



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.

1 CORE 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 story that are related to the training of soft skills are shown below.



Here's how an 'inner road trip' can help you find your purpose at work

World Economic Forum
28th of november 2022

The director of Stanford University's Hasso Plattner Institute of Design, Charlotte Burgess-Auburn is the author of the book "You Need a Manifesto. How to craft your convictions and put them to work", where she defines that although we have manifestos, for different causes (political, religious, artistic, etc.) we need to make one for our own cause, to consider the power to produce and make positive change in the world. To create this manifesto of our own, the author provides some of the considerations necessary to forge an "inward journey" in allusion to a road trip by car, as a practice of

self-awareness that equips each person with an essential understanding of his or her own relationship to the process of executing his or her work. Burgess-Auburn points out, we must know ourselves, recognizing key aspects such as values, which act as an accelerator; ethics, which help to set limits, function as the brakes of the car that keep the road safe. Finally, the text invites us to reflect on the source of our biases and preferences, which are the routes chosen to a greater extent, some of these may be harmless, but others may be harmful to our journey.

1. Written statement of doctrines, purposes or programs.



Here's what Socrates can teach us about self-reflection and teamwork

World Economic Forum
14th of december 2022

According to philosophy professor Dr. Mitchell Green of the University of Connecticut, when Socrates and Plato spoke about self-knowledge, they were not referring to introspection, as has been commonly thought, but rather used what is known as dialectic: back-and-forth arguments between debaters ready to challenge each other's ideas. When this technique was used in work teams during a 2004 experimental study, they produced 25% more ideas than teams that did not. Thus, the author states, if you want to know your ideas, the ancient Greeks would say, you should try to convince someone else of them.



Here's the science behind procrastination

World Economic Forum
14th of december 2022

Procrastination is a universal and irrational form of delay that can have negative consequences such as stress and anxiety, research has linked it to cognitive biases, e.g., present and status quo bias. The first consists of prioritizing immediate pleasure over future consequences, and the second has to do with our preference to avoid tasks that make us change our way of thinking or that generate a cognitive load, i.e., we prefer to be in a relaxed state of mind than to engage in something new. Therefore, personality traits and environmental factors can also influence procrastination, which is not a trait of laziness as it is often labeled. However, if it becomes a problem, experts recommend, for example, dividing the tasks into parts and set rewards after each step.

2 QUALITY BASIC EDUCATION

Basic education is the educational level that lays the foundations for the learning process of girls and boys, however, although progress has been made in accessibility, new challenges have arisen with the appearance of the pandemic, which has made difficult, as stated in objective number four of the SDGs (Objectives of the Sustainable Development) to guarantee an inclusive, equitable and quality education, that promotes learning opportunities throughout life for everybody

the quality of basic education, however, within its forgivable loan programs it offers a program aimed at partially financing master's and doctorate studies of teachers and teaching directors of preschool, basic and secondary education in the district of Medellín to study in Higher Education Institutions of the nation.

International news articles related to quality basic education are shown below.

Due to its nature, Sapiencia does not focus directly on projects related to improving



International
Labour
Organization

I had to drop out of school and go to work because of COVID-19.

International Labour Organization
28th of november 2022

This video presents the story of Akram, a minor living with his family in Mosul, Iraq. After the pandemic, his family lost livelihoods and Akram had to leave school altogether for some time. However, in 2021, through the monitoring and mentoring by the ILO's Child Labor Monitoring System, he was able to return to school, only on a part-time, as he has to help his father collect scrap metal in the afternoons. However, he hopes to continue his studies, and says he would like to become a teacher in the future, as his teacher is a source of inspiration for the way he helps others.



Florida K-12 Mathematics Teachers' Credentials and Preparation

RAND Corporation
12th of september 2022

Florida (United States) is experiencing, at the beginning of the 2022-2023 school year, a shortage of high quality math teachers, according to the Florida Department of Education, where the greatest shortage is for math teachers from kindergarten through grade 12. To contribute to the understanding of Florida policymakers about the composition and preparation of the mathematics teacher, the authors of this article present selected findings from the Learn Together 2022 Survey, which describes the credentialing pathways taken by Florida's mathematics teachers, mathematics teachers' perspectives on the content of their mathematics preparation programs, and the availability and usefulness of resources for entering and completing a teacher preparation program.



3 CONTINUING EDUCATION 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.

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 Revolution and the

Transformation of Learning (C4TA in Spanish) 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 Arroba Medellín is virtual education, where online programs of Post-secondary education, Education for work and Specialized Talent are also offered.

Below there is an international news related to continuous training programs:



International
Labour
Organization

A life-changing learning experience

International Labour Organization
28th of november 2022

The video presents the story of a young man named Muhammad Taher from 28-year-old Yemen, who, faced with the explosion of the war in his country in 2014, was out of work and living without an occupation or goal in life. However, he received training in solar energy, which represented a radical change in his life. The course was designed to have two and four practical hours in the installation and maintenance of solar panels, which gave him enough experience, but he also received training in occupational health and safety and entrepreneurship. Currently, due to the fact that this type of energy has become a good alternative due to the constant power outages in his city, Muhammad has a better income, which has got him thinking about setting up a shop.



