Education

STRATEGIC INTELLIGENCE BRIEFING

Curated with Technical University of Munich
Generated for Ruslan Zeynalzade on 25 January 2024

Contents

Executive summary

Technological innovation is fundamentally transforming education, and updating the skills required for modern work. Building future-ready (and pandemic-proof) education systems requires curricula fit for the 21st century, coupled with the consistent delivery of widely-accessible instruction that builds a solid foundation for a lifetime of adapting and developing new abilities. Specialized education should focus in particular on skills that are in demand in the real world, and address the disconnect between employer needs and available talent pools.

This briefing is based on the views of a wide range of experts from the World Economic Forum's Expert Network and is curated in partnership with Prof. Dr. Isabell M. Welpe, Chair for Strategy and Organization, and Felix Rank, Research Fellow, at the Technical University of Munich.

The key issues shaping and influencing Education are as follows:

Education Innovation
COVID-19 has highlighted the need to be able to deliver instruction in new and more compelling ways

Lifelong Learning Pathways
Education typically ends at an early stage of life, to the detriment of workers and employers

Quality Basic Education
Equal opportunity in life requires equal access to a basic education

Relevant Continuing Education
Technical and vocational training is often unjustly neglected by education systems

Digital Fluency and STEM Skills
Digital skills are essential, but real digital fluency means applying ethical considerations to technical achievement

Core Soft Skills
Soft skills should have a more prominent place in instruction, in order to increase adaptability

Below is an excerpt from the transformation map for Education, with key issues shown at the centre and related topics around the perimeter. You can find the full map later in this briefing.
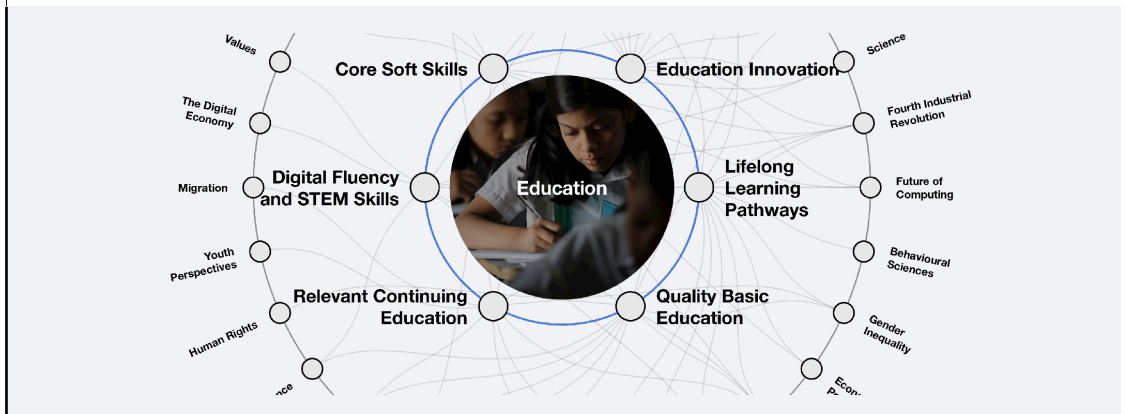
① Latest insights

A synthesis of the most recent expert analysis.

Below are your latest updates on the topic of Education spanning 19 different sources.

1.1 Current perspectives

New African Magazine
Building Tomorrow's Peace and Prosperity in West and Central Africa – A Call for Investing in Education Today
23 January 2024

Investing in education is crucial for building a future of peace and prosperity, particularly in regions like West and Central Africa where children are most vulnerable to disruptions caused by conflicts, climate crises, and pandemics. In the Sahel region, 28 million children are out of school, contributing to political instability. Despite progress, 8 out of 10 children in the region are unable to read by the age of 10. Efforts are being made to increase access to education, improve learning outcomes, and strengthen skills for the job market. The World Bank has increased its education portfolio in the region, emphasizing the importance of investing in education for lasting peace.

The Conversation (Spanish)
¿Se expresan los jóvenes de ahora peor que los de antes? Lo que dice un informe de la RAE
18 January 2024

La Real Academia Española ha publicado un informe crítico sobre el conocimiento y uso del español por parte de los jóvenes. El informe señala varias preocupaciones, como las carencias en la comprensión lectora, la falta de fluidez expresiva y el escaso interés por la literatura. La RAE insta a mejorar la enseñanza del español como lengua materna entre los jóvenes, y propone coordinar esfuerzos entre las diferentes etapas educativas y utilizar la tecnología de manera adecuada en el aula.

