Introduction: Education 4.0: Applied Degree Education and the Future of Work

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As countries have evolved from agricultural to industrial to knowledge-based and service-based new economies, the nature of work has increasingly been disrupted by technological advancement and transformation. In particular, Industry 4.0, which refers to the creation of intelligent networks that connect automation and artificial intelligence (AI), the internet of things (IoT) and big data as an autonomous value chain, is increasingly impacting the world of work and our everyday lives (Ustundag & Cevikan, 2018).

As a consequence, questions regarding these forces of change and the impact of Industry 4.0 on the future of work (Sergi, Popkova, Bogoviz, & Litvinova, 2019) have given rise to *hot topics*, such as the need for a redefinition of the nature of work, changes to workforce re/skilling requirements and the reshaping of workplaces. Concomitantly, an increasing number of publications, conferences and social media posts debate the changing dimensions of work relative to the new economy. Recent publications from key global players, such as *Technology, Jobs and the Future of Work* (McKinsey, 2019) and the *Future of Work* (Insights, 2018), expose the often-conflicting attitudes and approaches in addressing these disruptive forces. The reports evidence a growing gap between action and inertia as industry and employers determine how to heed (or not), the disruptions manifest in the new environment.

In tandem with these dimensional changes, the demands on the higher education sector in the wake of the new economy and shifting modes of operation are also being felt. Commentators herald the 'death of universities' and white papers on the future of higher education have recently proliferated, for example, *The future of higher education: Will higher education seize the future or fall victim to it*? (Mrig & Sanaghan,

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2018). The traditional model of 'bricks and mortar' university education and curricula replete with lectures and examinations is increasingly being displaced by new models that are inherently more responsive to anywhere, anytime, any device digital learning. Engagement in digital transformation and innovation agendas to meet the needs of new generation students, communities and workplaces (however these might be defined) is apparent. Future focused institutions are pro-actively engaged in shifting gears and mindsets to shape the future of education for this new world of work.

Technology and innovation are the triggers to transform higher education to ensure more fit-for-purpose outcomes in preparing students for the world of work and lifelong learning. Moreover, as this chapter iterates, it is in the applied degree sector that is likely to prove most responsive in providing the leadership and new paradigm opportunities for students and industries in this regard.

Applied Degree Education

In a digitally enhanced workspace, there is a demand for graduates with strong digital competencies and applied skills in tandem with soft skills. As a consequence, the *applied degree and* similarly the *professional degree,* with its balance of theoretical focus and career-orientated, practical work-integrated learning, are credential outcomes increasingly being sought after by employers who welcome the opportunity to recruit job-ready graduates with advanced skill sets into their workplaces. It is worthwhile to note that the qualifications of the applied degree approach can be variously titled. In some countries, an applied degree is the one that is titled as such, for example, in Australia, the Bachelor of Applied Information Technology and the Bachelor of Applied Cloud Technology, or the Bachelor of Applied Science common in the Universities of Applied Science in Europe. However, professional degree qualifications, those degrees that prepare graduates to enter professions such as medicine, dentistry, engineering, law or teaching, that also commonly utilize the applied learning and teaching approaches of the self-titled applied degrees, are titled with reference to their disciplinary fields of study, for example, Bachelor of Medicine, Bachelor of Dentistry, Bachelor of Civil Engineering and the like.

Pre-service education, even in the traditional professions, such as medicine and nursing (Meleis, 2016) in the health services sector, are undergoing curricula and pedagogical change in the wake of technological disruption and automation. Harvard University Medical School, for example, commenced the roll-out of a new curriculum in 2015 (Fu, 2015), to more actively engage students in their learning. In contrast to the traditional transmission teaching and rote learning approaches used to train previous generations, the redesigned curriculum integrates content across multiple topics and disciplines and includes flipped learning as a teaching approach. Clinical rotation is also placed earlier to enable students a more immediate 'real-world' applied experience to medical training. More recently, a Medical Education Conference (2019) hosted by the Hong Kong Academy of Medicine took as its theme:

'Curriculum Reform', citing that practice reform considerations are necessary due to the intensifying pressures on health care systems in countries to address global challenges, such as ageing populations, health care reforms and modes of service delivery.

