EdTechXEurope June 2022

This year's event focussed on **'The Experience of Learning'** and saw more than 700 delegates from 51 countries meet in London to discuss where EdTech stands post-pandemic, emerging trends in the industry and what the future holds.

It was yet again a thought provoking, intellectually stimulating event.

Opening keynote

The program began, in customary fashion, with a joint presentation by EdTechX founders Charles McIntyre and Benjamin Vedrenne-Cloquet who highlighted the growing significance of the EdTech sector in these two data points:

1. For every new $10 spent in education, $1 is now being spent on EdTech.
2. The sector is receiving 3x the funding it was pre-pandemic.

However Vedrenne-Cloquet did not mince his words when he called out the mixed performance of EdTech during the pandemic. Despite the obvious achievement whereby countries around the world saw their education institutions switch to online learning in a matter of days, he called out the following problems which the sector needs to confront:

1. The mass switch to online learning was typically not to educationally rich learning but to the "regressive triumph of the lowest technology" (ie Zoom and powerpoint). This had led to a learning deficit in schools with students falling behind on average by 8.2 months, as well as evidence that there has subsequently been increases in rates of early school completion, obesity, and teen pregnancies, as well as a rise in mental health issues.
2. The 'great resignation' which is not a new issue but rather part of a long-term trend and will contribute to a rising skill gap as "workers are **retiring** in greater numbers, but are NOT **relocating** in large numbers; They are **reconsidering** their work-life balance and care roles; Workers are making localized switches among industries, or **reshuffling**, rather than exiting

the labour market entirely; and because of pandemic related fears or habits. Workers are demonstrating a **reluctance** to return to in-person jobs" (what he described as the 5 Rs), and

3. The sector needs to confront its business ethics with a growing problem of abusive marketing practices and stealing users' personal data.

He and McIntyre suggested that the sector will (and should) increasingly be focussed on:
1. Impact & ESG (Environmental, Sustainable and Governance standards), and
2. Experiential learning (and noted their recent partnership with [zSpace](#)).

To support the EdTech sector in increasing its impact and helping meet ESG goals, EdTechX have developed an opensource and self-assessment methodology focussed on:
- Reach and affordability
- Quality of Education and Training, Gainful Skills and Employment
- Efficacy and Sustainability
- Customer Pricing and Data Security
- Responsible Selling and Marketing Practices
- Employee Engagement, Diversity and Inclusion
- Business Ethics and Competitive Behaviour

EdTechX is also looking to make its impact by granting a percentage of the founders' shares in their listed SPAC (Special Purpose Acquisition Company) EdTechX Holdings to non-profit initiatives supporting "the digitisation of education and digital inclusion in education".

And they are invested in the shift to experiential learning through the zSpace investment. With predictions ([link](#)) that Education and Workforce Development will be the sectors most impacted by immersive (AFR/VR) technologies after Healthcare, it is projected that the AR/VR/MR global market will be worth US$250B by 2028, and education's share will be US$16B by 2025.

They then went on to discuss Foundation Models, large artificial intelligence models trained on large amounts of unlabelled data (with AI self-learning as it does this) to create models that can be adapted to a wide range of subsequent uses. These Foundation Models are what sits behind the data processing required for AR/VR learning and leads the sector needing to confront the question of "who will be the gatekeepers?"

"[Immersive technology] is just like the atom splitting. It can be used for helping mankind, […], or it can be used for destroying mankind. That's where we are with virtual reality. […] How are we going to put in safeguards so that we don't get burned?" (Dr. Thomas Furness).

In answering these questions, McIntyre and Vedrenne-Cloquet claim the sector must be focussed on Impact and ESG and that this will lead to models and tools which are "designed by the many", "accessible by all" and underpinned by "transparency and Open AI".

