

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 are shown below.

1 ESSENTIAL CORE SOFT

Soft skills are related to the implementation of a combination of social and communication skills, aptitudes and the ability to reach out to others, such as creativity, flexibility, problem-solving, critical thinking and teamwork. These practices begin to be developed in basic education and are strengthened and refined in middle and post-secondary education, as well as in adult and working life. 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.



Why being bilingual can open doors for children with developmental disabilities, not close them

The Conversation
10th of January 2023

Recent studies consistently show that exposure to an initial language, including a minority language, does not have a negative impact on linguistic outcomes as traditionally believed, and this underscores the importance of giving children the opportunity to be bilingual. Bilingualism is possible for boys and girls with neurodiverse development such as infants with Down syndrome, this is the case of an applied research in which children with this condition learn Welsh as a second language, and in which it was concluded that their skills in this language were similar to children without this neurological characteristic.



5 ways we can develop the digital skills our economy needs

World Economic Forum
16th of January 2023

By 2030, a digital skills gap is expected to emerge, with 85 million job openings will be vacant globally, resulting in a gap of \$8.5 trillion gap between potential and actual annual earnings. All companies in all sectors need to be aware that they require a long-term strategy for the development of these digital skills. The author of this article recommends 5 ways to improve the capability of human talent: 1) make learning and development a central part of long-term planning and strategy, 2) do not overlook the importance of interpersonal skills, 3) offer learning through different channels (synchronous and asynchronous), 4) customize the approach for different functions and sectors, and 5) support the training of the next generation of talent.

2 QUALITY EDUCATION

Education is one of the tools that best opportunities to break the poverty circles of millions of people and to create better possibilities for just and democratic societies. Although progress has been made to improve access, quality, continuity and permanence, new local and global challenges are constantly emerging such as the emergence of the COVID 19 pandemic, emerging migratory processes in different territories and the continuation of wars as a way of dealing with differences and conflicts. These conditions have made it difficult, as stated in goal number four of the Sustainable Development Goals (SDGs) to ensure an inclusive, equitable and quality education that promotes lifelong learning opportunities for all.

Sapiencia is committed to the democratization of knowledge in the Special District of Science, Technology and Innovation of Medellín, and therefore has a wide range of programs, including scholarships and forgivable credits, which allow students to access and permanence of students in the different levels of post-secondary education, providing programs focused on the professional level (EPM Fund, Participatory Budget, best athletes and best high school graduates) and Postgraduate (Extending Educational Frontiers, Enlaza Mundos, Advanced Training) and specialized continuing education with training in Specialized Talent.

Some international news articles related to quality education are shown below.



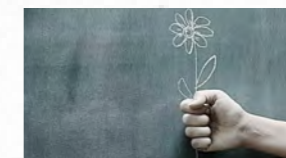
What Did the Pandemic Teach Us About Education & Flourishing Among India's Students?

Centre for Civil Society
27th of December 2023

India has the second largest education system in the world, serving 250 million children. However, while public and private schools are important in the K-12 system¹, there is another, lesser known player and is a parallel system of informal private enrollment² that also contributed to the formation of students in the period of closure due to the COVID 19 pandemic. Although this last actor generates controversy as it is not regulated, since it was born as an improvised alternative to offer education in private homes and training centers, there is no denying the role it has played in education.

Researchers at the Centre for Civil Society (CCS) in India are conducting research to address questions about the composition of system providers during the pandemic, parents' perceptions, and how well children learned using the new learning tools. In the present article, some of the progress of this exploration are addressed.

1. It is the designation used in some educational systems for primary and secondary schooling, from kindergarten through grade 12..
2. Refers to informal institutions that do not have the regulatory permits to operate as an educational institution.



Education 2022: Teaching a hyperconnected, misinformed, and vulnerable generation.

The Conversation (spanish)
29th of December 2022

The author exposes some of the characteristics that were present in education throughout 2022, reflecting on the needs that the new generations have with respect to their predecessors. These reflections include the importance of the contents, methods and competencies that are influenced by technology, social-emotional teaching, the status of many students as digital orphans³ and the effort of the research to generate innovative solutions that help to better preparation of these generations, so that they can better understand the world and be able to contribute to it, being happier.

