Guest editorial: Technology infused education, preparing graduates for a digital employment market

This special issue represents a continuation of a recurring theme in the *Education + Training* journal series – the relationship between technology, learning and transformative education. Since the last dedicated collection of themed articles, there has been increasing commentary on the role of technology on learning and the development of graduate employability skills as education providers transition themselves toward new and innovative platforms to develop digital skills. This discussion laid the foundation for the latest special issue, which aims to provide insight into stakeholder perspectives and good international practices to enhance digital literacy and the work readiness of graduates, identifying the current debates around the role of technology in informing human capital formation to meet the future needs of the digital economy. Using research from academics and practitioners from different country contexts, this collection of articles individually and collectively enables a better understanding of the impact, practices and challenges facing stakeholders and the relationship between technology-infused education and graduate work readiness (GWR).

Preparing graduates for an ever-changing employment market that increasingly relies on technology has received the attention of practitioners, policymakers and academics, particularly recently with the advent of new technologies. The onset of the pandemic precipitated, in many cases, radical changes to the delivery, assessment and facilitation platforms of learning. The learning experience transitioned itself over this period from being exclusively online to a physical engagement with several permutations in between. Phrases such as open distance learning (ODL), hybrid and blended learning, asynchronous learning and massive open online courses (MOOCs) have become embedded in pedological discussions and, in some cases, used interchangeably to mean the same thing or to differentiate between approaches to learning depending upon the context. The pandemic has also hastened transformational change in the workplace, requiring employees to upskill and adjust to where they work, how they work and increasingly to question why they work, which has led to the well-documented discussion around the “great attrition”. It is within this context that the potential for the graduate skills gap to be exacerbated has increased, with the reliance on technology in education, society and the workplace challenging academic thinking to fundamentally rethink graduate employability to ensure a young person’s skill set is aligned with and emotionally and practically attuned to the labor market.

As education and training providers wrestle with the transformational challenges associated with bridging the “real-world” gap, a series of interesting themes for discussion emerge around technology-infused education and the sum of its collective parts. The broad inter-related literature that centers around the graduate skills gap and GWR, the changing needs of the learner and social-emotional learning (SEL), vocational education and the impact of technology on an increasingly digitally enabled workforce underline the importance of continued research into GWR. Currently, themes explore and examine the motivation behind the increased use of technology in the education sector, its measurable impact on skills development and characteristics associated with technology in today’s educational and business contexts. As recent research suggests, there is an academic need for further research in these areas and to understand, through comparative research, the differences and lessons
to be learned to ensure success and to overcome common and, in some cases, unique challenges to technology-infused education in preparing graduates for a digital employment market.

This special issue attempts to bridge the identified research gap in technology-infused education and learning, addressing debate focused on the preparation of learners for an increasingly volatile and digitally led employment market from an international perspective. The themes to emerge from the selected articles will enable a better understanding of the role of technology in GWR, allowing comparison between stakeholder perspectives and contributing to sustainability development goals, SDG 4 (Quality Education); SDG 8 (Decent Work and Economic Growth) and SDG 9 (Industry, Innovation and Infrastructure). Collectively, the articles uncover best practices to assist education providers in successfully engaging with technology and provide insight into a range of alternative platforms that can facilitate learning and employability. The collection of articles consolidates the existing literature related to soft-skills development, vocational education and the broader theme of GWR. The articles also take research forward through first examining stakeholder perspectives of technology and its role from a cybergogy paradigm perspective in terms of assessments and preparing graduates for their future careers. Second, the articles individually and collectively provide insight into the human capital of the future, illustrating how identified stakeholders perceive technology as a platform to future-proof learners and ease their transition toward the next cycle of employment and employability.

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