The [conference program](#) included four tracks of concurrent sessions and I wrote a book full of notes, I'm conscious of summarising only the most salient points. I mostly attended the 'Future of Work' presentations and my notes included the following:

Preparing students for the workforce

Jeff Maggioncalda from Coursera joined the conference for a virtual 'fireside' chat. Key points included:

- As at March 2022 Coursera has 102 million registered learners and added nearly 21 million new learners in 2021 (representing 25 per cent year on year growth).
- Coursera's revenues have risen from US $184 million in 2019 to US $415 million in 2021.
- 'Coursera for Campus' launched in 2019 – a subscription model where educational institutions around the world can have access to the more than 5,000 courses on the Coursera platform for their learners. There were 30 universities subscribing to the platform prior to the pandemic and now more than 4,000 educational institutions are subscribers.
- In addition, Coursera now offers more than 4,000 industry microcredentials and professional certificates through 'Coursera Campus for Industry'.
- 'Career Academy' is a new initiative, offered as part of Coursera Campus for Industry, which currently packages up more than 20 entry level professional certificates from leading companies such as Google, IBM, Microsoft, Salesforce, etc. The Academy trains students for entry level digital jobs and Coursera is now also seeing universities encouraging their students to study these certificates so that they graduate with a degree and additional practical digital skills.
- Coursera has three revenue streams: 'Consumer' where learners come to Coursera and buy/subscribe to an open course from universities or industry. These offerings form the largest number of offerings on Coursera because they date back to its inception as a MOOC ten years ago. They are experiencing growth in this market of 20-30 per cent per annum linked in part to what's been termed the 'great resignation' but what Coursera refers to as the 'great reskilling'. Their 'Enterprise' segment includes Coursera for Business and Coursera for Government – helping private and public entities upskill their workforce and their growth estimates for this stream are approximately 50 per cent. Their third revenue stream is Coursera for Campus and no growth estimates were provided during the discussion.
- The explosion of online learning through COVID and the growth in Coursera for Campus has seen very different student cohorts enrolling in higher education – beyond the traditional university student profile.
- Many online courses are now starting to incorporate AR/VR into their content, thus making them much more engaging for students.
- The development of the MOOC was "a 'big bang' event when it comes to learning experience and innovation." The new wave in online learning experience is "hands on", with Maggioncalda stating that because almost every job is digital and requires digital tools and data fluency, new methods of learning (new digital tools) are needed so that students can apply the knowledge they learn – and hence the shift to more experiential learning through their acquisition of Rhyme (an online platform for practical projects).

The European Commission:

- In September 2020 launched a new Digital Education Action Plan 2021-2027 which contains 14 actions under two strategic priorities:
    i.   fostering the development of a high performing digital education ecosystem, and
    ii. enhancing digital skills and competencies for the digital transformation.
- European EdTech market is very fragmented, majority microbusinesses and very few truly large companies; there are curriculum mismatches but it is a driver of innovation in education, has proven itself agile, proactive and open in times of crisis (Ukraine and COVID), and is a growing sector with increased investments.

- The Commission is looking at how to measure the performance of EdTech in terms of learning outcomes and its impact.
- There is also political recognition of the importance of the sector and the 'will' for cooperation – including a 2021 roundtable discussion initiated by the European Commissioner for Innovation, Research, Culture, Education and Youth, Mariya Gabriel; plus a stakeholder forum in March 2022 and the Commission's attendance at the EdTechX Summit showing their interest in engaging with and learning from the sector.
- The European EdTech community developed a [Vision Document](#) for consideration by the European Commission following the March roundtable, and has also collaborated on a new Ukrainian School Hub to provide education in Ukrainian to refugees from the war in Ukraine and support students in continuing their studies.
- A new [Digital Education Hub](#) was launched on the day of the EdTechX conference to improve cooperation on digital education at the EU level.
- The EU has three key EdTech focus areas:
    i. deepening dialogue between policy and the EdTech sector
    ii. promoting effective and sustainable public-private partnerships and cross-sectoral cooperation, and
    iii. fostering the measurement of learning outcomes, impact and quality assurance in EdTech.
- These will be underpinned by considerations of regulatory approaches and standards – with an intention not to impose a top-down approach nor to leave things in the fragmented bottom-up state they currently are, but instead to work with the sector in a cooperative manner.
- Funding is also available to the sector in the form of support for cross-sectorial partnerships and networks, as well as €10B for break-through technologies through the European Innovation Council.

The State of Education in Europe & EdTech's role (Google Cloud presentation):

- 170 million teachers and students worldwide use Google Workspace for Education
- 150 million teachers and students use Google Classroom
- €230 million donated by Google to global education
- AI will become the norm, part of every lesson
- Education institutions will need a cloud partner they can trust (like Google Cloud)

Can Micro-Credentials Compete with Traditional Degrees?

