

JP Rossouw

Disruptive Forces Towards Innovation in Higher Education Institutions in 2022 and Beyond

Abstract

A new epoch for humankind has started in most, if not all sectors of life, including the education sector. The question that seeks to be answered is whether the new period that started with the commencement of the Covid-19 pandemic, often referred to as the “new normal”, is and will be characterised by less favourable education conditions or not. This paper explores a number of external disruptions, some associated with the pandemic, as possible catalysts towards an improved higher education system. Simultaneously, the function and necessity of internal disruption towards student mobility sustained innovation is considered. Despite the often-hostile nature of disruption, it can lead to much-needed or long-awaited innovation. The disruptive forces discussed are firstly alternative modes of delivery of university programmes, and secondly the mobility of foreign students. Thirdly, the value of microcredentialing as significant disruptive force for traditional universities necessitates a paradigm shift for policymakers. Within the context of a higher education institution, it can be predicted that all three of these possible innovations will be met with some level of resistance, despite the magnitude of the external force. These organisations will therefore need change drivers from within their ranks to create some kind of internal disruption towards the improvement of institution and the higher education sector as a whole.

Keywords: microcredentialing, hybrid mode of delivery, disruptive forces, higher education, innovation, resistance to change, student mobility

Introduction

A new epoch for humankind has started in most, if not all sectors of life. Everyone has to adapt to this new era triggered by the ongoing Covid-19 pandemic. One sector that had to adapt drastically is that of education: from primary school level to higher education. The question that seeks to be answered is whether the new period, often referred to as the “new normal”, is and will be characterised by less favourable education conditions or not. No one can refute the fact that the Covid-19 pandemic is utterly disruptive. Over a period of two years, it has unsettled millions of individuals, families and communities, not to mention countries and continents. This paper explores a number of external disruptions, some associated with the pandemic, as possible catalysts towards an improved higher education system. Simultaneously, the function and necessity of internal disruption towards sustained innovation is considered.

The value of disruption

In the 19th and 20th centuries higher education institutions had to develop to meet the needs of an emerging “national, analog, industrial economy” (Levine &

Van Pelt, 2021). These authors further contended that “today, higher education is again being transformed - this time to serve the needs of a global, digital, knowledge economy”. In both eras the revolution of HE was necessitated by changing societal needs. Christensen (2009), the late Harvard business scholar, pointed out that:

US universities mired in an expensive and outdated delivery model, one that prevents huge swaths of our population from taking advantage of the knowledge and expertise harbored by our nation’s colleges and universities.

A decade later, Levine and Van Pelt (2021), referring to the predicted changes in HE, cited Christensen, who argued that the changes will be “of such magnitude that they will disrupt higher education as we know it, rendering traditional models obsolete and driving many colleges and universities to bankruptcy”.

Christensen (2009) formulated a number of key characteristics of disruptive innovations, best illustrated by a set of concentric rings. The innermost ring represents established principles, methodologies and structures. Saracco (2022), referring to higher education, called this inner ring the Humboldtian model, characterised by traditional approaches such as full-time residential attendance and relatively inflexible degree programmes, albeit freedom of choice for students. Christensen (2009) estimated that not even 25% of students enrolled in higher education a decade ago “fit the ‘traditional’ mold of full-time 18 – 22-year-old students. The vast majority has different aims and expectations for their education than that offered by the elites at the center and some of the established rings”. Developments away from such traditional model are represented by rings further away from the core, and are primarily practical, as opposed to the rigorously theoretical content of traditional degree courses. Referring to the concentric rings model, Christensen (2009) added that “those left in the center that are unwilling to change their business model” while they continue to increase “quality and costs and serving a smaller and smaller niche of the growing market”. This is one of the reasons behind his prediction that institutions that cling to a business model that did not adapt to the modern needs of students, might eventually face bankruptcy.

“Disruptions take root in a new ring either because they are better than nothing or they shift the basis of competition from quality to convenience and customization” (Christensen, 2009). Roquette (n/a) stated that “these disruptive forces are shaping HE and we need a growth mindset to see disruption as a source of innovation”.

Disruptive forces that influence higher education institutions can originate internally or externally, but despite the often-hostile nature of disruption, it can lead to much-needed or long-awaited innovation. Management structures in traditional universities will have to prepare themselves to make policy decisions with far-reaching implications on both the way they deliver their courses and programs, and the construction and composition of such programs. Due to new geopolitical trends, the entire higher education sector will experience significant further changes within the next couple of years, some based on changes necessitated by the Covid-19 pandemic.