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War on the Rocks
Readiness Redefined, But Not Measured - War on the Rocks
15 January 2024

The Air Force lacks the ability to measure the readiness of its individual pilots, relying instead on one-size-fits-all training metrics. This results in pilots being deployed for missions that are misaligned with their recent training, leading to a decay of relevant skills. The Air Force should implement technology to determine pilot readiness based on individual performance, creating an Ascension-to-Retirement Competency Profile that tracks the attainment and retention of skills. This will improve individual readiness levels, allow for objective squadron assessments, and enhance training effectiveness. The Air Force should follow the lead of the Army and Navy in implementing individualized skill tracking and competency assessment.

STAT
People with food insecurity deserve better nutrition education
27 December 2023

People experiencing food insecurity, such as the growing number of migrants in Queens, New York, are in need of better nutrition education. Food insecurity is a public health issue in the US, with millions of households lacking access to nutritious food. Lack of reliable access to nutritious food is associated with increased risk of chronic diseases. While food assistance programs like SNAP provide monetary benefits, they are often insufficient to purchase healthy produce. Nutrition education is crucial in addressing food insecurity and improving health outcomes. Programs like SNAP-Ed have

shown positive results, but more federal action is needed to expand and improve these initiatives. Additionally, efforts should be made to meet communities where they are and promote systemic equity in the food system.

YiCai Global
Chinese Postgraduate Studies Applicants Drop for First Time in Nearly a Decade
25 December 2023

The number of Chinese applicants for postgraduate studies has declined for the first time in nine years. Around 4.4 million people took the postgraduate admission test, down 360,000 from the previous year. Lower cost-effectiveness and a lack of return on investment are the main reasons for the drop. Many students are realizing that obtaining a master's degree takes a lot of time and money, without significantly improving their job prospects. It remains difficult to find a job even with a master's degree, leading to a decrease in applicants. The value of long-term work experience and heightened skills is also recognized in the job market. However, postgraduate studies are still popular among fresh graduates majoring in medicine, agriculture, and science.

Australian Strategic Policy Institute
Why are so many young Chinese depressed?
21 December 2023

China's high youth unemployment and the rise of depression among young people can be attributed to factors beyond the country's growth slowdown. The rigid education system, past fertility policies, and tight migration restrictions have contributed to the burnout and disillusionment of Chinese youth. The pressure to attend a good university for better job prospects is immense, especially for rural children who view it as their only path to legal residence in cities. The structure of the school system further exacerbates the problem, with only 50% of children being allowed to pass the entrance exam for academic high school. Loneliness, due to the one-child policy, is another cause of depression, as children lack siblings and cousins to play with. Parents also face stress, with many middle-aged urban couples caring for four elderly parents in addition to their children. Policy solutions include decentralizing the education system and addressing hukou restrictions on rural-urban migration.

NASA
Telescopes Illuminate 'Christmas Tree Cluster'
19 December 2023

The NGC 2264 cluster, also known as the "Christmas Tree Cluster," is a group of young stars in the Milky Way, 2,500 light-years away from Earth. This composite image enhances the resemblance to a Christmas tree through color choices and rotation. The blue and white lights represent young stars emitting X-rays, while green represents gas in the nebula and white indicates foreground and background stars. The image shows the variability and activity of the stars, caused by magnetic fields, flares, and material falling onto the stars. The Chandra X-ray Observatory detected the X-rays.

UNDP
Coding Summer Bootcamp: technology creators and not mere users
01 December 2023

Why Coding Bootcamp for children/adolescents and young people? On the importance of bringing young people closer to technology, the president of the City Hall of São Filipe, in Fogo Island, mentor of São Filipe Coding Summer Bootcamp, is convinced that bringing young people together of the world of technology is the main step to become to have technology creators and not mere users.

The Conversation (French)
Débat : La pédagogie peut-elle renverser la sociologie ?
25 October 2023

« La pédagogie peut renverser la sociologie », a déclaré le ministre de l'Éducation Gabriel Attal dans une interview au Monde début octobre. Qu'en penser ?

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ReliefWeb
Rapport: Mission Paix et Cohésion Sociale à Limani et Waraga - Cameroon
05 October 2023

Introduction

Promouvoir la paix et la cohésion sociale nécessite l'engagement de tous les membres de la société, des individus aux institutions. Cela peut être réalisé en favorisant le respect mutuel, en encourageant le dialogue et la compréhension interculturelle, en promouvant l'égalité des chances et en luttant contre les discriminations. Les programmes éducatifs axés sur la tolérance, la diversité et les valeurs de paix peuvent également contribuer à renforcer la cohésion sociale.

