

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.

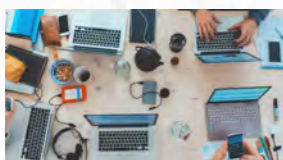
Some findings of the examination made between March 31st 2023 and April 26th 2023 are shown in this report below.

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.



How to leverage your skills in the post-knowledge AI economy

World Economic Forum
April 18th 2023

This text analyzes how skills, for example, technological skills and competence in other languages, could become a fundamental axis of work in the economy after the knowledge economy, enabling the generation of financial transactions.

This concept is rooted in the idea that these types of skills have intrinsic value and will be exchangeable in a future economy, whose infrastructure could address multiple social or equity challenges such as inequality of opportunity.

Let's take the case of a person, anywhere in the world, regardless of whether their age is 20 years old and lives in a rural area or 50 years old and they are in an Asian metropolis, they could have a fair opportunity to build wealth through the only thing that is under your control: the skills. These will be a combination of specialized human skills and augmented skills tailored to the individual, such as what is already being seen with Generative Artificial Intelligence (AI).



Here's how 'cognitive flexibility' can improve your career

World Economic Forum
April 18th 2023

Hard-working people need high levels of career adaptability to survive in an environment where skills and roles can quickly become obsolete. Overall, adaptive organization¹ is emerging as an important business model. Recent research in the field of cognitive neuroscience has drawn attention to the function called cognitive flexibility, which helps learn under uncertainty and negotiate complex situations. It is not just about changing decisions, but quickly realizing when a strategy is failing and then changing or reorienting them. The function involves areas of the brain that encompass decision-making, including the prefrontal cortex and striatal circuitry. When this circuit becomes dysfunctional due to neurological diseases or psychiatric disorders, can cause rigidity of thinking and lack of adaptation.

¹ It is a business structure that has the ability to adjust, evolve and respond effectively to changes and challenges in its environment.



How the brain stops us learning from our mistakes – and what to do about it

World Economic Forum
April 25th 2023

Although it is said that we learn from mistakes, the ways in which the brain processes information and leads us to make decisions that will probably lead to repeating the mistakes. This is due to several factors, for example, drawing conclusions from sparse data and using cognitive shortcuts to create a version of reality of things that are implicitly assumed. In this sense, the author presents some practical tips to help reduce these patterns. One of them is to become more comfortable making mistakes; Society denigrates failures and mistakes and, consequently, one is likely to feel shame when one makes them and try to hide them. The more guilty and ashamed we feel, and the more we try to hide mistakes from others, the more likely they will be repeated. It may also be a good idea to take a break from performing a task that you want to learn to do better; Recognizing mistakes and pausing to consider them can help reduce frequency bias, making them less likely to be repeated.

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.



These are the barriers facing global education targets, according to UNESCO

World Economic Forum
April 18th 2023

Without \$97 billion in additional funding, several countries will not be able to meet their national education goals by 2030, a new UN report reveals: Can countries afford to meet their national benchmarks for the Sustainable Development Goal N°4² that calls for an urgent review of financing? The Global Education Monitoring (GEM) report of the United Nations Educational, Scientific and Cultural Organization (UNESCO) focused on Goal 4 of the 2030 Agenda for Sustainable Development, which aims to ensure quality, inclusive and equitable education and promote lifelong learning opportunities for all. Among its findings, it highlights that the education sector will need an injection of funds for countries to achieve their objectives, but also strategies that will increase the effectiveness of financing and the number of teachers in preschool and primary schools in low-income and medium income countries.

² Original title: Can countries afford their national SDG 4 benchmarks?



Drawing pictures is great for children's development – here's how parents can help

World Economic Forum
April 19th 2023

The article describes some of the ways in which drawing can be beneficial for girls and boys in communication, memory and learning. Drawing allows them to take their experiences of the world and transform them by making new connections and relationships through their inventive minds. Their knowledge, memories and fantasies feed their imagination and drawing allows children to

explore, develop and record their own creative and imaginative ideas. Parents can help their daughters and sons by giving them encouragement to draw, as well as spending time sitting with them while they draw, collaborating with the drawing or showing them some drawing patterns so that they have inspiration.