Education 4.0

Education 4.0 (e.g., Frerich et al., 2017; Gleason, 2018; Raman & Rathakrishnan, 2019) refers to the shifts in the education sector in response to Industry 4.0 where digital transformation is impacting the ways in which the world of work and our everyday lives are becoming increasingly automated. Industry 4.0 and the adoption of automation and digitization including new technologies such as artificial intelligence and big data require new workforce competencies and capabilities.

Moreover, Education 4.0 and the future of work relies much less on *what* you know (in conceptual and theoretical terms) and much more on *how* you can demonstrate not only the synthesis and application of knowledge and skills, but also inter-operably, the integration of this synthesis in relation to the relevant new technologies in the field. It is this focus on advanced skills application and the imperative to up-skill and re-skill, to unlearn and relearn, that is driving a new educational paradigm. This focus on 'real-world' integration echoes the insights from the 2019 World Economic Forum on the *Future of Work*. Experts at Davos, including the CEO of IBM, Ginni Rometty, who calls for the development of a new career and education model, which she deems, '*new collar, not blue collar or white collar*' and the one that requires investment in skills development and responsivity in real time to the changing skills landscape. It is this 'new collar' that more than ever before heralds the relevance and significance of the applied degree to the new economy.

Blurring of Boundaries and Convergence

Indeed, as the enhanced focus on technological advancement and greater impetus to provide graduate employment outcomes has occurred, the convergence and consequent blurring of boundaries between the traditional academic and vocational sectors has become increasingly evident. The traditional bifurcation of vocational and higher education in many countries is giving way to the building of more permeable and complementary tertiary systems. Reform agendas in the vocational and higher education space, with the aim of clarifying and strengthening outcomes for students, employers and the economy at large are being driven in several countries.

In April 2019, the United Kingdom announced the establishment of 12 new institutes of technology backed by 170 million pounds of government funding. These new institutes will be unique collaborations between, universities, further education colleges and leading employers such as Nissan, Siemens and Microsoft. The

new institutes will deliver higher level technical training education to help close the skills gaps in key STEM areas. The People's Republic of China has also released a vocational education reform implementation plan (The State Council, 2019) that aims to improve national systems, policies and standards in vocational colleges and universities offering applied degrees to better prepare its workforce for a more market-orientated economy.

New Generation Education Models

Institutions that provide professional and/or applied degrees with strong industry orientation and connectedness are increasingly looking to reframe their business models, to adapt and adopt new ways of teaching and learning to ensure currency and responsivity to the needs of the new economy. SMART campus environments that include authentic on and off campus enterprises as well as simulated learning spaces, blended and project-based learning, technology-enhanced learning and the integration of artificial intelligence, data analytics and process automation are increasingly incorporated into curriculum redesigns *for* and *with* their industries and professions.

As the *Educause Horizon Report: 2019 Higher Education* edition (Alexander et al., 2019) identifies, there are significant challenges and opportunities in technology adoption for higher education. Digital fluency across faculty members is gradually improving; however, the demand for more expansive digital learning experiences continues to increase. The focus on ubiquitous learning anytime, anywhere across various devices and the use of analytics technologies to support learning are important developments with a time-to-adoption horizon of one-year or less. Forthcoming in the next few years will be the greater use of mixed reality and artificial intelligence (AI) across higher education, followed by the greater adoption of block chain and virtual assistants. Given these changes, there is a significant need to rethink the practice of teaching. Other emergent areas of focus for higher education include: modularized and disaggregated degrees, advancing cultures of innovation and a growing focus on data-centred approaches to learning measured across multiple platforms.

New Generation Learning Space Design

Similarly, with the advent of new generation educational technologies and new generation learning spaces, the ways in which learning and teaching occurs are in transition. New generation learning management systems provide opportunities for a greater integration of on-line digital learning objects and blended approaches to learning and teaching delivery. New generation learning spaces provide the flexibility to better enable social constructivist, project and problem-based learning activities that are a feature of applied degree education.