3. Term used to refer to students who had to teach themselves the use of Information and Communication Technologies (ICTs) due to the digital divide between them and their parents' generation.



Transforming Education with Equitable Financing

UNICEF
13th of January 2023

In September 2022, the Transforming Education Summit held in New York, called on governments and the international community to mobilize action to transform education systems, including increasing equity in education spending towards achieving Sustainable Development Goal number four: quality education for all. To examine the equity issue in education, this inform presents findings on equitable education financing using the latest data from 102 countries and territories, highlighting the urgent need to target resources to reach the poorest and most marginalized. The text discusses the challenges of not only inadequacy but also inequity in national education spending and international aid to education, and explores how equitable education financing can help address the global learning crisis.

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.

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 Medellín in different programs and levels as specialists in various technological processes. The focus of the second citadel Arriba 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,

Below there are international news related to continuous training programs



How digital literacy contributes to women's employment and prevention of gender-based violence

UNDP
05th of february 2023

The text presents the story of different women, both native and migrant or refugee, in a province of Moldova (Europe), who have benefited from the digital literacy courses offered by the Center for Rehabilitation of Survivors of Gender-based Violence in the state of Gagauzia (Moldova), in support of an UNDP project funded by the Romanian government through the Romanian Agency for International Cooperation (RoAid). This initiative aims to improve the labor market insertion of its participants, equipping them with digital skills that will allow them to be more productive in their jobs or ventures.



Experimenting, learning, and innovating to improve digital inclusivity and literacy in Mongolia

UNDP
16th of november 2023

As technology advances at a rapid pace, many people are being left behind, particularly the elderly and people with varying abilities who not only lack the digital skills required, but also lack access. UNDP Mongolia Accelerator Lab is working to ensure inclusive access and digital literacy for the most vulnerable groups in Mongolia. For this purpose, they piloted a comprehensive digital skills program, where they found that the curriculum developed by Microsoft Digital Skills was appropriate because of the amount of resources and easy and free access. With this information, they developed face-to-face courses for about 100 older people, supported by a vocational training organization, in which they found that many older people thought that technology was not designed for them and that they felt abandoned. They taught basic computer literacy, effective online communication,

security assurance and digital content creation. As a result, the program's creators conclude that to be inclusive, it is necessary to think about all the small but important details for accessibility, from program development to awareness and in-person training, while being fully aware of specific characteristics and limitations.

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



How your business can benefit from 'people sustainability'

World Economic Forum
04th of january 2023

The COVID 19 pandemic, inflation, demographic changes and increased regulation put pressure on companies to establish new social contracts with their employees, supply chain partners and communities, which take into account the policies and experiences of the entire value chain. When thinking about creating a workforce for the future, it is beneficial to consider the "sustainability" of different groups: employers, contingent workers, suppliers and their employees, and people in their communities, this can help improve environmental, social and governance metrics, driving better business outcomes and improving people's quality of life. The article proposes to focus efforts on 1) training employees to develop and upgrade skills, can ensure that people are engaged and equipped, as well as investing in groups that do not participate much, such as women and people of African descent in the technology industry, (2) to make supply chains and trade networks more equitable, and promoting human rights and environmental conservation, and 3) creating a people-centric business approach, as they are the ones who implement new technologies and design new business models, under the assumption that a motivated team is more resilient and productive, even in times of crisis.

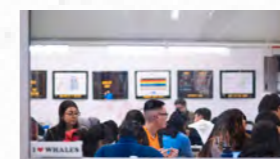
5 DIGITAL FLUENCY AND STEM EDUCATION

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 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 Valle del Software.

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



Education 4.0: Here are 3 skills that students will need for the jobs of the future

World Economic Forum
02nd of January 2023

Education 4.0 reimagines education as an inclusive, lifelong experience that places the responsibility for skill-building on the learner, with teachers and mentors acting as facilitators and enablers. The labor market is constantly evolving, so it is necessary for three critical skills need to play a central role in each student's personal curriculum: 1) Problem Solving, 2) Collaboration, and 3) Adaptability. These elements are important to consider as we invest in and seek to improve existing educational systems for the ever-evolving jobs of the future.