This session was initially envisaged as a debate between Mark Brown (Professor of Digital Learning and Director of the National Institute for Digital Learning, [Dublin City University](#)) and Jo Angouri (Academic Director for Education and Internationalisation, [University of Warwick](#)) on the 'pro-degrees team' and Anant Agarwal (founder of edX and now Chief Open Education Officer at [2U](#)) and Jüergen Siebel (Executive Director, [CEDEFOP](#) – the European Centre for the Development of Vocational Education and Training) on the 'pro-microcredentials/non-degree team'. Unsurprisingly it didn't turn out that way with all speakers, to some extent or another, recognising the merits in both traditional full degrees and shorter forms of learning.

- Mark Brown did a major review of microcredentials for the European Commission ([link](#)) which was used in the development of the new European Commission framework for microcredentials endorsed earlier this month. He is sceptical of the claims about the demand for microcredentials, with only 15 per cent of US employers looking for them in their hiring processes. He argued strongly that the role of government is very important in setting the benchmarks for quality in microcredentials.

- Anant Agarwal highlighted one of the drivers of short courses was the cost to the learner. He gave the example of the MIT MicroMasters which was established six years ago and comprised 25% of the content of a full Masters at MIT. The course was free to start and if the student progressed well they were then charged $1,000 for the course. Graduates reported 89% had gained a promotion or a new job in the first three months after completing the MicroMasters. His view is that modular, stackable courses are the future.
- Jo Angouri argued there was no competition between research intensive universities like Warwick and microcredential providers as they offer different learner pathways. She subsequently noted though that postgraduate learning and upskilling will increasingly focus on shorter, alternative credentials.
- Jüergen Siebel argued there was no need for competition between full qualifications and shorter courses if qualifications comprise stackable units or components. He argued that the current landscape is a challenge for education regulators as they can only react to the changes which are happening in the market (such as the nature and pace of change). He went on to cite research showing the size of the current skills gap across the EU – with 46 percent of adults needing upskilling and that "we are miles away" from achieving that level of additional retraining at the moment. He also discussed a recent CEDEFOP study on microcredentials ([link](#)).

The importance of upskilling the workforce

- The [Bank of England](#) is taking a new approach to hiring to try and ensure its FinTech and data science teams attract a more diverse workforce. Melvin Lopez-Corleone indicated their approach has succeeded with more than 70 per cent of recent applicants to these teams being women. They also used data analytic tools to determine the location of visitors to their website's hiring pages to learn that most visitors were based in London and the South East of England (where the Bank traditionally recruits from). In addition to visits to universities across the UK, they then followed up with universities outside the South East and encouraged them to encourage their students to consider applying, which was also successful.
- The UK bears an annual cost of £1.5B ([link](#)) due to the lack of sufficient graduates with STEM skills.
- The Bank of England and all government agencies face an added challenge when trying to recruit STEM graduates, because they can't match the salaries being paid by leading technology firms.
- [Bror Saxberg](#) (Learning Forge, and formerly Chief Learning Officer at Kaplan) cited a range of data about the pace at which jobs are changing and the consequent need for upskilling and reskilling. He pointed out that the rate of digital transformation in the workplace and the tight labour market being experienced in many countries, are likely to lead to employers to choose not to replace workers when they need new skills but rather to invest more in upskilling and reskilling. (A useful Australian piece of analysis on a similar topic is a report ([link](#)) commissioned by Google from AlphaBeta.)

The rise of remote work and remote corporate learning – is it here to stay?

- Malaysian energy company [PETRONAS](#) made a major shift to remote work and remote learning during the pandemic and this has seen remote learning much more widely accepted – but interest in in-person delivery has swung back to some extent, with Asrif Yusoff stating that hybrid learning comprising on-line and face-to-face learning is now here to stay.
- With [Kahoot!](#)'s focus on games and quizzes, some think of them as a K-12 EdTech focussed company but with 1 billion users their biggest revenue stream is now B2B activity. In Eilert

Hanoa's experience senior managers want some online corporate training to continue, in part for the same reasons that corporate travel budgets have been reduced (as some meetings have switched to online), but the other driver of the increased use of online training is that it allows greater flexibility to schedule the training when it's needed and it can be done in a timely, asynchronous manner.

