial intelligence to examine millions of job offers. work and identify skills gaps and "adjacencies" that can help companies train team members to meet the demands of the future of employment. Using data from around a decade ago and with the help of machine learning, they are observing changes in skill demands, where management and leadership skills are becoming important. Conclusions from their work stand out, such as that technology can do some tasks better, but there are others that it does not do as well, especially those related to social skills. This type of research could better guide managers, hiring teams and human talent to optimize and retain their workforce through better compensation and training plans.



Future of jobs 2023: These are the most in-demand skills now - and beyond

World Economic Forum
May 1st 2023

Between now and 2027, companies predict that 44% of workers' basic skills will be affected because technology is moving faster than they can design and scale their training programs. The text presents a classification of the most in-demand skills according to the Jobs of the Future 2023 report. Cognitive skills top the list of those considered most important for workers. Analytical

thinking is considered a core skill by more companies than any other skill, followed by creative thinking and the self-efficacy skills: resilience, flexibility and agility; motivation and self-awareness; and curiosity and lifelong learning.



6 lessons from Singapore on upskilling for the future

World Economic Forum
May 3rd 2023

Singapore has not yet completed its centenary and is already one of the highest-income countries in the world. As a result, many foreign governments often look to Singapore to see how they can emulate its success. In the discussion panel of the Growth Summit, Skills for Growth: Creating a Future-Ready Workforce (2023), Soon-Joo Gog, Chief Skills Officer at SkillsFuture Singapore, explains the six (6) ways the young island nation is upskilling and reskilling its workforce for the future. This includes proactively upskilling, having constant communication between the public and private sectors, thinking about green innovations, investing in the workforce and redesigning jobs to include the greatest number of experienced workers or immigrant population.

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