



DYNAMIC REPORT OF

# STRATEGIC INTELLIGENCE

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



August 2021

Source: Strategic intelligence  
World Economic Forum

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# 1. Core Soft Skills

According to The World Economic Forum estimates published in 2020, For 2025, around 85 million jobs will be lost due to growing division of labor between humans, devices and algorithms, although 97 million new jobs may emerge that are better suited to this new dynamic. And while there is broad consensus that no single skill set or area of expertise is likely to be able to sustain a long-term career well into the future, core 21st century soft skills, including not only creativity and flexibility, but also complex problem solving, critical thinking and collaboration will be crucial in enabling people to better adapt to the changing needs of the job market.



## FRONTIERS

**Rwandan women in higher education: progress, successes and challenges**

25th of August 2021

In nearly three decades since Rwanda's genocide and civil war, its education sector has undergone reconstruction to an unprecedented degree within higher education. While greater numbers of girls are attending university, and more women are becoming university faculty members, their status in educational leadership roles remains unclear. This qualitative investigation sought to present insight into four women who serve as professors and executive leaders within the higher education system by examining their progress, successes, and challenges.



## THE SCIENCE BREAKER

**How accurate is our memory?**

23rd of August 2021

Our memories often feel like records of the past. But the dominant view among scientists is that our personal memories are highly prone to error and not to be trusted. How accurate is memory, really? No need to be pessimistic – our study suggests that memory, while not a perfect record, is much more accurate than scientists think.



## 2. Quality Basic Education

According to the World Economic Forum, more than 263 million young people around the world do not go to school. Basic education should provide a stronger foundation to learn new skills in the future. Unequal access to education leads to a unequal access to opportunities and can permanently hinder the students' potential to learn new skills in the future. Technological innovation could be a good way to tackle this problem.



### PROJECT SYNDICATE

**The transformative power of early education**

24th of August 2021

Despite the importance of a person's early years, an estimated two in five children, mostly in low- and lower-middle-income countries, are still completely missing out on pre-primary school. Giving everyone the same educational opportunity from the beginning can play a powerful role in fostering inclusion. The investigation showed that the children that experienced early education showed fewer suspensions from school, had better employment outcomes and overall mental well-being, and were less likely to receive criminal convictions.



### ASIAN DEVELOPMENT BANK

**Education is in crisis: how can technology be part of the solution?**

13th of August 2021

A learning crisis affects many developing countries in Asia. Millions of children attend school but are not learning enough. They cannot read, write, or do mathematics at their grade level. These kids have not mastered previous knowledge and it's because of this that, each time, learning becomes even more difficult for them. The magnitude of the crisis is staggering: in low- and middle-income countries more than half of children are not learning to read by age 10. Edtech may be one part of the solution – but it should be a means not an end. Our guiding principle should be to first diagnose what is going wrong in a system and then identify which solutions are best suited to solve those problems.



## 3. Continuing Education Programs

Generally, education ends early in life, which is a disadvantage for labor market productivity. Training for adults is vital to ensure that those already in the workforce and their employers can face the challenges generated by the fourth industrial revolution. Providing flexible learning or helping employees acquire new skills will be a key method of mitigating unemployment and unequal access to resources.



### INTERNATIONAL LABOUR ORGANIZATION

#### Skills for prosperity programme in Indonesia

11th of August 2021

The ILO's Skills for Prosperity Programme in Indonesia (SfP-Indonesia), funded by the United Kingdom government, aims to improve the country's skills development policies and systems and enhance employability and future-readiness of young women and men including those from disadvantaged groups aspiring to pursue and advance career in the maritime industry.



### LSE BUSINESS REVIEW

#### Technology promotes inclusion for the world's largest minority group: people with disabilities

25th of June 2021

One in six people worldwide—over one billion people—have a disability and faces economic exclusion. Now, digital transformation linked with edtech, remote working, fintech, and networking make it possible for people with disabilities to find greater success at work. Talal Rafi writes that promoting disability inclusion is rewarding for organisations, improving productivity and increasing innovation, among other benefits.