External disruptions

The Covid-19 pandemic is one forceful external disruption that brought about or accelerated a number of significant changes. Some innovations, such as online

teaching, was already prevalent the beginning of the new millennium shortly after the Internet came into being. Christensen (2009), for instance, pointed out that online enrolments “have skyrocketed in the past decade and, importantly, credentials earned online have made tremendous gains in credibility and are accepted and respected by an ever-growing set of employers”. As will be discussed next, new initiatives and approaches act as disruptive forces that higher education institutions have to adapt to, if not the initiator themselves.

Alternative modes of delivery

The first and foremost challenge that the Covid-19 pandemic posed, was the matter of how to reach the students and how to proceed with the courses that they enrolled for. A large number of universities internationally already had online courses in place and was well equipped for online teaching by means of the necessary technology, in the form of both hardware and software. Yet, direct contact with the students in lecture rooms were still the order of the day in the beginning of 2020. The first year of the pandemic was characterised by emergency measures put into place, during which it was left to lecturers to find innovative ways to offer the courses.

The interaction between lecturers and students became more structured in 2021. When it dawned that the Covid-19 pandemic will not subside as rapidly as was expected, more guidance was offered to lecturers on teaching and learning processes. Some lecturers demonstrated well-developed technological capacity, but those with limited experience, skills and inclinations in this regard experienced serious challenges. It soon also became clear a certain portion of students did not have the level of access to computers and the internet to cope with the demands of their studies. Those who managed access through mobile phones, had limited data, and plans had to be devised by universities to assist them. As can be expected, tuition at higher education institutions in first world countries were much less affected (Li & Lalani, 2020), but even in these countries students from lower socio-economic communities experienced similar challenges.

When the new academic year started in January 2022 in South Africa, all primary and secondary schools, as well as the university campuses could open again. The difficult policy decisions currently revolve around students and teachers not being vaccinated to be allowed or refused access to hostels, classrooms and sports facilities. As internationally, strategies to ensure students and staff stay safe from COVID-19 are being considered, which includes testing, social distancing, and de-densification (Kim, 2020). In South Africa thousands of individuals, including staff members and students, regard it as an infringement on their human rights to be vaccinated, or the run the risk of being excluded from certain activities and premises in the absence of a vaccination certificate.

The mode of delivery that has developed internationally – that of a blended program or a hybrid model – is a combination of online tuition and contact sessions, with a varying percentage of each. Referring to the disruptive force associated with the inevitable increase in online teaching, Roquette (n/a) called for “the improvement of the online experience to provide more student engagement included in blended programs that combine online with face-to-face”.

Student (im-)mobility as disruptive force

Considering higher education globally, major changes are currently being experienced in the context of the mobility of foreign students between countries, or rather the lack of mobility due to closed borders, quarantine restrictions and vaccination requirements. Roquette (n/a) referred to a “re-balancing of trans-national education”. She points out that those countries that traditionally offer their courses in English, up to now imported students from predominantly Asian countries (China, India, Malaysia, South Korea, Singapore and Hong Kong). Higher education institutions in countries such as the USA, UK, Australia and Canada depend to a great extent on fees paid by international students to flourish (or survive) financially. Referring to the Australian context in April 2020, Hurley (2020) predicted that:

... the next big hit will come mid-year when \$2 billion in annual tuition fees is wiped from the sector as international students are unable to travel to Australia to start their courses for the second semester.

Early in 2021, Hurley (2021) reported the following, confirming his prediction in the previous year: “In October 2019 almost 51,000 new and returning international students arrived in Australia. In October 2020, this figure had fallen by 99.7% — to just 130”.

Turning to the UK, Saracco (2022) asked the question how higher education in Britain should respond to the disruptions caused by new geopolitical dynamics, as mentioned by Roquette (n/a) and confirmed by Hurley (2020) and Hurley (2021). Saracco (2022) asserted that 45% of all students studying abroad in the world hails from countries in the Indo-Pacific region, which is without doubt the main source of international students. One of the solutions she offered is

to intensify transnational education (TNE), enabling foreign students to obtain a degree from British universities without leaving their country. This formula has several advantages as countries do not need to develop universities from scratch and can draw on recognised expertise and existing resources. (Saracco, 2022)

Roquette (n/a), however, warned higher education institutions that offering online courses from countries such as the UK is not the total solution towards attracting international students: “Their traditional student-source countries become competitors. These ‘new importers’ will take advantage of very high regional HE demands, their own booming economies, increasing English-language-based provision and lower fees”.

