

Beyond 2015: Higher Education Re-imagined

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YOU HAVE JUST knocked off from work and hopped into the MRT train for a 30-minute ride to your friendly community football match. Fortunately, you find a seat. Pulling out your mobile phone, you log on to your degree programme learning zone to catch up with some coursework, which you have been putting off due to heavy work commitment. This is the final module you are doing for your business analytics degree. With this and all the other credentialled courses you have taken at two other universities, you will be able to present your stack of courses for the award of your degree.

Thankfully, your assignment will not be due in two weeks. You finish some reading and research materials that you have downloaded from the university's online library. You now have a plan for your task at hand but need to clarify and test your understanding. You check an online forum and chat with your professor and some coursemates who happen to be online. You are happy that you can share their perspectives and get tips for your own coursework.

By the time you reach your stop, you have not only captured an outline and pointers for your assignment in your smart device but have also completed an online test that is required of your module. You vow to finish the first draft of your essay when you get home tonight. But first, there is the football match you have been training for and looking forward to.

Fast forward five years...

Armed with your degree and extensive experience in your technical field, you have advanced in your career and have made the bold leap to start your own business. You know winning your first big client is crucial in getting your business to a good start. You know you can offer your client a more personal and customised solution than your bigger competitors. To better prepare for your presentation, you have over the last few weeks taken online modules from a couple of universities to gain deeper insights into the data analytics business of your client. You have also been engaging online coursemates who are in the field, as well as several professors who have consulted with similar clients. You are confident that you will knock the ball out of the park with your pitch.

You know that building up your start-up is going to be a long journey, especially in the highly-competitive environment. However, you are confident that if you continue to learn and pick up deep, transferable skills, you will be able to take on the challenges ahead. Right now, you need to hone your business and management skills and put in place effective teams and processes to get your business to a strong start. To help you do that, you have recently signed up for an MBA programme, not just any MBA but one specially put together to meet your needs as a professional and an entrepreneur. With the help of SIM's expert system on assembling a customised MBA course, you have registered for different modules from various renowned universities around the world. Learning in the digital age is something so familiar to you and a breeze in spite of your busy lifestyle.

Now on your way to meet the client, you are feeling positive about yourself and the future of your business. You decide to free your mind from the presentation and to review your plan to raise \$5 million from crowdfunding. You touch your iWatch 8 and...