In the school sector, new generation learning space design has referenced the work of Thornberg (2013) and Bosch (2018) who each identify the need to provide physical learning spaces and related pedagogies that enable various opportunities for learning engagement. These include 'mountain top' spaces conducive to one-way modes of delivery, such as in lectures and plenary addresses; quiet 'cave' spaces for individual learning; 'campfire' spaces, which promote sharing by 'elders' and group dialogue; and 'waterhole' spaces for informal networking, peer-to-peer learning and social cohesion. As new learning and teaching spaces are created, the higher education sector is also witnessing trends in learning space design towards more flexible open-space environments more suited to the needs of new generation learning and teaching. The traditional library, for example, when reimagined as a learning commons, provides a more transparent and open spatial configuration. One that invites student collaboration and communication and that provides access to an ever-increasing scope and scale of virtual library resources. Learning commons environments might also provide maker space facilities, inclusive of larger co-creation workspaces and equipment such as 3D printers, audio–visual media, and AR/VR/MR technologies, in addition to the more traditional photocopying and print-based resources. Work and learning spaces in new generation campuses include single pod learning stations as well as small and larger group spaces for meetings and socially networked learning.

Preparing Generation Z for the Workforce

Technology is not the only driver propelling those of us in the applied degree space to rethink our ways of working. The mindset of the new generation entering the workforce is also changing. A recent story in Reuters (Kim, 2019) serves to highlight this shift. The news article, entitled *'South Korea's burned out millennials choose YouTube over Samsung',* describes how a young South Korean man, earning 65 million Won, triple South Korea's average entry level wage, chose to leave a secure job and related benefits as a researcher at Samsung Electronics (the most desired workplace in South Korea for graduates as of 2019) to start his own YouTube channel.

The Class of 2018 and beyond, more accurately, the post-millennials dubbed Generation Z—defined as those born between 1995 and 2010—look to engage with the world of work in different ways. Generation Z values socially conscious and purpose-driven workplaces and displays greater entrepreneurial leanings and an openness to less traditional work arrangements, including the Gig economy. A recent article in the *China Daily* reports on the results of survey conducted with c. 280,000 students across 100 colleges in China, which found that over 60% of Chinese college students were interested in starting their own business. Just over 70% of students saw entrepreneurship as a better way to achieve self-improvement and self-worth. And 97% of students surveyed said they would benefit from education on starting a business. Generation Z is poised to become the most entrepreneurial generation ever.

Employability Competencies

As we engage in this transformation, the new innovation pedagogies (e.g., Konst & Kairisto-Mertanen, 2018) informing student success are being more explicitly developed to include the all-important employability competencies (initiative, team orientation, problem-solving, reflectiveness, critical thinking, adaptability, resilience, and the like) required by industry and employers. In an era where content is everywhere, companies are implementing new recruitment strategies beyond the usual requirements for CV and interview, to incorporate tasks involving problem-solving in teams that test the applicant's competencies in these soft skills. As we engage in transforming our ways of working to meet Education 4.0, how are we also integrating the necessary C21st competencies and entrepreneurial leanings of Generation Z into our programmes?

Learning How to Learn for Life-Long Learning

The challenges of providing courses for Generation Z and for those already in the workforce who require re-training and up-skilling provides a significant opportunity for the applied education sector in tandem with industry and professions. However, this requires a shift in thinking. Not just local and/or regional, but global perspectives, *must* be afforded if the applied education sector is to remain relevant and sustainable into the future. Just as the boundaries between HE and VET are blurring, so too are the geographic boundaries that once-upon-a-time kept institutions merely local. Individuals and teams travel the world as fly-in fly-out educators and international marketers. Universities and institutes have campuses in several, if not many parts of the globe. Education is about value creation. Education in the twenty-first century is a global industry with global impact.

Work-Integrated Learning and Degree Apprenticeship

Work-integrated learning experiences enable applied degree students to apply and develop their professional practices in a real-world context. Work-integrated learning and close connections to our industries and professions is an esssential feature of applied degree education. The opportunity to engage in real-work environments, both locally, regionally and internationally, enables students to gain a very real sense of socio-cultural expectations, as they learn through work based learning what their future field of work activity in reality is like. Such valuable learning experiences are integral to all applied degree programmes, as variously described per industry

and profession. These include teaching practicums, professional internships, work-integrated learning, work placements and clinical rotations. Such practical engagements contribute in large part to the successful employment outcomes enjoyed by the graduates of applied degree programmes.

