

ANNUAL EDUCATION OUTLOOK

2023 GLOBAL EDUCATION OUTLOOK

January 2023

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01

EXECUTIVE SUMMARY

1. Executive Summary

2023 starts the next chapter for education. Immediately following the pandemic, but without the government and private stimulus that powered a three-year surge in education technology formation, adoption and investment. Schools and Universities will consolidate sprawling procurement, the economy will dampen government spending and private growth capital and EdTech formation will decelerate, driving defensive acquisitions and consolidation. We're shifting from 'short-term surge' to 'long-term transformation' and from 'learning loss' to 'competitive catch-up' on a bumpy economic foundation with regression to home market focus.

The last few years have proven challenging for education as inflation, viruses, and other macroeconomic drivers continue to threaten to disrupt daily life. And despite lackluster profit reporting and a smattering of company layoffs in 2022, many EdTech solution providers are anticipating digital transformation will continue in earnest to meet the needs and demands of all learners. Flexible work schedules are being mirrored in hybrid school schedules, and learning is being accessed more regularly in the home by learners of all ages.

As we reflect on 2022, several key themes emerge that together are reimagining and restructuring the new education economy, where technology moves to meet the changing needs of learners, teachers and institutions.

Governments, employers and consumers together will spend over \$7T a year on education and training in 2023. Meanwhile, education technology will have doubled in size relatively quickly. Regulation will tighten before easing as digital learning becomes mainstream, public-private partnerships will be further accepted and credentials become more diverse.

Figure 1A. Growth of Global Education and Training Expenditure

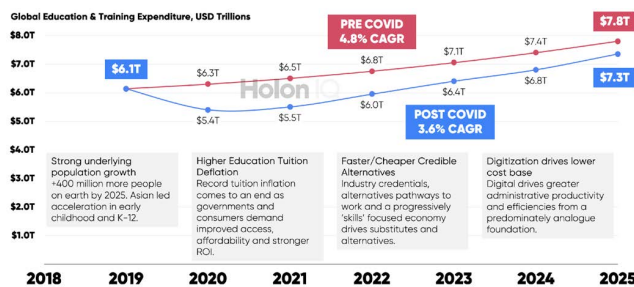


Figure 1B. Global education – now and then

2019 (Pre Pandemic)	2025
\$6.1T education spend 6.7% of Global GDP	\$7.3T education spend 6.6% of Global GDP
\$183B EdTech spend 3.1% digital spend	\$404B EdTech spend 5.5% digital spend
Profit vs non-profit	Cost vs Outcomes
Property heavy Face-to-face delivery	Capital light Technology enabled

02

GLOBAL MARKET OUTLOOK

2. Global Market Outlook

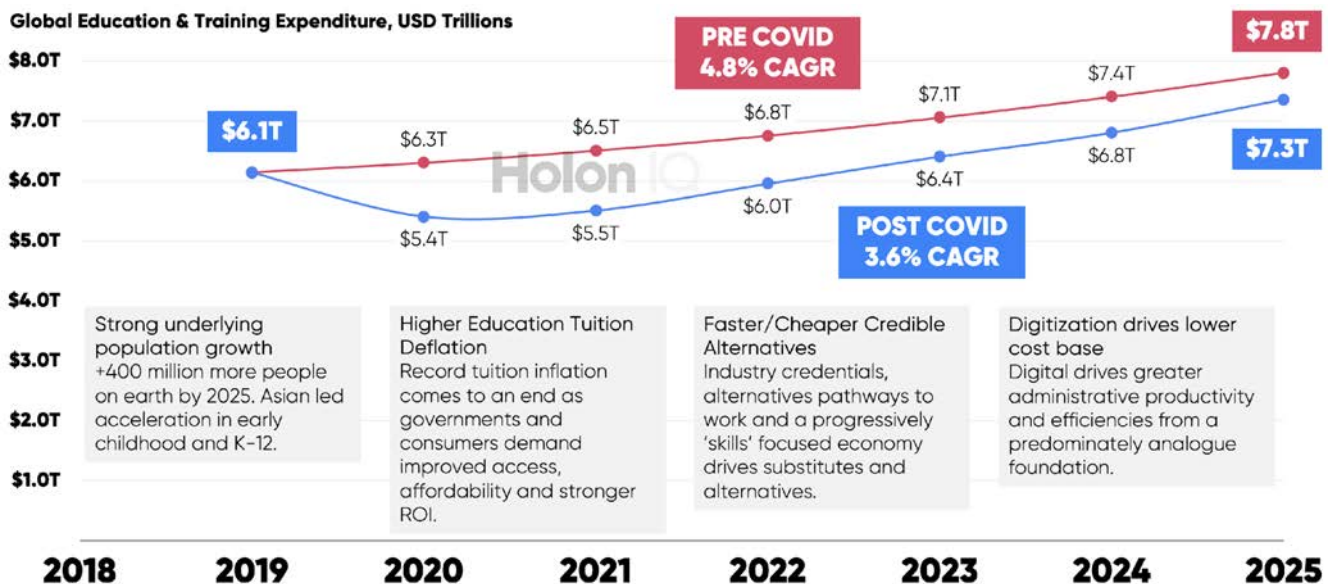
Governments, employers and consumers together will spend over \$7T on education and training in 2023 and over \$300B of that expenditure on education technology, across hardware, software and services. As we transition from pandemic to economic impacts, we see the digital transformation of education maintaining momentum alongside consolidation in education technology.