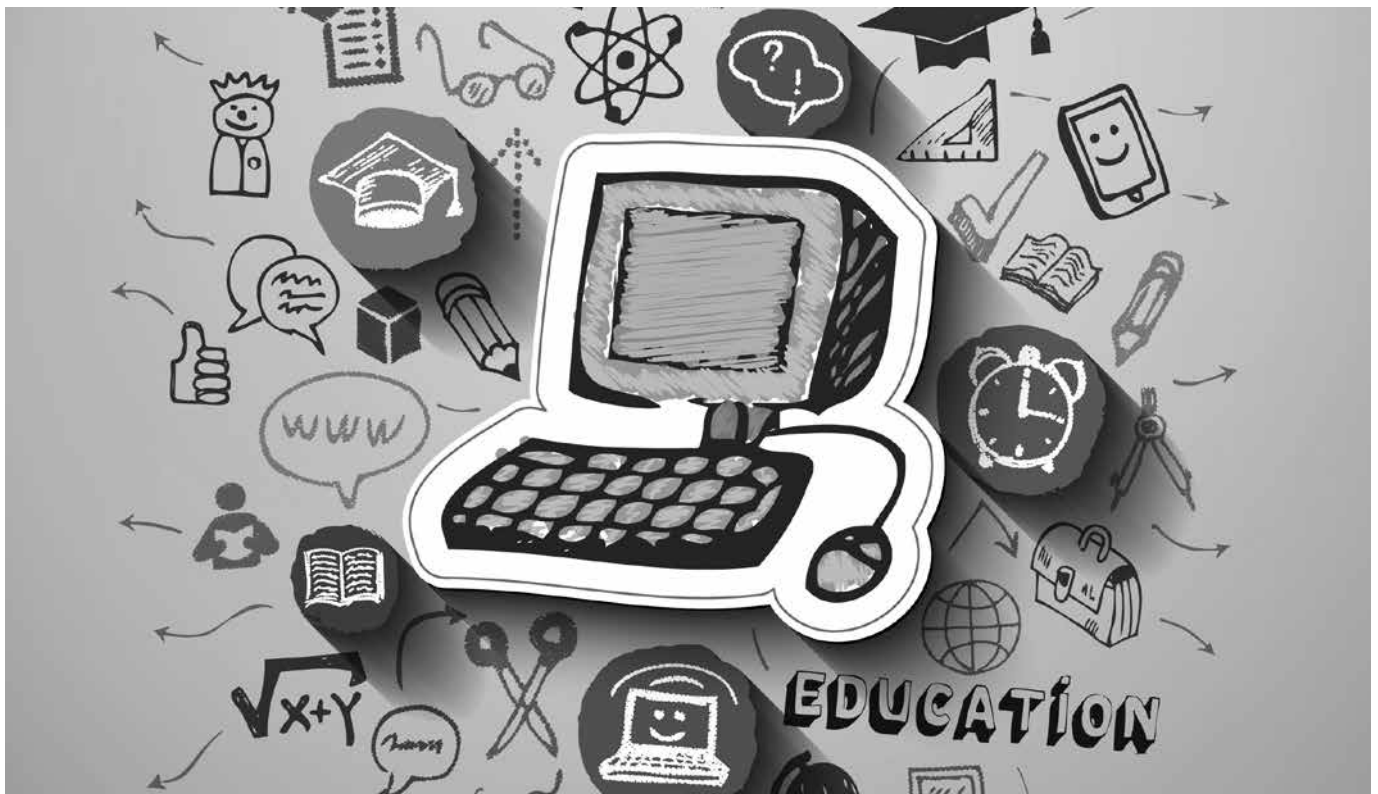
Education Utopia

This reads like utopia in lifelong learning? Probably not, if we fast forward 10 to 15 years from now.

In the last 20 years, advancements in digital technology have practically impacted every aspect of how we live, communicate and work, and dramatically changed our lives beyond our wildest imagination. Similarly, over the next 20 years or maybe much less, the way we learn and teach will also be radically transformed beyond what we know today.

The changes in the higher education sector will be reflective of how industries such as music, entertainment and news have been changed by technology. These changes are unstoppable and will continue to gain momentum in bringing about a paradigm shift that will liberalise higher education and revolutionise the way we understand and acquire knowledge. The fact that many well-known institutions such as Harvard, MIT and Stanford are already making some of their courses freely available online on Massive Online Open Courses (MOOCs) signifies a move in this direction.

Just as how digital technology has impacted the recording, production and marketing of music in a revolutionary way, so will it change the way knowledge is created and produced, and how it is packaged and delivered. Given how digital technology has stood many industries on their heads today, it is not difficult to imagine that higher education in the future will be a totally different kind of experience: it will not only be richer, more accessible and more personalised; it will also be in the full control of the individual, and hence more useful and meaningful to him at whatever life stage he is at.



Education For Anyone, Anytime, Anywhere

Today, the business of higher education lies in the hands of educational institutions with well-established campuses, structures and curricula that dictate how learning is to be experienced generally. Acquiring a degree is a coveted pursuit that opens doors to one's career, available to those who are assessed as deserving by traditional measurements of academic abilities. Historically, this has also meant a clear study-work divide: one finishes university over a fixed three to four-year period before embarking on a career. In future, this study-work divide will be increasingly blurred as further education is no longer confined to a fixed period in our youth but will take place as we work and learn throughout our lifetime.

Neither qualification from nor achievement in higher education will be based on grades alone but will be considered along with our experience, knowledge and skill set. Higher education will become accessible to everyone, not just the elite few. We will not need to go to a university to get a degree. We can acquire a higher education anytime, anywhere and at a pace that works for us. This will be made possible as educators and education providers collaborate and compete to provide an ever-growing offering of college courses that anyone anywhere in the world with an Internet connection can access. We will have great flexibility to work and study at the same time as there is no fixed duration of study. In fact, there is no end-point as learning will be lifelong.

Personal Responsibility And Control

What is more exciting is that we will be able to customise our own learning experience in more ways than one. Some education programmes today may be designed to allow some flexibility but there is almost no customisation to meet each learner's needs, given the rigid frameworks within which universities have to operate. Imagine the possibilities of being able to put together courses from a variety of universities and other providers, picking and choosing content that is most relevant and useful to us. We can pursue a full course or combine different courses, each requiring a different length of study to acquire the knowledge and skills needed, and earning different credit points, some of which can be built up towards a qualification or even a degree. Neither the courses nor the sequence in which we will take them will be constrained by the conventional definition of semesters.