- Mario Barosevic, Emerge Education, noted that COVID triggered a lower rate of EdTech take-up in corporate training than he had initially expected and reasoned that this was because so many workplace training companies are very small, niche providers. During COVID they switched to Zoom (or equivalent) and maintained their existing employer relationships, so they did not have the need for, or the scale to make, a big investment in EdTech. Yusoff agreed with this observation and noted that this contributed to declining course satisfaction ratings in some offerings.
- Fadl Al Tarzi (Nexford University – an online university offering degrees and professional certificates) discussed the "oversupply" of corporate training options available to employers and the problem this creates (for employers and workplace training providers). Employers need to be able to measure the quality of both EdTech and face-to-face workplace training alternatives and suggested a stronger focus on pre-hiring training was part of the solution (pre-hiring training is pre-requisite training for job applicants typically in larger organisations often IT. The training is often delivered in partnership with training providers at the job applicant's cost).

A new era of talent?

- Professional apprenticeship services provider, Multiverse, not only helps employers find talented entry level workers for professional apprenticeship roles, they then also provide ongoing upskilling and support to the apprentice over the course of their career and to employers for their ongoing upskilling and reskilling needs. All of Multiverse's services are underpinned by data and in his presentation, Rich Davies, emphasised the importance of their data insights team as well as their use of Tableau to give users access to their data. (Last month Multiverse completed their Series D fundraising round, raising more than US $220m for a valuation of US $1.7B.)
- LearnIn launched during COVID and helps companies build a "talent academy" driven by the development and rollout of specific training plans for groups of employees over a 12-week period to help learners develop skills over time. Their corporate partners include leading tech companies (eg Apple, Google, IBM, LinkedIn etc) and they work with more than 50 education providers to develop tailored training offerings. They provide a compelling rationale for why 'traditional' forms of corporate training aren't making a significant difference to employee skill acquisition and raised US $13 million in their Series A round. The company was founded by David Blake who previously founded the upskilling platform Degreed.

Finally one of the highlights for me of all EdTech conferences is learning more about different companies and their EdTech offerings. This event proved no exception:

Start-up Award Finalists

- abwaab – Jordanian high school focussed online learning platform which allows students to learn at their own pace, test themselves and access expert tutors. Learning is offered via video, visualised learning, continuous assessment, and backed by performance analytics.
- eKidz.eu – German language learning app for K-12 which is also focussed on helping children learn to read. Previous winner of the UNICEF EdTech Award.

- Lifeed – Italian program helping companies and their employees going through digital transformation by focussing on improving communication, organisational and innovation soft skills. The program includes micro-learning modules, interactive and multimedia, reflective exercises and soft skills, as well as connecting participants to a broader community.
- OED (not the Oxford English Dictionary) but ObjectiveEd – US company focussed on 'reinforcement' learning for school students with disabilities helping improve student mastery and educational progress.
- Virtual internships – UK company offering guaranteed virtual internships in "innovative companies" in more than 70 companies.

The winner of this category was OED.

Scale-up Award Finalists
- BibliU – UK 'Learning Enablement' platform which provides universities and colleges the tools to automate learning content workflows and improve student outcomes. BibliU also provides digital textbooks, monographs, and courseware.
- GoStudent – Austrian online one-on-one tutoring platform supporting learners in K-12 and higher education.
- Kahoot! – Norwegian games-based and trivia quiz learning platform originally focussed on K-12 and now providing learning to corporates and learners at post-school institutions. Has recently signed a partnership with the World Health Organisation to bring health content to more than a billion students worldwide.
- Labster – Danish virtual laboratory simulator used in high schools and universities. They claim that students who learn in Labster's virtual labs increase their final course grades by more than 16 per cent.
- Outschool – US based online 'marketplace' of courses for school students to study in small online classes to supplement what they learn at school.

The winner of this category was GoStudent.

ESG & Impact Award
- EvidenceB – French company which designs adaptative learning resources for K-12 based on the latest research on cognitive science and AI to improve knowledge acquisition and stimulate students' intrinsic motivation.
- PAGS – Belgium based company which creates teaching resources tailored to individual needs, especially for learners with a disability. Designed and researched by specialists in Special Needs Education.
- Sanoma – a Finnish media company now also focussed on learning including through the recent acquisition of Pearson's K-12 business in Italy. The company's focus is on digital and online learning resources.
- Smowl tech – Spanish online exam proctoring software which does not need to be installed and hence complies with GDPR requirements.
- Zenius – Indonesian tutoring company originally offline, then online tutoring and now a learning platform offering learning materials for K-12 students in Indonesia.

The winner of this category was EvidenceB.