Food and Agriculture
Organization of the
United Nations

FAO Farmers' Field School empowered Kawkab to become a community leader

Food and Agriculture Organization
of the United Nations
22th of december 2022

The FAO Farmer Field School (FFS) is a knowledge platform on family farming, participatory approach that fosters a hands-on learning environment. Under the Smallholder Support Program (SSP) has made it possible for Kawkab Al-Yassin, who received training in production improvement and marketing skills, turned her small family farming project into a profitable enterprise, where she has generated employment for 14 women in her community, improving their living conditions and those of their school-age children.

4 PERTINENT POST-SECONDARY EDUCATION

Certain representatives of the business sector and some graduates have expressed the need to modify the curricula, as they point out that 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 is necessary to joint effort among the actors of the educational community to reduce this gap and the risks that derive from it.

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 consolidation

of Post-Secondary Education. In this way, Sapiencia is currently leading the construction of the public policy for post-secondary education (PPEP for the Spanish acronym), which proposes to establishing a system that integrates Secondary Education, Higher Education, Training for Work, and Specialized Continuing Education, through a modular and sequential. The policy seeks that people can achieve a degree of training according to the needs, interests and potentialities of the students, the productive sector and society in general.

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



These are the world's most sustainable universities

World Economic Forum
01st of december 2022

As the climate crisis has intensified, the need for large-scale transformation has become more urgent, so universities have taken action to positively affect their communities. The Times Higher Education (THE) 2022 impact ranking is the only tool that measures the contributions of universities in relation to the Sustainable Development Goals (SDGs) of the United Nations. In the final results, the University of Western Sydney led in meeting the SDG-related criteria, ranking first globally in clean water and sanitation, second in responsible production and consumption, and third in gender equality, fourth reducing inequalities, and fifth in partnership for the goals. The second place went to Arizona State University in the United States, which took first place in three categories: sustainable cities and communities, life underwater, and life on the land.



These are the best universities in emerging economies

World Economic Forum
20th of december 2022

The results of the Times Higher Education University Rankings, which measure the performance of universities worldwide using 13 performance indicators in the following categories: teaching (the learning environment); research (volume, revenue and reputation); citations (research influence); industry income (knowledge transfer); and international perspective (staff, students and research). For this edition, it is highlighted that universities from countries classified as

emerging economies increased from 34% in 2018 to 42% in 2022. In this list of best universities in emerging countries for 2023, China was the country with the highest representation, with 11 universities among the top 200, being Tsinghua University in Beijing the most prominent at 16th place globally. It is also worth noting that there are 25 new African universities in the ranking, and countries such as Zambia, Namibia, Mozambique, Zimbabwe and Mauritius that are participating in the ranking for the first time.

5 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.

these areas, which allows the acquisition of skills for the 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 courses focused on

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



How could the metaverse impact education?

World Economic Forum
7th of december 2022

In this text, the World Bank presents six ways in which the metaverse can positively impact learning. The new generation of virtual reality (VR) headsets allow for an immersive sensation closer to face-to-face, so, like a flight simulator that prepares pilots for an emergency landing, virtual reality can train for any activity, from agricultural skills to firefighting. Among the ways it impacts education are: 1) learn and connect to immersive virtual campus allowing for life-like experiences such as accessing libraries, meeting rooms, meeting coaches and counselors, 2) improving real-world skills in virtual and hybrid environments, 3) explore different worlds through visualization and storytelling, 4) build human capabilities in interpersonal or difficult situations, 5) improve accessibility for people with disabilities, and 6) increasing the capture of data about learning performance.



Explained: What is ChatGPT?

World Economic Forum
13th of december 2022

Although artificial intelligence-driven chatbots³ are not new, ChatGPT is different in that its focus is on intelligent conversation, admits its mistakes, corrects false assumptions and may even be able to structure more advanced dialogues such as writing web news. The creator of this technology is the company co-founded by Elon Musk, OpenAI, who launched ChatGPT at the end of November 2022, and although it still presents challenges inherent to this type of technology, several professionals, including professors, journalists and programmers, fear that they could be out of a job in just a few years due to the improvement of this type of technology.

³These are applications that simulate a conversation with a person by providing automatic responses.

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 Observatorio de Sapiencia, 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's a summary of an international news about educational innovation:



How lessons from online learning during the pandemic can improve education moving forward

World Economic Forum
25th of november 2022

One scholar has studied the effects of the shift to e-learning during COVID-19 and has drawn three key conclusions. The first is that students want more interactivity in their online learning, rather than just uploading class materials to the web, e.g., the use of online tools such as Mentimeter and Kahoot, which makes online learning more engaging and interactive. The second is related to the fact that digital education should be inclusive, and in this sense, some girls students, especially the older ones, were affected since they had to spend more time to other responsibilities such as childcare or members requiring special care, so they need more flexible learning opportunities. Finally, international students were also an affected group since they did not know where to go for mental health support, while they were away from home, which made it difficult their concentration and performance, making it clear that universities need to improve plans to provide emotional and academic support to this population.

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