En fin de compte, la paix et la cohésion sociale sont des objectifs importants pour promouvoir un monde plus juste et harmonieux, où les individus vivent en harmonie les uns avec les autres.

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Harvard Business Review
How Companies Can Help Universities Train Tech Workers
16 January 2024

Companies and universities are collaborating to develop curricula and spaces for students to learn and work with cutting-edge technologies, helping to train tech workers in the skills that companies urgently need. This model, based on five principles, has been implemented at universities such as Arizona State, the University of California San Diego, Oregon State, and Purdue.

Eco-Business
The young Filipinos studying clean energy in China
22 January 2024

Filipino students are studying renewable energy engineering in China as part of a three-year program initiated by environmental organizations in the Philippines. The students, aged 17 to 22, aim to contribute to the energy transition in the Philippines and help address the climate crisis. The country's vulnerability to disasters like typhoons and flooding, coupled with its potential for wind and solar power development, make renewable energy an important focus. The program in China, specifically in Gansu province, provides practical experience and language classes to prepare the students for their studies.

Smithsonian Magazine
Thirteen Discoveries Made About Human Evolution in 2023
28 December 2023

In 2023, thirteen discoveries were made about human evolution, providing insights into the diet and tool use of early ancestors, their environment, and behaviors such as hunting and jewelry-making. Research indicated that Neanderthals hunted cave lions and giant extinct elephants, suggesting cooperation and planning in hunting. Neanderthals may have gathered in larger groups and had food storage or preservation techniques. Additionally, evidence showed that Neanderthals cooked and ate crabs, indicating their exploitation of marine resources. These findings expand knowledge about our ancient past and what it means to be human.

NiemanLab
The climate crisis will cut across journalism
21 December 2023

The climate crisis is increasingly becoming a pressing issue in Brazil, and journalism has a vital role to play in addressing it. With historic droughts, heatwaves, fires, and floods, Brazilians are turning to journalism for accurate information to make better decisions. One challenge is combating disinformation, especially in news deserts where accurate information is scarce. To overcome this, journalism needs to connect with diverse audiences, including children and young people. Narrating the climate crisis requires a shift in temporality and incorporating Indigenous perspectives. Journalists also need to navigate the complexities of artificial intelligence and social media regulation.

World Bank Blogs
Empowering educators and learners: Insights and strategies from the EdTech Readiness Index
01 December 2023

The EdTech Readiness Index (ETRI) was created to monitor and support education and technology (EdTech) policies and practices globally. The World Bank, with support from Imaginable Futures, created the ETRI to enable countries to identify good practices and areas where EdTech policies can be strengthened, and monitor progress made by governments in this field.

Frontiers in Computer Science
Workplace Approaches to Teaching Digital Accessibility: Establishing a Common Foundation of Awareness and Understanding
13 October 2023

Accessibility in the digital world is a shared responsibility, requiring a common foundation of awareness and understanding. However, little is known about how digital accessibility can be effectively taught, and research on workplace teaching and training in accessibility is highly scarce, despite its crucial role in building accessibility capacity in the workforce. This paper considers workplace accessibility pedagogy to focus on aspects of foundational education, characterised as a pedagogically informed set of teaching strategies, cultivated through organisational and workplace cultures and practices. It contributes an analysis and synthesis of pedagogic research with 55 experienced accessibility educators in higher education and the workplace, in the UK and internationally, drawing on insights from expert panel methods including interviews, forums and focus groups. We find that digital accessibility is identified as a necessary core competency for an inclusive digital world. We examine the prevalent approaches that experienced workplace educators use to establish foundational awareness and understanding of accessibility to enable learners to achieve core learning objectives. We report the challenges that workplace educators face, negotiating different contexts and working practices and adapting foundational learning experiences to meet the pedagogic demands of different roles, responsibilities and specialist advancement. In doing so, we demonstrate that establishing...

RAND Corporation
American Mathematics Educator Survey
03 January 2024

The American Mathematics Educator Study (AMES) surveys were administered to a sample of American Educator Panel members in spring 2023 to better understand critical gaps in mathematics education. The surveys aimed to provide insights on factors influencing teachers' mathematics instruction and students' learning experiences, including teachers' preparation and professional learning resources, students' access to high-quality mathematics learning opportunities, and obstacles hindering these opportunities for all students. The detailed information about the sample, survey instruments, and resultant data for the 2023 AMES surveys is presented in this technical report.