Gender equality in STEM can support a sustainable economy.

World Economic Forum
04th of january 2023

In the midst of a rapidly changing world where vast technological advancements are announced almost daily, the so-called Fourth Industrial Revolution is characterized the fusion between the physical, digital and biological worlds; and although this is time generate excitement for the future, it must ensure to move forward in an integrated and inclusive way. The economy will be dominated by STEM industries, which have engineering and computer science at its epicenter, so those in the field will have the highest paid jobs. This written presents some points to keep in mind, as well as mentioning some initiatives from all latitudes focused on boosting STEM education for women, such as Global Engineer Girls (GEG), GirlHype and Girls Who Code.

6 EDUCATIONAL INNOVATION

Educational processes have been undergoing changes, which were accelerated after the COVID 19 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:



Student-content interactions:
Exploring behavioural engagement with self-regulated inquiry-based online learning modules

SpringerOpen
02nd of January 2023

This article investigates technological innovations and changing learning environments and how they are influencing student participation. In this sense, it seeks to make up for the lack of recent literature that provides information on how students engage and interact with online content in self-regulated environments, considering the absence of direct teacher support. The paper investigates how instructional design, informed by factors related to behavioral engagement, can influence the process of learner-content interaction within the fabric of inquiry-based learning activities. Two e-learning modules on introductory science topics were developed to facilitate independent study by students in an asynchronous online environment. The study revealed that students showed a high level of commitment to participate in and complete the tasks required less manipulative and proactive effort during the learning process.

7 FUTURE OF WORK

The world of work is changing fast - and mapping out healthy new work models is necessary to channel that change into the creation of stronger, sounder livelihoods and sufficient safeguards. Job creation was already high on the global agenda before a pandemic upended labour markets in different territories. In this context, the education sector recognizes the need for articulation with the different actors of society in the elaboration of policies that can ideally help both workers and their employers. The most successful approaches will take into account changing demographics and changing job roles, and will leverage disruption as a means to design workplaces that genuinely serve everyone's needs.

Sapiencia offers programs focused on improving the employment profile of its beneficiaries in order for them to achieve a more harmonious transition to the labor market, for this has a wide range of offerings to cover the most pressing needs of the labor market and industry 4.0. in the short and medium term. It offers disruptive courses on technological megatrends that will impact the vast majority of jobs such as: Artificial Intelligence, Data Science, Blockchain, among others.

Some international news articles about future of work are listed below



With high-tech manufacturing plants promising good jobs in Ohio, workforce developers race to get ready

Brookings
24th of January 2023

One of the most auspicious aspects of President Biden's Administration's surge in industrial policy legislation in the United States is the possibility of creating thousands of new, accessible, technology-related jobs for people without a college degree. The opening of fabs in the case of semiconductor brings the possibility of employing a large number of people directly and indirectly, but to achieve this absorption of workers, they need to be able to upgrade their skills with specific credentials and certificates. Thus, local governments, academia and the sector are undertaking joint initiatives to achieve the necessary workforce training in the state of Ohio. The Columbus State Community College (CSCC) partnered with the Ohio Association of Community Colleges to recruit and train workers to work in this industry, and they have prioritized two issues: first, a short-term certification program to improve the skills of existing workers, and second, a curriculum enhancement approach to broaden long-term job prospects.



These are the 4 skills you'll need in the workplace of the future

World Economic Forum
10th of January 2023

Researchers analyzed 228 million recent job postings in the United States to identify the top four most in-demand skills in the changing workplace. The results yielded the following skills. The results yielded the following skills: 1) knowledge of artificial intelligence (AI)/machine learning (ML), 2) cloud computing, 3) product management, and 4) social media. The authors found that one out of every eight-job advertisements listed one of these skills as a requirement. This trend is evidenced in the U.S. case, with a growth rate for these skills over the past five years; specifically in 2021, the rate was 370%.

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