The recent advent of new generation degree apprenticeships has also highlighted a greater focus on applied degrees and on mutually beneficial work/study alignments, to benefit both the employee/student and the employer in terms of up-skilling and workplace talent development. In the UK, Australia and here in Hong Kong, degree apprenticeship programmes are gaining interest and traction from industry bodies and employers alike. Whereas 'apprenticeship' schemes in the past have referred mainly to trades qualifications at diploma/higher diploma levels, new generation degree apprenticeships reflect opportunities to 'earn and learn' across a broad spectrum of professional domains. While a degree apprenticeship requires determination and perseverance on behalf of the student/employee and some resource and time investment for the employer in working with degree providers to embed work-based assessment and mentorship, on the whole, the cost benefit in the tripartite relationship has been found to be beneficial (Morley, 2018).

Applied Degree Innovation Ecosystem

The applied degree sector, given the traditional bifurcation between university and vocational paradigms, has not been particularly diligent in giving voice to either the educational and/or applied research outcomes in the work we do, or the value we offer. Given the greater convergence and intersection of university and vocational education, it is timely to consider coming together in more significant ways. We need to invest and commit to an applied degree education innovation ecosystem, which brings together the best in applied research, scholarly and professional practices. We need to learn from and with each other, in regards to how we respectively manage organizational transformation and cultural change, in order to shift, adapt, and leverage the new technologies and opportunities afforded by Industry 4.0 and globalization. Collaboration has been identified as a key factor in securing the future of the higher education sector. A recent KPMG (UK) report (2019), *Future Proofing the University* contends that 'Collaborations can be the platform by which universities can become more efficient and effective, better meet student and industry needs and build the platforms for investment in innovation (p. 18).'

As applied degree sector professionals, working in a globalized sector, how are we attempting to flexibly yet purposefully address ecosystem imperatives to adapt our applied degree curricula, our teaching, and our stakeholder engagements locally, regionally and globally to meet the new knowledge and skills currencies for the new world of work? How are we focusing on service design to enhance our stakeholder user experiences? In addressing the changing industry and market demands, collaboration, agility and fresh thinking is certainly required.

Perspectives from the Field

The following chapters in this book provide perspectives on ways in which applied degree practitioners are actively working and collaborating across borders and disciplines to address the challenges of educating the next generation of emergent professionals, in a world undergoing significant disruption, as previously described. The chapters are divided thematically into six parts and comprise 27 chapters.

Part I entitled, "*Rethinking the role of education and educators*" in addition to this chapter introduction, has three chapters that query the role of education and educators in this new generation learning environment. "Multidisciplinary Learning Environments Generating Innovation Competences—Some Examples from Turku University of Applied Sciences in Finland", discusses how students' innovation competencies can be developed in various multidisciplinary learning environments. Higher education institutions need to provide learning environments that enable students to develop the competencies needed in the current and future world. "Aiming to Support Students' Expertise in Higher Education: A Theoretical Case Study on Evaluation of Learning Environments with the Model of Domain Learning", discusses a proposed theoretical framework to develop a multidisciplinary learning environment and how to apply this expertise in the case of a Finnish university. "Application of Five Models of Academic Developer Practice to Develop Educators for Applied Learning", describes how a new university in Singapore is applying five models of academic developer practice, namely: grassroots, faculty-led, strategic, community building and research-based, to develop educators for applied learning. "Where do Students go: A Review of Educational Pathways for Students and Graduates in a four-year Degree Program in an Ontario College", reviews the educational pathways for students and graduates in a four-year degree program in an Ontario Canada college. This case study reviews a program offered in one college and examines the data from student enrolment as well as employment and educational data (key performance indicators) for graduates over the last five years.

Part II entitled, "*Applied and professional education*" includes another four chapters and collects studies in applied and professional education. "Design and Multidisciplinarity: Co-creation in Practice", reports on a joint project between a faculty-student team and an industrial partner. The multidisciplinary faculty and student team consisting of design, engineering and occupational therapy collaborated with an eldercare centre to redesign an arm skate meant for the rehabilitation of the upper limb. "A Discussion on Engaging Research in the Learning and Teaching of Vocational and Professional Education and Training in Hong Kong", utilizes comparative analysis to discuss the relevancy and applicability of the scholarship of teaching and learning and/or research-informed teaching on practices in learning and teaching in the vocational and professional education and training in Hong Kong. "For Some or for all: Vocational English for Hong Kong Secondary School Students", discusses vocational English in secondary education in Hong Kong and the government initiative in the provision of such a path in vocational education in secondary schools. Other initiatives, such as English for specific purposes, applied learning electives,