Frontiers
Beyond mere respect: new perspectives on dignity for healthcare workplace learning
16 January 2024

A study explores the conceptualizations of dignity in workplace learning among stakeholders in healthcare across different professional groups. The study identifies eight dimensions of dignity, including respect, self-x, feeling safe, understanding otherness, supporting others, equality, professionalism, and belonging. It also highlights a tension between dignity as professionalism and dignity as equality. The findings suggest the need to revise existing concepts of dignity in workplace learning to address this tension and emphasize the importance of active care, team integration, and skilled support in fostering a dignified workplace learning environment.

Business and Technology University
BTU's Third Mission – Potential and Actions Related to Popularizing Knowledge and Technology Transfer within University
20 December 2023

Business and Technology University (BTU) in Georgia recognizes the importance of the third mission of higher education institutions - connecting and translating knowledge to society. BTU is actively collaborating with local and international institutions, as well as public agencies, to promote innovation, deliver social impact, and bring positive change. BTU's third mission is a shared agenda across the organization, with activities including popularizing technology transfer, supporting implementation, facilitating dialogue, and ensuring the relevance of knowledge to real-world needs. While Georgia has made progress in aligning with international standards, there is still room for improvement in institutional cooperation and science-business collaboration.

SpringerOpen
In their own voices: a nationwide study of students' attitudes towards the implementation of smart learning environments in UAE schools
22 January 2024

A nationwide study in the United Arab Emirates (UAE) investigated students' attitudes towards the implementation of smart learning environments (SLE) in schools. The study involved 1857 secondary school students and found that students had mixed feelings about SLE implementation. Furthermore, significant differences in attitudes were found based on school location and grade level. The study emphasizes the need for stakeholder engagement to determine the scope, innovation of technological devices, and teacher development required for efficient SLE implementation.

Nautilus
We Were Born to Groove
26 December 2023

Newborns have the ability to discern a regular beat in music, according to a study conducted by a research group in 2009. The study involved playing drum rhythms and observing the babies' responses when a beat was omitted. The results of the study confirm that beat perception is a distinct mechanism separate from statistical learning. The research also suggests that beat perception evolved gradually among primates, reaching its pinnacle in humans. This study adds weight to the argument for a biological foundation of beat perception and highlights the deep biological roots of music in humans.

OECD
OECD Digital Education Outlook 2021: Pushing the Frontiers with Artificial Intelligence, Blockchain and Robots
01 December 2023

How might digital technology and notably smart technologies based on artificial intelligence (AI), learning analytics, robotics, and others transform education? This book explores such question. It focuses on how smart technologies currently change education in the classroom and the management of educational organisations and systems. The book delves into beneficial uses of smart technologies such as learning personalisation, supporting students with special learning needs, and blockchain diploma credentialing. It also considers challenges and areas for further research. The findings offer pathways for teachers, policy makers, and educational institutions to digitalise education while optimising equity and inclusivity.
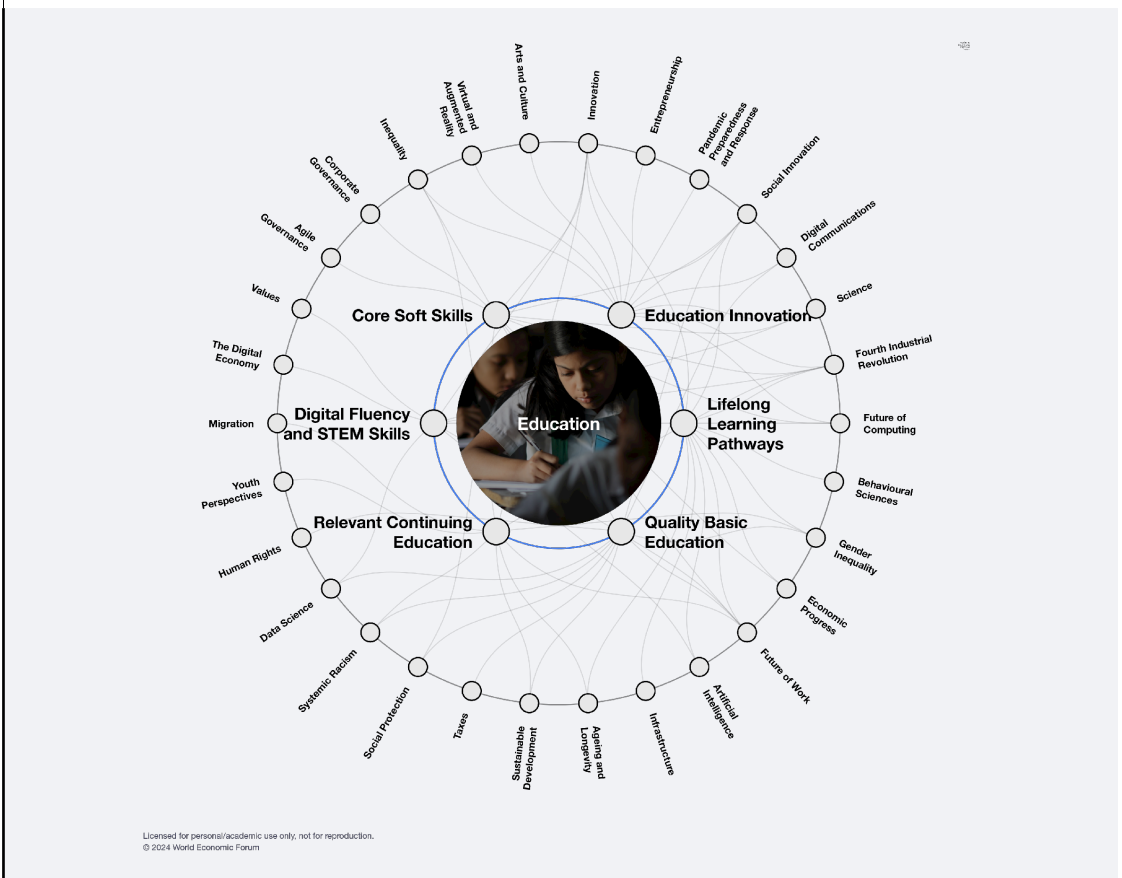
② Strategic context