### INDIA DEVELOPMENT REVIEW

#### Why we need to prioritise skill building of field workers

4th of August 2021

COVID-19 and subsequent lockdowns have changed the way companies and organisations work, including those in the social sector. While some of them have had to shift focus from their core programmes towards relief efforts, thereby stretching their existing resources, most have had to move to remote working models. Doing so has highlighted the limited digital skills and capacities within the sector, and the need to strengthen them. Moreover, in today's remote working reality, tech and data-related roles have become essential. However, the overall increase in demand for technically trained talent relative to supply has led to an increase in expected salaries for these roles.



## 4. Pertinent Post-Secondary Education

There is a disconnect between the skills needed for a job and the training that is given. Without the proper modifications to the education and training, this gap between supply and demand is expected to increase considerably. To deal with this, it will be very important to go back to align global talent sources with market needs. However, closing this gap will be increasingly difficult, as the requirements of skills change rapidly, especially in fields like information and communication technology (ICT).



### FRONTIERS

#### The effect of child quantity and education on parent's well-being in Vietnam

25th of August 2021

Vietnam currently has a rapidly aging population, while formal social protection has only covered a small fraction of older people. Therefore, many older people with insufficient income or poor health must rely on their children's support. This study uses the Vietnam National Aging Survey 2011 to determine whether the quality of children's education/employment and the number of children in a family impact older people's life satisfaction and health.



### FRONTIERS

#### Universities as partners in primary health care innovation

10th of August 2021

Universities have a unique role in the health ecosystem as providers of trained staff and discoverers of health innovations. However, often the universities don't have an active participation and they see health services simply as future employers of their graduates or clinical trial sites. This present case study is of a primary health service Access Health and Community (AccessHC) in Australia and its university partner Swinburne University of Technology. Together they established a Kickstart Program which was to provide seed funding for small joint innovation projects generated by both organisations. In this article, the promising results of this alliance are presented.

**HARVARD BUSINESS SCHOOL WORKING KNOWLEDGE****OneTen: Creating a new pathway for black talent**

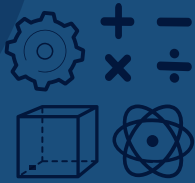
9th of August 2021

Last year, it took a teenager's 10-minute video of a Black man's murder to shine a light on the raw hostility that Black people face daily in America. George Floyd's death at the hands of a white police officer forced many to acknowledge the systemic racism that touches nearly every aspect of society—from healthcare to homebuying. In the wake of Floyd's murder, five executives felt compelled to confront these disparities. They formed a new organization, OneTen, to confront two of the most profound inequities: access to education and access to employment.

**VOXEU****Student autonomy and academic performance**

1st of August 2021

Understanding the impact of the COVID-19 pandemic on education requires a solid grasp of the impact of student autonomy on learning. This column examines the impacts of an innovative policy in Greece that provided higher-performing students with more autonomy. Targeted students missed more classes, while lower-performing students' attendance remained unchanged. The autonomy policy was used more by students in academically diverse classrooms, and is associated with increased performance only in high-stakes subjects for targeted students.



# 5. STEM Education

Science, technology, engineering, and math skills are at the core of the fourth industrial revolution. Therefore, young people must develop digital fluency and STEM skills from a young age if they want to be prepared to thrive in the workplace and in modern society.



## WORLD ECONOMIC FORUM

**This is how we can teach young people to use science and data to make better decisions**

20th of August 2021

Current educational methods fail to teach students the skills they need to thrive in the modern world. What the research shows is that 'scientific learning' requires students to be intensely engaged in problem solving in realistic contexts, working in small groups with their peers to make and justify the chosen set of decisions. It is proposed that the expert teacher should design good practice tasks (engaging, motivating, challenging but achievable) and then monitor students' thinking as they work, regularly providing timely and specific feedback on how to improve.