Here's why teaching children empathy can boost their creativity

World Economic Forum
April 24th 2023

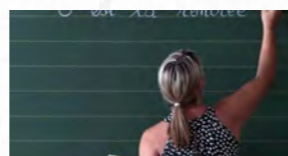
Most people think that empathy, the ability to put yourself in other people's shoes, is fixed or static, but it is not, empathy can be taught. Learning that incorporates empathy can be worked through practices such as reading about others, which can help students increase their creativity, according to education professor Helen Demetriou of the University of Cambridge. This premise is supported by research using the Torrance Test of Creative Thinking, which measures students' responses to drawn and written prompts. The findings suggest that teaching empathy in school can boost social skills and help prepare childhood for adulthood.



How reskilling and upskilling talent can help shrink the cybersecurity skills gap

World Economic Forum
April 18th 2023

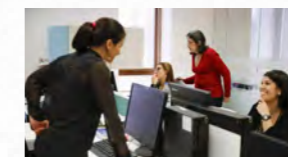
Despite economic uncertainties and other related challenges, companies around the world continue to adopt digital transformation initiatives at an unprecedented pace. According to a recent report, spending on digital transformation is expected to reach \$3.4 trillion by 2026. At the same time, the talent shortage, particularly in the cybersecurity industry, is worsening. Nearly 70% of security leaders say they face additional risks due to cybersecurity skills shortages, and more than half struggle to recruit and retain new talent. The text presents some ways to address these demands, such as the Cybersecurity Learning Hub initiative led by the World Economic Forum with the participation of partners Fortinet, Global Cyber Alliance and Salesforce, which offers resources for students of all levels. This type of training helps companies better safeguard their organizations with needed talent, but also provides a greater incentive to retain existing talent.



These are the world's most multilingual countries

World Economic Forum
April 26th 2023

The ability to speak more than one language can be a big advantage in the job market, experts say. Digital technology is breaking down language barriers like never before, but even the most popular translation tools have barely scratched the surface of human linguistic diversity. Google Translate now supports 133 languages, a small fraction of the many spoken around the world. Beyond the professional complement, research has shown that being able to speak more than one language provides a variety of health benefits, including protection against conditions such as dementia and Alzheimer's. Likewise, people who speak one or more foreign languages are believed to be better problem solvers, as well as being more creative and empathetic, according to the European Commission.



This is how Latin American women came to be more educated than men

World Economic Forum
April 14th 2023

Currently, more than 6 in 10 women in Latin America and the Caribbean go to university, while less than half of men do. In 1970, according to statistics, only 5% of women completed secondary education. This, according to the Latinometrics' analysis of World Bank data, represents significant progress for a region largely made up of emerging and developing economies. Societies with more educated women tend to have lower levels of violence and are more likely to be democratically governed.



Africa's universities are surging in the world rankings

World Economic Forum
April 18th 2023

Now there are 97 African universities in The World University Rankings, up from four in 2012. The scores of African universities have increased faster than the world average in relation with the 13 performance indicators of the world rankings, that include teaching, research, innovation and internationalization, among others. In the text they describe some of the reasons for the notable African increase in rankings, such as strategic momentum within universities and increased funding through special interventions for research and infrastructure development.

3 CONTINUING FORMATION PROGRAMS

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.

the first of which is the Citadel of the Fourth 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 @Medellin 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,

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



Gwangju youth action in response to online discriminations - Magistral Class against racism 2023.

UNESCO
April 3rd 2023

This product is a video that shows students from the city of Gwangju (South Korea) who carried out different activities to bring to life their projects on different types of online discrimination such as xenophobia, racism, homophobia, among others, accompanied by the UNESCO Master Class against Racism; The audiovisual resource mentions different action plans, implementation strategies and results. On March 21, 2023, to celebrate the International Day for the Elimination of Racial Discrimination, Korean students traveled to Paris to share their experience at UNESCO's second global master class against racism and discrimination.

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.

programs, plans and projects for the consolidation 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

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

5 DIGITAL FLUENCY AND STEM EDUCATION

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 and/or data processing.

courses focused on these areas, which allows the 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.