2.1 Global Education and Training Expenditure

Global education and training expenditure is set to exceed \$7T in 2023 as population growth in developing markets fuels a PreK-12 expansion and technology drives unprecedented re-skilling and up-skilling in developed economies. Driven by higher education tuition deflation, combined with

faster/cheaper alternatives and digitization progressively driving efficiency across all sectors, in 2020 we revised our Global Education and Training market size, downgrading total spending by ~\$500B in 2025 compared to our Pre-COVID outlook.

Figure 2.1. Global Education and Training Expenditure



2.2 Market Expectations

HolonIQ's Annual Education Market Expectations survey gathers data and perspectives from our Global Panel on the state of the global education market. This year's results show that organizations facing financial and political uncertainty, technology challenges and talent shortages.

Key market trends and issues for organizations ranged widely depending on geography, sector and organizational context, but several themes emerged across the board. Global and regional economic uncertainty is putting pressure on established organizations, EdTech companies and educational institutions, with restrictions on the availability of capital and budgets for growth and innovation.

Technology was also identified as a significant issue, particularly the continued mandate for digital adoption and transformation initiatives and ongoing evolution of diverse learning design and delivery modes, especially for Higher Education institutions. Advanced technologies are also considered an important trend, with the possibilities and challenges of AI top of mind. Related to many of these trends is the broad issue of talent acquisition, retention, and development. New skills are needed, but the labor market is tight and the workforce is still recovering and reflecting on an extended period of disruption.

"Despite market sentiments, fundamentally EdTech is at an inflection point and the next wave of Edtech winners will look very different from incumbents"

K12 Online Learning, Singapore

"Political instability is a real challenge"

Corporate Training, Peru

"The biggest threat to HE is the potential limiting of international students - many institutions depend heavily on the funding

these students bring, to be able to deliver their core functions."

Higher Education institution, UK

"OpenAI will be a major disruption"

Higher Education provider, Colombia

"With the rise of AI, it will be challenging to adapt to this change while also embracing it"

Higher Education institution, Canada

Market Conditions

Education market conditions have been challenging, with the situation expected to stay the same, or improve a little over the coming year.

Overall, the impact of challenging world and regional events on the global education market has been felt significantly, particularly in the second half of the year. 30% felt that market conditions in their country were moderately worse and 28% felt they were the same compared to 6 months ago. There was some positivity from 24% of respondents, however, who perceived market conditions to be moderately better now.

Figure 2.2A. How are current overall market conditions in your country compared with six months ago?



Looking ahead, sentiment is mixed but tending somewhat optimistic, with 34% expecting the situation to remain the same, and 28% forecasting moderate improvement. Still, one quarter of our respondents are expecting the situation to

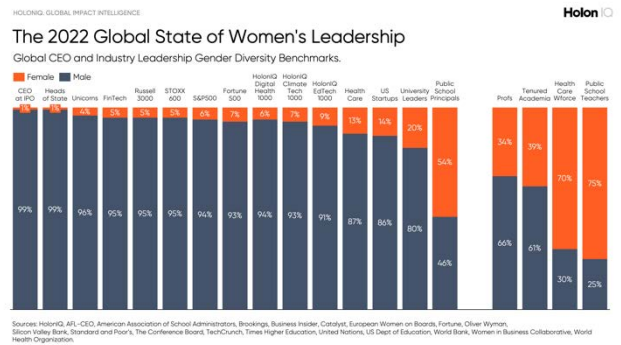
Future of Work. The constantly evolving work environment, particularly in the last 2-3 years have seen major changes in how we work, hire and retain talent. Employees are leaving office jobs to start businesses or moving to different industries. Automation and new technology adoption is making lower skilled jobs obsolete which means that we will see less demand for basic office jobs and more jobs in STEM. Employers are also increasingly having to re-invent employee training and engagement practices.

The future workplace is very likely to have a different mix of jobs compared to the current labour market. This will result in increased demand for reskilling, corporate training and engagement and higher public spending into areas including STEM education, which are all likely to create further opportunities in the EdTech space. In the post-Covid world, increased focus on workplace safety for healthcare workers could also drive demand for use of equipment like smart PPE, channeling investment into HealthTech. With companies driving widespread adoption of technologies such as blockchain, which in turn have potential adverse impacts on the climate, the resultant need for climate tech investment will also be on the rise.

Outcomes

In the impact landscape, a key challenge faced by stakeholders is measuring outcomes of the technology used. Given measures of diversity are important outcomes in today's world, we analysed the global state of women leadership in 2022. Across numerous categories of industries, institutions and governments, the proportion of women leaders remains at less than 20% except at public schools. While a majority of the frontline staff in these institutions are female, the underrepresentation of women at decision making levels highlights the long road ahead to achieve gender parity.

Figure 2.3F. 2022 State of Women's Leadership



The Global Impact Index is a prototype summary measure designed to capture the social, environmental and economic outcomes at the country level. The index is based on 50 equally weighted impact indicators, representing 10 pillars spread across the 5 dimensions of Resources & Environment, Education & Workforce, Health & Wellbeing, Equity & Governance, and Technology & Economy. Over 150 economies which account for more than 99% of the world's population and GDP are scored and ranked.

European nations dominate the top 10 of the index, led by the Nordic countries. New Zealand is the only country outside of Europe included in the top 10 and Japan is the highest ranked Asian country ranked at 17. Smaller, wealthy nations outperform on the prototype impact indicators with the G7's average rank of 19 and G20 average rank of 53.

Figure 2.3G. HolonIQ Global Impact Index - Methodology.