Microcredentialing

In the context of the Christiansen concentric rings model, microcredentialing (Ascione, 2021), has become a significant disruptive force for traditional universities that should ideally lead to innovative restructuring practices, if leadership in such universities find a way to make such a paradigm shift. The notion of microcredentialing is also referred to as micro certification (Saracco, 2022). Ascione (2021), discussing current trends in the development of higher education institutions, defined microcredentialing as follows: “Microcredentials demonstrate knowledge and competencies, are attainable in shorter periods of time, and tend to be more narrowly-focused”. In the context of the ways in which higher education should

react to new geopolitical dynamics, Saracco (2022) promoted a proactive policy on micro-certifications, individual training accounts and apprenticeships.

Levine and Van Pelt (2021) predicted one new reality higher education institutions will have to cope with: a decrease in institutional control and an increase in the power of higher education consumers. Alternative qualification processes and structures will have to be put in place, which will most probably cause tension between adhering to the strict regulations of qualification authorities, and market-driven new requirements according to which university degree is not necessarily what is required (El-Azar, 2022). Roquette (n/a) referred to big companies like IBM, Google and Amazon who do not necessarily require university degrees of new employees: “I see algorithm mentors that will guide learners on their next choice of a course, a module or project/experience. More clarity will also emerge on the skills and competences that people carry with them as virtual badges”.

In their exposition of realities that higher education institutions should prepare for, Levine and Van Pelt (2021) described a postsecondary sector that is found over and above traditional colleges and universities:

It consists of a hodgepodge of diverse and independent for-profit and non-profit initiatives, organizations, and programs and services beyond mainstream higher education that have abandoned key elements of traditional higher education practice. They are rejecting time- and place-based education, creating low-cost degrees, adopting competency- or outcome-based education, emphasizing digital technologies, focusing on the growing populations underrepresented in traditional higher education, and offering pioneering subject matters and certifications. (Levine & Van Pelt, 2021)

In the context of the prevailing knowledge economy, Levine and Van Pelt (2021) pointed at the fact that such institutions are rapidly increasing and expanding: “They provide cheaper, faster, more accessible and/or more convenient alternatives to traditional institutions”. This should be seen as stern warning to traditional colleges and universities to seriously consider alternative ways of structuring their programs. Once such programs, for example four-year degree courses, have become unattractive because of its inflexibility, enrolments will decline. Those institutions that meet the requirements of the market – both the students as consumers and the labour market for which students have to be prepared – will thrive.

Christiansen (2009) admitted that the quality of education and the prestige of the resulting qualifications attained through these lower-cost courses may be questioned by those that stand by traditional universities as well as qualification authorities. However, he maintains that these qualifications are, “in the eyes of both consumers and employers, frequently good enough”. This phenomenon can probably be explained by the fact that most of these qualifications are tailor-made for a specific purpose in a specific industry.

Microcredentialing has several distinct characteristics. In the first place it is individualised education that is competency-based. “Employers increasingly recognize that course credits and degrees have been weak proxies for developed capabilities” (Vander Ark, 2021). In addition, students can proceed through the course at their own time. In the context of microcredentialing, some customs that are historically embedded in the traditional university set-up, such as semester or annual courses – the strict adherence to uniform time constraints – should be abolished in favour of a much more flexible approach.

Internal disruptions

Consistent with the well-established principles of the management of change, for organisations to grow and adapt to new circumstances, organisations need change drivers. Change drivers can be external factors, but when these drivers come from their own ranks, they are members of the organisations who are convinced that certain changes need to be implemented. Sometimes such change agents are in managerial positions, but in many cases they come from the lower ranks of the organisation.

Change drivers rely on formulating reasons for the necessity of change, in order to persuade the rest of the organisation to start implementing such change. In a survey involving 3 199 executives from industries and regions around the world and conducted by the McKinsey Quarterly in 2008 (cited by Dentinger & Derlyn, 2009) the two main reasons for change identified by the respondents are to be more efficient and competitive.