We can also decide how we want to learn – online study, face-to-face classes or a hybrid of both. Although we will still have to read and do research, write papers, interact and exchange with professors and peers on what we have learned, what is different is how we do these will be designed entirely by us according to our needs and preferences. With technology, we will have at our disposal a variety of platforms to engage in rich and vibrant learning communities of professors and peers with a wide variety of backgrounds from around the world. With advances in telecommunications and video technology, virtual interaction will more closely approximate the actual experience in traditional study groups. Indeed, they will form a diverse learning environment in its true and full form.

Individualised And Real-time Learning Support

In the traditional classroom, a professor may understand a few students well, some students not so well and most students not at all. With advances in artificial intelligence and adaptive learning software, every student's abilities will be easily mapped, allowing lessons to be tailored to his needs. A digital record can be made of the learner's learning journey, his strengths and weaknesses diagnosed and his education customised accordingly.

Re-defining Qualifications And Degrees

With these changes, a concomitant shift will occur with the way credits and degrees are awarded and valued. An unbundling of degree credits will allow the learner to accumulate them along his learning journey. These credentials will be considered together with work and life experiences and will be acceptable to employers in evaluating knowledge and skill set.

There will be a need for a reliable system to ensure standards and integrity. And as a traditional degree becomes less important in getting a job or career advancement compared to experience, knowledge and skills, there will be a more level-playing field for many to prove their true worth. But this could be a double-edged sword – as almost everyone has access to higher education and a degree is no longer a big differentiator, the employee will have to stand out with extraordinary capabilities in other areas. Perhaps this will encourage the achievement of the real goal of education; instead of just being a paper chase, it can help individuals find their passion, talent and life's meaning.

Learning For A New Economy

Will all these changes enhance learning? They certainly will mean that education will be more student-centric and relevant. Learning will be customised with more timely intervention and help to ensure optimal learning outcomes. By putting control and ownership into the hands of the learner, he can take responsibility of his own learning as his experience, knowledge and skills change.

Will it drive up the costs of education? The costs may start high but as the number of learners increases, the cost to each individual learner could drop. With more providers, a healthy competitive environment can only be good for them.

Will this spell the demise of the traditional university or educational institution in Singapore? There is still an important role for these organisations to play not just in terms of research that generates new knowledge but also in educating and providing the physical campus experience that some may still value. But the role that these institutions will play will have to be responsive to the changes brought about by new ways of teaching and learning that are not confined by place, space and pace. Institutions will also have to embrace students of diverse backgrounds, not just those fresh out of high school but also those who hail from different life stages. For providers of higher education, business cannot be as usual and adjustments will be needed to ensure that they remain relevant in future.

On the whole, all these changes augur well for Singapore as it moves into a new phase of development. As a knowledge-based economy where hardware can be easily acquired and duplicated, it is the knowledge and skills of people that will ensure our competitiveness and survival. The ability to optimally capitalise on manpower is all the more critical in the present tight labour market. This is the motivation behind our government's SkillsFuture initiative, which aims to equip people with real-world job skills rather than paper qualifications.

About The Author



Dr Lee Kwok Cheong joined SIM Global Education (SIM GE) as CEO in 2005. Under his leadership, SIM GE has grown to become one of the largest private education institutions in Singapore, offering programmes from more than 10 leading universities from around the world, with 22,000 students currently enrolled and over 120,000 alumni.

Prior to joining SIM GE, Dr Lee was CEO of NCS Pte Ltd and Assistant Chief Executive at the National Computer Board. He sits on the boards of ITE Holdings, Inland Revenue Authority of Singapore and Nera Telecommunications. He is on the Steering Committee of the Infocomm Media Masterplan 2025 and chairs its Manpower Working Committee.

Dr Lee received Singapore's Public Service Medal in 2010 for his contribution to Nanyang Polytechnic and the Institute of Technical Education. He was conferred the IT Person of the Year Award in 2000, Honorary Fellow in 2008 and Hall of Fame Award in 2011 by the Singapore Computer Society. He graduated from Massachusetts Institute of Technology and University of California at Berkeley. In 2014, he was awarded an honorary Doctor of Business by RMIT University.