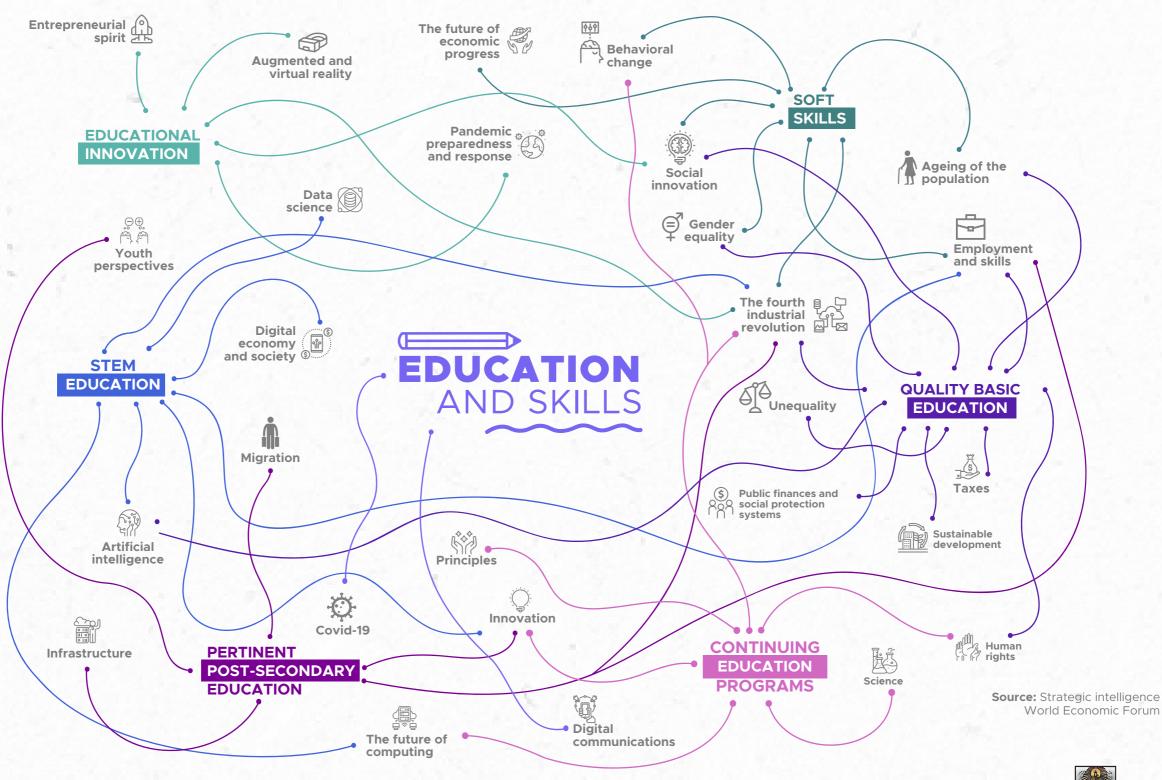


observatorio@sapiencia.gov.co





www.sapiencia.gov.co



Ciencia, Tecnología e Innovación





# 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 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.



The gender gap in sport and its development in the classroom

The Conversation (Spanish)
18th of september 2022

The news item states that, as is the case with areas of knowledge linked to science and technology, such as mathematics and physics, boys in physical education are expected to have more skills and better grades than their female peers. For girls, the expectation is that they will be good at sports, such as gymnastics, sports dance, skating or volleyball, sports disciplines where corporal expression and collaboration with the rest of the members of the team is encouraged. On the other hand, men are expected to develop skills in areas such as soccer, handball, cycling and basketball, where

competitiveness, competition and leadership are promoted. The text invites to become aware of this bias, in order to help fight against sexist beliefs in the development of sporting activities, starting with physical education classes.

**Note:** at Sapiencia we believe in the possibilities that, for men and women, the different sports disciplines offer, in terms of the development of soft skills such as stress management, self-control, discipline, self-demand, results orientation, among others which are fundamental for academic and professional performance.

## 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.

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

An international news article related to quality basic education is shown below.

n selected OECD countries



This chart shows how student-teacher ratios vary around the world

**World Economic Forum** 9th of september 2022



Source: Statista (2022)

Around the world, schools are struggling to recruit teachers before the start of the school year. A phenomenon is being seen in not only the U.S. but also in Canada, Australia and in Europe, as low salaries and

burnout from the pandemic are leading to a mass exodus from the profession. As our chart shows, there are fairly significant differences between OECD countries, with Norway and Belgium having the lowest class sizes (around 10 students per teacher) and Mexico as the country with the largest class size (between 25 and 30 students per teacher).