Sapiencia, through the Talento Especializado program offers a series of free and modular

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





Artificial Intelligence is not a Pandemic

ETH Zürich
April 24th 2023

The author reflects on the growing concern that ChatGPT could undermine the education system, which has led to a series of rules and regulations being issued to contain its expansion. Compared to other disruptive technologies, it is true that tools of this type burst into the public domain quite abruptly, but there are already calls to completely freeze the development of new AI models. Entire countries are trying to ban ChatGPT, publishers are expanding author agreements, and universities are rushing to introduce regulations in favor, but often against, its use. In this sense, the author affirms that AI is not a pandemic, but rather a tool, for example, to overcome initial writer's block.



Bridging the Gender Digital Divide: Challenges and an Urgent Call for Action for Equitable Digital Skills Development

UNICEF
April 25th 2023

Digital inclusion has become an increasingly important part of everyday life, needed for success in both the classroom as well as the world of work, and in some contexts increasingly important for accessing services. However, this report highlights that a majority of youth in low- and middle-income countries are not connected to the internet, have limited digital skills, and do not own a mobile phone. Adolescent girls and young women are especially disadvantaged. Evidence shows that 9 out of 10 adolescent girls and young women are offline in low-income countries.

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:



Can AI improve education? Here are 4 potential use cases

World Economic Forum
April 18th 2023

AI systems are already disrupting the world of education and could be used in ways that help students in their teaching-learning process. The text highlights four use cases: 1) differentiated instruction, this implies that AI can offer help to the student as they carry out their tasks, promoting adaptive learning that adjusts to the students' own rhythms; 2) use of a smart textbook, which consists of an iPad application that monitors the focus and attention of students while reading, includes one-click definitions of key words, among others; 3) improved assessment that more quickly identifies a student's exact skills and weaknesses and, 4) personalized learning that occurs when students' interests and goals guide 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



What ChatGPT and rapidly advancing AI could mean for working life and skills

London School of Economics and Political Science
April 1st 2023

Innovation in long language models (LLMs)³ like ChatGPT is thriving at a rapid pace, so it's difficult to get a general sense of how they and the advanced AI's, will impact the skills we'll need in the future. Richard Brown analyzes the impacts of these technological tools on knowledge economy and explores the many challenges we face, which highlights the need for sophisticated moral judgment.

³ These are artificial intelligence systems designed to understand and generate information or texts in natural language, in a coherent and contextually relevant way.



The paradox of 'productivity paranoia'

World Economic Forum
April 19th 2023

Productivity paranoia is a term coined by Microsoft CEO Satya Nadella to describe the concerns of leaders: hybrid or remote workers are not doing enough. Two experts explain their approach to handling the situation, as a paradox rather than a problem with a unique solution. Their latest research suggests that virtual teams focused on building trust and verifying results have the highest team effectiveness ratings. Here they offer tips for leaders to help achieve balance in teams, including learning from what isn't working, instilling a sense of purpose, promoting engagement, and encouraging growth and development through continuous learning; For example, opportunities for employees to receive (or provide) mentoring as part of their development plan or tactically on a specific project or initiative that is new to them.



Skills-first approach: How cutting-edge skills data can help build an adaptable, resilient workforce

World Economic Forum
April 26th 2023

Various changes and uncertainty have been observed in the world of work in recent years: COVID-19, Great Resignation⁴, rising inflation, cost of living, and generative AI, among others. This has supercharged transformation projects driven by remote work, automation and digitalization, increasing costs and competitive pressures. The result is an accelerated shift toward a skills-based operating model for talent. Companies that move rapidly toward the skills-first model will be more competitive and will emerge stronger by building a more resilient and adaptable workforce. The text presents some needs and initiatives such as the mapping of skills where those that are available and those that are needed are identified, organizational structures established for learning, for capacity development and for mentoring, among others.

⁴ The Great Resignation" is a term that refers to a work phenomenon that was observed especially in the United States, during the COVID-19 pandemic. It is a trend in which a significant number of employees decided to resign from their jobs, change careers or make important career decisions in a short period of time.

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