The key issues shaping Education.

The following key issues represent the most strategic trends shaping the topic of Education. These key issues are also influenced by the other topics depicted on the outer ring of the transformation map.

FIGURE 1 | **Transformation map for Education**

2.1 | Education Innovation

COVID-19 has highlighted the need to be able to deliver instruction in new and more compelling ways

Even prior to the pandemic, technological innovation was changing the ways educational materials are generated, educational content is distributed, material is engaged with by learners, and educational outcomes are evaluated. Technology companies such as Amplify and Knewton have been digitizing textbooks and creating content based on gamified learning, while others such as Coursera, edX, and Khan Academy have sought to revolutionize education delivery through Massive Open Online Courses (MOOCs). However, some education systems, especially at the primary and secondary level, have been relatively slow to incorporate even the most basic, widely available learning technologies - and unequal access to

technology has hindered online education efforts during COVID-19. While technology has long been viewed as a potential means to address issues related to unequal access to education - particularly in rural or hard-to-reach communities and among traditionally-marginalized groups - the pandemic highlighted the need for more related infrastructure. As of mid-2020, a few months after the WHO declared COVID-19 a pandemic, less than half the population in 71 countries had access to the internet for the purposes of remote learning, according to UNICEF.

In addition to the delivery of education, more innovation is also required in terms of school curricula. UNICEF has advocated for balancing hard skills such as reading, writing, and math with soft skills such as problem-solving and creativity; in addition, instruction should no longer necessarily take place through front-of-class teaching, according to recent research. Pedagogy is a field ripe for innovation, especially when it comes to personalized learning. However, research has also highlighted that new learning tools do not always enable engagement with hard-to-reach groups - and it is critical that the drive for related innovation is matched by the monitoring of its effectiveness. Funding should be strategically allocated to trials, and any successes can be scaled up in the future. Greater public-private collaboration aimed at expanding this opportunity could also be beneficial - since governments cannot necessarily directly influence every classroom, they should instead focus on setting the right conditions for future-proof curricula and more innovative formats. As the education sector is both highly sensitive to change and a central pillar in the economy, better data collection could help ensure effectiveness.

Related topics: Inequality, Virtual and Augmented Reality, Arts and Culture, Innovation, Entrepreneurship, Pandemic Preparedness and Response, Social Innovation, Digital Communications, Science, Fourth Industrial Revolution, Future of Computing

2.2 | Lifelong Learning Pathways

Education typically ends at an early stage of life, to the detriment of workers and employers

In Europe and the US, demand for physical and manual skills in repeatable tasks is expected to decline by 30% in the coming decade, according to McKinsey & Company, while demand for technological skills like coding is expected to increase by more than 50%. As career paths are increasingly altered by fundamental labour market disruptions, there is a growing need for lifelong learning - at all ages, both inside and outside of traditional schools, including after the completion of formal education. Adult training is vital; helping employees gain new skills will be a key way to alleviate unemployment, address unequal access to resources, and engage older people in the workforce. While nearly 84% of the world's talent under the age of 25 is being "optimized" through education, that figure falls to 45% for those over 25, according to the World Economic Forum's Global Human Capital Report. In order to better engage people over 25 in gaining new skills, the UNESCO Institute for Lifelong Learning has recommended the development of national qualifications frameworks, and providing lifelong learning through community centres.