This is how much the global literacy rate grew over 200 years

World Economic Forum 13th of september 2022

According to data compiled by Our World in Data and the World Bank, the global literacy rate has taken a quantum leap and now stands at 87%, or in other words, almost nine out of ten people worldwide. However, strong regional inequalities persist, with countries in sub-Saharan Africa having the worst literacy rates in the world. Furthermore, in these regions with low literacy, women are the least likely to have access to education. In sub-Saharan Africa, for example, the literacy gap was even wider, at 72% for men and only 59% for women.



What does the new "multilingual competence" of the LOMLOE imply?

**The Conversation** 19th of september 2022

In Spain, the Law amending the Organic Law on Education (LOE by its Spanish acronym) of 2006 - LOMLOE - which enters into force this semester, maintains seven key competencies that already existed (linguistic, mathematical, scientific-technological, digital, personal and social, citizenship, entrepreneur and cultural), but adds multilingual competence, which implies being able to use different languages and being aware of their similarities. In short, the new law gives a prominent place to multilingualism and the linguistic and cultural transfer between languages. As a key competence, this aspect must be worked in all subjects, even if they are not "linguistic" at first sight (biology, mathematics, etc.).

SAPIENCIA

Agencia de Educación

Postsecundaria de Medellír









It's time we prioritized menstrual health in Nigeria. Here's why

World Economic Forum 22th of september 2022

Period poverty is a reality to many women and girls in low and middle-income nations, who are forced to use rags, tissue paper or leaves in place of menstrual hygiene products. As part of several local initiatives to support menstrual health and hygiene, the Abuja Hub taught 50 secondary school girls in Kuje Area Council on how to make reusable sanitary pads through the Pad and Pant Project designed to teach secondary school girls how to manage their menstrual cycle with dignity. Reports state that girls miss an average of 24% of a school year, which affects their academic performance, and can even lead to dropping out due to poor grades or psychological stress.

#### CONTINUING **EDUCATION PROGRAMS**

Due to the constant changes that the the updating of knowledge, skills, attitudes, rules and concepts for people of all ages, which implies continuing education inside and outside traditional

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), where productive sector is going through, it is training is given to the population of the necessary to provide training that allows 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.

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



**CODINC-Coding for inclusion** 

All coding

24th of september 2022

The "Coding for Inclusion" aimed at fostering STEM education of disadvantaged youth through an inclusive educational approach based on a peer-learning pedagogical method for formal and non-formal educational contexts in Europe. The project adapted, disseminated and scaled up a inclusive learning good practice based on the Capital Digital<sup>1</sup> project, and successfully trained 15-18 year old youngsters from disadvantaged backgrounds, migrants and asylum seekers. The topics covered were coding and programming, which the youngsters would later teach to their peers aged 10 to 12 years old.

www.sapiencia.gov.co

The young "e-facilitators" learned to engage children in STEM and coding activities in a playful way. This first work experience enhanced the youngster's confidence when starting their careers and finding a job. Moreover, the project effectively supported young people to develop critical thinking, creativity, digital and collaborative skills, and science capital.

<sup>1</sup>Capital Digital is a programming school for children and youth in the Brussels-Capital Region, focusing on disadvantaged populations.

#### 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

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 Some international news regarding 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.

pertinent post-secondary education are shown helow



**Biden's Cancellation of Billions in Debt Won't Solve the Larger Problem** 

The Atlantic 24th of august 2022

The author invites reflection on the economic relief given by the government of U.S. President Joe Biden's administration for the payment of educational credits, which consisted in covering up to \$10,000 in loans for those students with federal debts and up to \$20,000 for Pell Grant recipients, whose main condition was that they had not exceeded an income of \$125,000 per year or less than \$250,000 per year as a family. In this article, it stipulates that beyond alleviating the burden of the heavy debts of U.S. students, efforts should be made to address affordability of college, which can be addressed if higher education is viewed as a public good.