other learning experiences and a reference to Norway's vocational English curriculum, are compared and discussed. "The Role of the Learning Organization to Effect Successful Change: VTC A Case Study", utilizes a theoretical learning organization framework to report on a case study of how vocational education in Hong Kong has managed change to adapt to the keen competition in higher education. "Preparing Canadians for the Changing World of Work", looks at how Canada's colleges and institutions are innovating in education and training in response to significant new global trends, such as climate change, ageing population, reconciliation with indigenous peoples and advances in technology. The chapter provides a perspective on how Canada is equipping learners of all ages for the future. "Synergy for Success: How to Better Develop Vocational and Professional Education and Training in Hong Kong", discusses the implementation of vocational and professional education and training (VPET), previously vocational education and training (VET), in Hong Kong. It analyses the gap and possible constructive alignment with various initiatives, including the selection of applied learning (ApL) as electives, career-related experiences in other learning experiences (OLE), and the enrolment to the newly launched vocational English programme (VEP) at junior and senior secondary levels.

Part III entitled, "*Curriculum and the future of work*", reports on how curriculum reform is addressing the future needs of work. "The Global Partners European Alliance—Charting its Course", reports on a unique collaboration alliance across Europe and America that addresses distinctive, highly impactful opportunities to successfully assemble the proper resources and skills from amongst its members to provide long-term solutions for the improvements of overall learning environments, educational experiences and outcomes for the students, faculty and community partners and stakeholders. It shares the philosophy behind the collaboration, the gains and challenges of working together and practical examples of successful collective initiatives. "2 Universities, 2 Countries, 2 Approaches to Innovative Teaching", reports on two different approaches, from two universities: one in the United Kingdom and another in Germany, systematically utilizing two different teaching methods and alternative learning opportunities that align more closely to a global workplace. Both teaching methods increased participation of students internationally and increased student enrolment. "Changing the Mindset of Engineering Educators to Teach Design Studios", reports the work of a learning and teaching design team in the Faculty of Engineering and Information Technology at a university in Australia. The aim of the team is to change the mindset of engineering academics and specifically to orient and substantively engage, write and deliver a curriculum that produced more innovative design-abled students (MIDAS). The study reports on what has been done and how they are effective in transforming engineering education. "Students Take Over as Curriculum Co-designers and Facilitators: A Case Study from Engineering", discusses how student leadership is a critical curriculum move, aiming at developing innovations to transform the curriculum to better engage with students and respond to the demands of a rapidly changing future workforce. For example, they encourage students to co-design design studios to engage students in authentic and complex problems drawn from professional practice.

Part IV entitled, "*Innovative pedagogies and instructional design*", brings together four studies on pedagogical and enterprise innovation and instructional design. "The Impact of Competition-Based Learning on Enhancing Students' Motivation, Engagement and Professionalism: A Case Study of Fashion Design Undergraduates in Hong Kong", reports on a qualitative case study of a class of undergraduate fashion design students who voluntarily participated in an international competition. These students received coaching and collaborated with industry experts to produce physical prototypes of their designs. "The Relationship Between the Aesthetic Attributes of Sports Bras Design and the 3D Body Measurements of Generation Y Females in Hong Kong", reports on a study to explore the relationship between individual preferences for aesthetic attributes and the sales of a sport product of a fashion design programme. The scientific approach and findings of the project transfers the intangible preferences of aesthetic attributes, consumers' motives and needs of young customers into tangible and measurable data. "Students Perceived Change of Motivation and Experiences of Flipped Learning in Using Active Learning Strategies for Teaching and Learning", investigates and reports on the effective and positive motivation of students in using flipped learning and active learning strategies for learning. Evidence was collected from pre- and post-survey questionnaire focusing on the achievement of subject learning outcomes, student's motivation and perceived experience. "Connecting the Dots: Practice as Research (PaR) as an Innovative Creative Industries Pedagogy", focuses on the creative industries and practice as research. The study tries to develop new methodologies for art and design practice disciplines within a higher education context; and how to use multiple methods of art practice and writing to enhance understanding.