Better integrating literacy and basic skills programs into national education agendas can lead to an improved quality of life. Many developing countries have made significant progress in terms of increasing investment in education for young people, though education systems around the world continue to emphasize the front-loading of learning at an early stage of life - leaving older generations with educational attainment only as an increasingly faint memory. Skills decline when they are not used, as noted in the Organisation for Economic Co-operation and Development's Survey of Adult Skills; accurately mapping the typical skills lifecycle is key for estimating the points at which people will likely have a need to refresh their competencies - whether with the aim of simply changing careers, re-entering the workforce after caring for a family member, or following an extended illness. Ideally, education systems can thrive thanks to a fundamentally strong public sector. However, by working together with the private sector, governments and educators could potentially develop more necessary infrastructure for providing learning and training opportunities to workers at all stages of their careers.

Related topics: Behavioural Sciences, Gender Inequality, Economic Progress, Future of Work, Artificial Intelligence, Social Innovation, Infrastructure, Fourth Industrial Revolution, Ageing and Longevity, Innovation

2.3 | Quality Basic Education

Equal opportunity in life requires equal access to a basic education

Fewer than 10% of countries have laws that help ensure full inclusion in their education systems, according

to a UNESCO report published in 2020 - and 40% of the poorest countries have failed to support "learners at risk" during COVID-19. While many countries are able to provide adequate primary education, many more struggle with quality and availability; this has been particularly concerning in sub-Saharan Africa, the Middle East, North Africa, and parts of Southeast Asia, according to the World Economic Forum's Global Human Capital Report. According to UNICEF, more than 175 million children worldwide have not been receiving pre-primary education, and inequality in terms of access remains high particularly among the poor and disadvantaged. While nearly two-thirds of all countries have attained gender parity in primary education, girls are still less likely than boys to start secondary education; disability and membership in an ethnic minority can present further obstacles. In addition to boosting the enrolment of children in basic education, a greater focus should be placed on learning infrastructure - on training teachers, and creating healthy and safe learning environments not only during school hours but also at home.

Providing greater access to a basic education is essential for advancing the United Nations' Sustainable Development Goals. Alongside efforts to increase access, more concerted efforts are needed to improve quality. This could be aided at least in part by introducing clearer, more widely-recognized global standards to benchmark learning outcomes and enable less-siloed education and more individualized learning paths. One widely shared, persistent barrier to providing a broadly accessible, adequate basic education is cost. According to UNESCO's review of the UN's Millennium Development Goals (precursors to the SDGs targeted to 2015), an additional $22 billion would be needed every year in order to meet basic education targets for 2030. And, according to a UNESCO report published in 2020, 41% of countries were not conducting meaningful surveys on individual education characteristics such as disabilities - or making related data available. This underlines an acute need for new financing and data collection models, particularly in developing countries. Technological innovation could be one means to help address the issue, especially when it comes to children in rural areas and those regularly migrating with their parents.

Related topics: Sustainable Development, Taxes, Social Protection, Systemic Racism, Social Innovation, Inequality, Data Science, Digital Communications, Human Rights, Future of Work, Gender Inequality

2.4 | Relevant Continuing Education

Technical and vocational training is often unjustly neglected by education systems

Employers have long been warning of widening gaps between the skills in demand and those that workers actually have - while governments have touted a need to foster more technical talent if countries want to be globally competitive. One report published by Deloitte estimated that 2.4 million positions in the manufacturing sector alone could remain unfilled between 2018 and 2028, with a potential economic impact of $2.5 trillion. Without adequate modifications to education and training systems, this gap will only worsen. Closing it promises to only become more complex, as skills requirements change at an accelerating pace - particularly in emerging technology fields. This calls for greater collaboration between the public and private sectors - in particular, more needs to be done to better balance the goals and desires of policy-makers, politicians, and educational institutions with those of entrepreneurs and investors. There is a need to better understand the linkages between these sometimes disparate interests, and ways they can be combined to serve people, the environment, and broader economies in healthier and more complementary ways.

