## How should higher education and tech companies address the 'skills gap'?

Technology platforms and interfaces have become such a fundamental part of our personal and professional lives over the past two years that it should come as no surprise that there has been a significant rise in career opportunities in technology. In fact, there was a 36% increase in roles in technology and digital advertised between June and August 2020, with software developers, web designers and data analysts the most sought-after roles. Speaking at the Reimagine Education session on Learning and Thriving In the New Normal, panelists explore the reasons for this skills gap and what can be done to develop the capabilities which employers are looking for.

"We don't really have a talent gap in the world," says Anthony Salcito, Vice President of Worldwide Education at Microsoft, "It's really a talent opportunity or a talent alignment challenge and we've got to work hard to make sure that universities are providing relevant experiences with industry insight to help guide students on a pathway so that they can maximise their capabilities as they enter the workforce, but also to understand their motivations for how they can apply their talents and interests."

There is clear recognition among tech companies of the value of recruiting talented graduates, yet this skills challenge, which significantly pre-dates the pandemic, remains as technology continues to disrupt and evolve. As Rebecca Allyn, Education to Workforce Lead at Amazon Web Services (AWS) explains, technology is "driving innovation across all industries" and "the use case for tech is really as varied as the industries using it".

She says: "I talk to companies every day who are customers of Amazon and AWS who are having to pass on lucrative projects because they can't find the people to staff them," she says, adding: "We see a critical part of our mandate as needing to work with education to build this community of skilled folks who can enable innovation."

For Rebecca, higher education has not been able to "move at the speed of business when it comes to responding to the skills and competences that tech companies" want. She continues: "I think the focus has remained very diligently on the two year and four year degrees and less so on the skills and tech required for those hands-on, real world experiences that prepare students and learners" for graduate employment.

The rise of micro-credentials has long been on the risk list as a disruptor to the traditional degree, which has been the backbone of higher education since its inception. The desire for purpose and flexibility among Generation Z makes the ability to select specific, bite-sized courses an attractive option.

Rebecca adds: "If you think about just artificial intelligence and machine learning as an example of the level of specialisation that is required, there are not many higher eds which have the capacity to really respond in the way that creates that alignment [between education and technology] and that's when incremental credentialling becomes so incredibly important. From an employer view, it can accelerate people into careers more quickly, it can help match the demand for talent, it can serve as a way to signal and communicate the alignment between skills and jobs. It can also improve inclusivity as it is an approach which is more accessible for people who can't take the time off to do a full degree. It also fits with how people actually learn, which isn't necessarily always in a very linear, straightthrough way."



For Sarah Toms, Executive Director of Wharton Interactive at The Wharton School, specialising too early in technological skills carries different risks. She feels that channelling learners into specific career paths when they're young can be a "mistake" and will not contribute to the tech sector's needs in the long-term.

She says: "When an 18-year-old is graduating from high school, they don't know yet what is available to them. That is the wonderful thing about a four-year degree that is working well, it should begin with an undecided major that enables them to explore and see what the possibilities are out there. Secondly, innovation comes from a diversity of background and skills and if we're allowing our learners to get funnelled into one set of very specific skills too quickly that's actually not going to help with the overall meta of growth of innovation in our economy."