## LONDON SCHOOL OF ECONOMICS AND POLITICAL SCIENCE

**MPs with both an educational and occupational background in STEM are the most likely to demonstrate engagement with STEM issues in Parliament**

16th of August 2021

Joshua Myers and Hilde Coffé investigate the effect of having a STEM background on both the likelihood of MPs proposing a STEM Private Members' Bill and the proportion of proposals an MP dedicates to such bills. They find that having a STEM background does not affect the likelihood of proposing a STEM bill. However, MPs with both an educational and occupational STEM background are more likely to spend a higher proportion of their bill proposals dedicated to STEM issues. They also find that having a STEM educational background matters more strongly for women than for men.



## EOS

**Code-switching and assimilation in STEM culture**

28th of July 2021

The scientific community cannot claim it is becoming a diverse and inclusive culture based on numbers alone—not if professionals who are Black, Indigenous, and People of Color must leave themselves behind to be part of it. This text reflects on the difficulties these people face, particularly in the field of geoscience.



**RAND CORPORATION**

**A Pilot Study Investigating STEM Learners' Ability to Decipher AI-generated Video**

12th of August 2021

Artificial Intelligence (AI) techniques such as Generative Neural Networks (GNNs) have resulted in remarkable breakthroughs such as the generation of hyper-realistic images, 3D geometries, and textual data. This work investigates the ability of STEM learners and educators to decipher AI generated video in order to safeguard the public-availability of high-quality online STEM learning content. The COVID-19 pandemic has increased STEM learners' reliance on online learning content. Consequently, safeguarding the veracity of STEM learning content is critical to ensuring the safety and trust that both STEM educators and learners have in publicly-available STEM learning content.





## 6. Educational Innovation

Training courses are updated very infrequently and are generally not adapted to the Fourth Industrial Revolution. Technological innovation is changing the way educational materials are generated, the way educational content is distributed, the way students they involve with the materials and processes used to evaluate the results of education. Technology presents opportunities to educate in new, playful and personalized ways, which could change the traditional role of teachers and facilitate a comprehensive learning experience.


**STAT**

**We know how to keep kids safe from COVID-19 in school. Now we need to do it.**

23rd of August 2021

Many parents and school administrators are faced with a dilemma of growing urgency: How do we ensure that kids are safe at school while still reaping the benefits of in-person learning.? This text suggests that four clear and important measures must be implemented in parallel to minimize the chances of outbreaks at school: vaccination, face masks, proper ventilation, and frequent and rapid COVID-19 testing.


**FRONTIERS**

**Editorial: The Present and Future of Immunology Education**

2nd of August 2021

This Research Topic addresses issues relevant to teaching of modern immunology, a field that has exploded in recent years and is constantly evolving. These articles encompass curricular innovation, new pedagogical strategies, and teaching tools for the current and future generations of immunologists. The wide range of articles in this Research Topic illustrate diverse approaches for teaching basic tenets of immunology. Channeling one of the basic principles of Immunology, it is hoped the readers of this issue will select the Immunology articles that are most helpful to their particular mode of teaching. The articles presented are aimed at practitioners -the faculty members who are teaching and organizing Immunology courses.


**FRONTIERS**

**Cultivating Graduate STEM Pathways: How Alliance-Based STEM Enrichment Programs Broker Opportunity for Students of Color**

28th of July 2021

To understand how higher education institutions broker graduate opportunities for Students of Color (SOCs) in STEM, we employ a single case study of a Louis Stokes Alliance for Minority Participation (LSAMP) alliance. Drawing primarily from student interviews and informed by Small's (2006) organizational brokerage theory, our findings illuminate how 1) alliance-based STEM enrichment programs (SEPs) bridge social capital via interorganizational networks and 2) how SEP instability creates barriers to building the trust that is central to the brokerage process. We conclude with recommendations for future research and practice.