In 2019, Germany introduced a national continuing-education strategy based on a more holistic culture that takes into account the interests of the government, industry, and trade unions - and employs algorithmic matching, financing, and the visualization of competencies. Accurate, timely career guidance can help successfully transition young people from their school years to employment, by ensuring that they understand their true options based on real labour market data and demand. Proactive career guidance can also help circumvent the gender stereotyping and socio-economic opportunity gaps that often hold young people back from choosing certain occupations. In general, technical and vocational training is underutilized - and often unjustly neglected by education systems as a second-best option. Such training and education can be a key driver of economic growth, by providing many of the skills required for jobs that will have genuine staying power in future labour markets. Technical qualifications may be best designed through collaboration between employers and industry groups, and particular attention should be paid to fostering their evolution based on sets of mutually agreed-upon standards.

Related topics: Innovation, Gender Inequality, Future of Work, Ageing and Longevity, Youth Perspectives, Migration, Systemic Racism, Fourth Industrial Revolution, Sustainable Development, Inequality

2.5 | Digital Fluency and STEM Skills

Digital skills are essential, but real digital fluency means applying ethical considerations to technical achievement

Technology has provided a crucial lifeline during COVID-19 by linking people to loved ones and work - in ways that make it clearer just how digitized the near future will be. The hybrid forms of collaboration that have emerged as we move towards a new normal bring their own challenges, and may aggravate existing inequalities. To thrive in a contemporary workplace, young people need to develop digital fluency and science, technology, engineering and mathematics (STEM) skills from an early age. Real fluency starts with basic digital literacy - and adds an ability to apply critical thought and ethical considerations to using and developing technology, or dealing with data. While learners need help to attain an ability to apply innovation in ways that take into account ethical considerations, education systems need to ensure technology curricula are up-to-date on related issues - and teachers need opportunities to refresh their own skills and knowledge to keep up with real-world developments. The ethical use of technology should be embedded throughout an education and lifelong learning, to prepare people of all ages to deal with the thorniest related issues.

Properly matching STEM skills with a solid ethical grounding requires investment, though the benefits in terms of increased digital fluency can clearly exceed related costs. That is certainly true for businesses hiring young people equipped with fluency who are less likely to build artificial intelligence and other systems that result in litigation or scandal. Many of the most desirable jobs require a healthy understanding of math and science; according to projections made by the US Department of Labor, many of the 20 fastest-growing occupations for the period between 2016 and 2026 will require related backgrounds and skills. In addition, the European Centre for the Development of Vocational Training (Cedefop) has estimated there will be 11% employment growth within the European Union for occupations tied to science, engineering, and information and communications technology between 2020 and 2030. Given the importance of high-value-added STEM in future workplaces, it is imperative to ensure access to related education for people from all socio-economic groups. Girls and women are particularly underrepresented within STEM disciplines, and it is crucial to find ways to proactively increase their engagement during secondary and tertiary education.

Related topics: Data Science, The Digital Economy, Future of Work, Science, Fourth Industrial Revolution, Values, Innovation, Artificial Intelligence, Future of Computing

2.6 | Core Soft Skills

Soft skills should have a more prominent place in instruction, in order to increase adaptability

By 2025, some 85 million jobs may be lost to the emerging division of labour among humans, machines, and algorithms, according to a World Economic Forum report published in 2020, though 97 million more jobs may emerge that are better adapted to the new dynamic. Among to top 10 skills in terms of prominence by the year 2025, according to the report, are soft skills including creativity, leadership, and flexibility. While education can generally provide a basis for future re-skilling, self-actualization, and forming a civic identity, specific educational curricula cannot remain fixed as standard career paths continue to evolve and become less linear than ever before. While there is a wide-ranging consensus that no single skill set or area of expertise is likely to be able to sustain a long-term career in the future, the core soft skills of the 21st century - including not just creativity and flexibility but also complex problem solving, critical thinking, and collaboration - will be crucial for enabling people to become better able to adapt to the changing needs of the job market.

These soft skills should be developed early, in basic education, and then later refined at colleges and universities - as well as, ideally, during lifelong learning as an adult. By providing a strong base of soft skills, an educational system can serve as a catalyst not only for an increased adaptability to future jobs, but also for a generally improved quality of life. However, shifting demand for skills across industries will require that curricula be updated and adapted on a regular basis - because they are naturally informed by the evolution of labour markets. Upgrades to curricula should also be built into systems incrementally, to avoid the excessive disruption and implementation time-lag associated with major, infrequent overhauls. One, single organisation cannot provide these soft skills alone, and certainly not for the duration of a person's life - therefore the creation of adequate learning systems requires at least a certain amount of input from both public and private institutions. In general, more emphasis should be placed on collating insights from government, businesses, and civil society organizations when designing curricula.