**These Students Are The First To Attend Law School From Prison** 

**Next City** 2nd of september 2022

Since August, Maureen Onyelobi from a women's prison in Shakopee, Minnesota, and Jeffery Young of a men's prison in Bayport, New York, began classes at St. Paul's Mitchell Hamline School of Law to earn a professional law degree. This achievement is made possible through a dialogue between the American Bar Association and the non-profit organization Prison to Law Pipeline, who has provided employment, mentoring, counseling and entrepreneurship opportunities for former inmates. The proposal arose in the aftermath of the pandemic, to allow the annual admission of two students, who are studying remotely from prison.



More students are dropping out of college in the US - here's why

World Economic Forum 06 of september 2022

Getting an education is said to be our passport to the future. But, since the pandemic, it seems more US college students are choosing the university of life. In order to find the authors state that the evidence suggests an active labor market and a rising cost of living as the main factors that are modifying the behavior of young people. According to Intelligent.com's survey, 31% of college students who drop out of college say it is to find a job, another 31% say they were not sure what they want, therefore, many prefer to "stop investing time and money in a degree they don't really want, rather than find a job. The cost of living also plays a key role, with 29% of young people saying they cannot afford to pay their living expenses due to rising inflation. On the other hand, 28% have the ambition to start their own business, so they are willing to drop out of college. Some of them, however, plan to continue their education in other ways, such as coding bootcamps or technical or trade schools.









Overview of Technical and Vocational Education in Nepal

Nepal Economic Forum 9th of september 2022

The skills and knowledge of a population, strengthen a country's economy and development. Least developed nations like Nepal need to focus on developing the skills of its population to create a resilient and growing economy. Skill development is critical and should be prioritized in Nepal as the country has a growing number of youth population who have received formal education but lack the practical skills necessary for the job market. The Government of Nepal envisions achieving rapid, sustainable, and employment-oriented economic growth as per its 15th Five-Year Plan. Similarly, it has targeted to provide high quality, employment – oriented and practical education to all its citizens. One of the main levers of sustainable development is education, which involves the transfer, acquisition, creation, and adaptation of information, knowledge, skills, and values.



Why Africa's youth hold the key to its development potential

World Economic Forum 19th of september 2022

For decades, development reports have called out African countries for their unsustainable demographic growth. This growth tends to be viewed as a strain on almost all developmental capabilities. However, people under the age of 35, reflecting the great potential of their young population, head a large number of African start-ups. Thus, it is increasingly recognized that the continent's educational programs must be reinvented to foster the entrepreneurial spirit that benefits African society. For this reason, the education system aims to take advantage of multiple synergies between Africa's universities, industry and business through targeted investments. For the continent's private sector, the return on investment is: access to applied research and a pool of young, bright talent hungry for impact in their lives.

## 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.

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

these areas, which allows the acquisition of skills for the so-called industry 4.0, which includes software development, programming automation lanauaaes. 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.

An international news article about the actual landscape of STEM education is listed below:



Ensuring equitable access to AR/VR in higher education

**Brookings** 5th of september 2022

Augmented reality and virtual reality (AR/VR) technologies are creating new means for education by opening doors for students to learn and teachers to instruct in a more immersive, technological environment. For this reason, researchers at Brookings and leading universities are exploring the opportunities and barriers in the design and implementation of AR/VR scenarios to facilitate diversity, equity and the inclusion of these technologies in institutions that historically include a larger proportion of the population such as African-descendants, Hispanics, and indigenous<sup>2</sup>.

<sup>2</sup>These institutions include Minority-Serving Institutions (MSIs), Historically Black Colleges and Universities (HBCUs), Hispanic-Serving Institutions (HSIs), and Tribal Colleges and Universities (TCUs).

# 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's a summary of some international news about educational innovation:



Information eliminates female students' preference for female mentors

/oxEU

21h of september 2022

Mentorship programmes commonly use race, gender, and nationality to match participants. Despite the popularity of these programmes, there is little evidence that those students being mentored value mentors with shared traits. Using novel administrative data from an online US university mentoring platform, this column finds that female students disproportionately reach out to female mentors not out of homophily³, but from a lack of other information about the mentors' abilities. Female students do not value a mentor's gender per se, but use gender as a proxy when no direct information about quality is available.

<sup>3</sup>He tendency of people to relate to others who are similar to them.

# EDUCATION IN THE WORLD



observatorio@sapiencia.gov.co



**SAPIENCIA** 

Agencia de Educación Postsecundaria de Medellír