Part V entitled, "*Adaptive learning technologies*", includes three chapters in learning technologies investigation. "Rapid Experimentation as a Co-creation Tool for Gamified Augmented Reality in City Spaces—Case ARriver", reports on a rapid experimentation case carried out by using a combination of augmented reality (AR), game-based learning (GBL), bring your own device (BYOD) and mobile learning integrated into upper secondary school studies. Student innovated content for AR objects that game companies or the project learning environment lab of a Finnish university refined into digital form. The digitized objects were set on a smart city platform by a start-up in Finland. "The Use of Innovative Customer Relationship Management Technologies for Developing a Framework for Health Education of Ageing Population", reports on the use of innovative customer relationship management technologies on an ageing population and the development of an innovative framework for health education to improve health knowledge and learning attitude of elderly persons. "Can Clicker Technology and the Latest Online Response Systems Enhance Student Engagement? A Comparative Study of Two Approaches", reports on a practical approach to implementing improvements in the teaching of bilingual learners by reflecting on some of the challenges encountered whilst using technology to enhance student engagement and receive real-time feedback. An ethnographic research method is employed and a comparative framework is utilized to highlight the successful aspects of the technological interventions and obstacles hindering the educator in facilitating in-class engagement. "Real-World Simulation: Software

Development", aims to reduce the disjuncture between study and work environments. In the findings, student feedback shows that they better understood the cultural space in which software developers operate, the need to take responsibility and importance of delivering high-fidelity software on time.

Part VI entitled, "*Data analytics, assessment and feedback*", collects five chapters that report how big data and analytics are being applied within education as well as selected industries. "Research on Big Data and Fashion Industry", reviews the application of big data in the fashion industry from a fashion design discipline point to view, including the business models and information integration within the fashion industry, smart wardrobe system, personalized clothing network and the like. "Big Data, Cognitive Computing and the Future of Learning Management Systems", reports an analysis of how learning management systems should evolve in the future. The analysis shows that current learning management systems and their software architecture are mainly based on traditional multitier, relationship database-oriented architectures. The contention is that these will not be enough to withstand the impact on the new paradigm for modern learning environments. "Applying Big Data in Higher Education: A Case Study of Teacher-Focused Learning Analytics", discusses the value of teacher-generated analytics into learning design. It is argued that teacher-focused learning analytics can improve students' learning and guide them to more efficient results than the traditional education. The chapter addresses the notion that teachers are no longer only consumers of data analytics but are also producers in the analytics process. "Pedagogical Shifts: Learning Analytics of Mobile Learning Using Rain Classroom in Theatre Arts Classes", reports on a learning analytics of mobile learning the case study using Rain Classroom in theatre arts classes. Parties of participation in a class meeting need not conform to a binary set-up of instructor and learners but can extend to a triumvirate of instructor, learners and their mobile devices.

Conclusion

This book shares perspectives and insights across various disciplines and cultures as it relates to applied and professional education. The chapter authors revisit and provide empirical and/or evidence-based practice in various areas of contemporary educational focus. These include, applying innovative educational paradigms and pedagogies, implementing instructional and curriculum designs as well as tailoring learning platforms to align with the demands of Industry 4.0.

The chapters also exemplify and advocate for the new roles and values of applied degree education and for the strengthening of vocational and professional education and training in a technologically-driven society: One that demands a more future-oriented curriculum, comprising of innovative pedagogies and instructional design, and one that requires the use of adaptive learning technologies, big data and learning analytics, across different cultures. The traditional higher education model is being

increasingly challenged to meet the needs of a new generation of learning in fast-changing environments. Along with the rapid advancement in technologies, a more applied education coupled with an enhanced technological orientation is required.

While these chapters offer an overview on the current state of applied education from multiple perspectives, the dynamic environment within which we operate means that further studies are necessary. Work in the future could well focus on developing and validating the new generation Education 4.0 model through evaluation studies that examine its outcomes, including the sustainability of the alignment of Education 4.0 with Industry 4.0. Further studies might also undertake more consolidation work, such as, devising use-case blueprints or examining policy strategies in regard to how Education 4.0 is leading and changing the world of work or vice versa.

It is also important to note that while this book is rich in content, there are also topics worthy of attention that have not been included; for example, the scaffolding of K-12 STEM, STEAM or STREAM frameworks; personalized learning and recommender systems of adaptive learning technologies; digital transformation and the impact of internet of things (IOT); the integration of artificial intelligence (AI) and assistive technologies on student success; case studies on labour force re-skilling/up-skilling for the future of work and the impacts of dealing with automation in Industry 4.0. As such, the opportunities to continue our professional inquiry and conversations on such topics and in many other related areas pertaining to applied education, technology and innovation remain tantalisingly open.

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