Related topics: Social Protection, Agile Governance, Economic Progress, Science, Future of Computing, Fourth Industrial Revolution, Future of Work, Innovation, Corporate Governance, Social Innovation
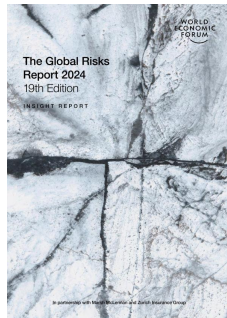
③ Further exploration

Explore the latest World Economic Forum reports related to Education.

16 January 2024

EDISON Alliance Impact Report

10 January 2024

Global Risks Report 2024

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About Strategic Intelligence

Our approach

In today's world, it can be difficult to keep up with the latest trends or to make sense of the countless transformations taking place. How can you decipher the potential impact of rapidly unfolding changes when you're flooded with information - some of it misleading or unreliable? How do you continuously adapt your vision and strategy within a fast-evolving global context? We need new tools to help us make better strategic decisions in an increasingly complex and uncertain environment.

This live briefing on Education, harnesses the World Economic Forum's Strategic Intelligence platform to bring you the very latest knowledge, data and context from our 300+ high quality knowledge sources. Its aim is to help you understand the global forces at play in relation to Education and make more informed decisions in the future.

Each day, our Strategic Intelligence platform aggregates, distills and synthesizes thousands of articles from around the world. We blend the best of human curation with the power of machine learning to surface high-quality content on over two hundred global issues to our one million users globally. Our hand-picked network of content partners from around the world means that we automatically exclude much of the noisy clickbait, fake news, and poor quality content that plague the Internet at large. We work with hundreds of think tanks, universities, research institutions and independent publishers in all major regions of the world to provide a truly global perspective and we are confident that our data are well positioned when it comes to the intrinsic biases inherent to open text analysis on uncurated content from the Internet. For further context on our approach, you may be interested to read Strategic trend forecasting: anticipating the future with artificial intelligence and These Are The 3 Ways Knowledge Can Provide Strategic Advantage.

↓ A leading expert presenting a transformation map at our Davos Annual Meeting

Transformation maps

Our Transformation Maps are dynamic knowledge visualisations. They help users to explore and make sense of the complex and interlinked forces that are transforming economies, industries and global issues. The maps present insights written by experts along with machine-curated content. Together, this allows users to visualise and understand more than 250 topics and the connections and inter-dependencies between them, helping in turn to support more informed decision-making by leaders.

The maps harness the Forum network's collective intelligence as well as the knowledge and insights generated through our activities, communities and events. And because the Transformation Maps are interlinked, they provide a single place for users to understand each topic from multiple perspectives. Each of the maps has a feed with the latest research and analysis drawn from leading research institutions and media outlets around the world.

At the centre of each map is the topic itself. This is surrounded by its "key issues", the forces which are driving transformation in relation to the topic. Surrounding the key issues are the related topics which are also affected by them. By surfacing these connections, the map facilitates exploration of the topic and the landscape within which it sits.

Continue online

Our suite of Strategic Intelligence tools are available to help you keep up to date across over 300 topics.

On the web

Visit Strategic Intelligence on your desktop or laptop. All modern browsers supported.

In the app stores

You can find our Strategic IQ app on the Apple App Store, Google Play Store or Huawei App Gallery.

You can also follow Strategic Intelligence on Twitter.

Go further with our Pro offering

Our Pro membership allows you to create unlimited custom transformation maps and the ability to collaborate on them with your colleagues. You also get the ability to export transformation maps images and Powerpoint presentations. As a Pro user, you also gain access to a range of hypothetical scenarios that have the potential to impact developments in the near future; enabling you to think through and anticipate potential opportunities and risks.

To learn more, visit our membership site.

Contributors

World Economic Forum

Abhinav Chugh,
Content and Partnerships Lead

Bryonie Guthrie,
Practice Lead, Foresight and Organizational Transformation

James Landale,
Head of Content and Partnerships

John Letzing,
Digital Editor

Dhwani Nagpal,
Content and Partnerships Specialist

Technical University of Munich

Acknowledgements

Content Providers featured in this briefing

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Harvard Business Review

NASA

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New African Magazine

NiemanLab

RAND Corporation

ReliefWeb

STAT

Smithsonian Magazine

SpringerOpen

The Conversation (French)

The Conversation (Spanish)

War on the Rocks

YiCai Global