In higher education, the external disruptions identified were alternative modes of delivery, student mobility, and microcredentialing. Within the context of a higher education institution, it can be predicted that all three of these possible innovations will be met with some level of resistance, despite the magnitude of the external force. These organisations will therefore need change drivers to create some kind of internal disruption to enact the necessary changes towards higher competitiveness and increased effectiveness. Once the severity of external disruptions subsides to a certain extent, it cannot be taken for granted that the changes will be established to such an extent that they will be maintained. Universities were forced into alternative modes of delivery which have distinct advantages but may be discarded once they are not essential anymore. Some members of the organisation may argue that the university should return to exclusively the contact mode of delivery that marked the pre-Covid era and abolish any kind of hybrid model. When student mobility returns to the “previous normal”, the measures put into place in higher education institutions as coping strategies may be discarded. Movements towards microcredentialing may be terminated shortly after implementation, irrespective of the fact that they bring about significant advantages due to their flexibility and the fact that they ensure highly effective workplace related qualifications.

Conclusion

In this paper it was argued that disruptions from either external or internal sources can play a positive role in the innovation of higher education. Mintz (2021) appealed to those involved in higher education institutions not to try to go back to the “old normal”. He pointed at the fact that the “pre-pandemic reality was beset by challenges and inequalities, which the pandemic exposed and intensified”. He added that many students need something different than what was offered, and that the existing business model of meaning higher education institutions was precarious.

Enthusiastic and motivated change agents inside higher education institutions will have to initiate internal disruptions for the benefit of the organisation. Emergency measures, developed under the pressure of external disruptions, will have to be entrenched in formal policies to ensure sustainability. In the words of Mintz (2021):

Rather than viewing the pandemic wholly negatively, we'd do better to consider it a hard-earned learning experience that has opened our eyes, challenged us and driven us to make long-overdue reforms. We'd be remiss if we failed to learn the pandemic's lessons.

Saracco (2022) concurred with Mintz: “Even if universities continue their central mission of transmitting knowledge, they will have to diversify the range of training they offer in partnership with large companies”.

It is imperative that higher education authorities, in their policy-making processes during the new era that has just started, should use every opportunity to innovate, even if this means that the current business model has to be adapted or abolished. Only such an approach will ensure a positive contribution from higher education to the knowledge economy of a country.

References

- Ascione, L. (2021): 6 critical trends for the future of higher education. <https://www.ecampusnews.com/2021/12/21/6-critical-trends-for-the-future-of-higher-education/> (Accessed 13 February 2022).
- Christensen, C. (2009): How to Manage the Disruption of Higher Education. <http://forum.mit.edu/articles/how-to-manage-the-disruption-of-higher-education/> (Accessed 13 February 2022).
- Dentinger, S. & Derlyn, E. (2009): *Drivers and Implementation of Change: An attempt to depict successful factors*. <http://www.diva-portal.org/smash/get/diva2:222331/fulltext02.pdf> (Accessed 15 February 2022).
- El-Azar, D. (2022): 4 trends that will shape the future of higher education. <https://www.weforum.org/agenda/2022/02/four-trends-that-will-shape-the-future-of-higher-education/> (Accessed 13 February 2022).
- Hurley, P. (2020): Australian universities could lose \$19 billion in the next 3 years. Our economy will suffer with them. <https://theconversation.com/australian-universities-could-lose-19-billion-in-the-next-3-years-our-economy-will-suffer-with-them-136251> (Accessed 15 February 2022).
- Hurley, P. (2021): 2021 is the year Australia's international student crisis really bites. <https://theconversation.com/2021-is-the-year-australias-international-student-crisis-really-bites-153180#> (Accessed 15 February 2022).
- Kim, J. (2020): Arguments for and Against Bringing Students Back to Campus. <https://www.insidehighered.com/blogs/learning-innovation/arguments-and-against-bringing-students-back-campus> (Accessed 13 February 2022).
- Levine, A. & Van Pelt, S. (2021): Higher education should prepare for five new realities (opinion). <https://www.insidehighered.com/views/2021/10/04/higher-education-should-prepare-five-new-realities-opinion> (Accessed 13 February 2022).
- Li, C. & Lalani, F. (2020): The COVID-19 pandemic has changed education forever. This is how. <https://www.weforum.org/agenda/2020/04/coronavirus-education-global-covid-19-online-digital-learning> (Accessed 14 February 2022).
- Mintz, S. (2021): Let's Not Return to the Old Normal. It's time to create a new normal. <https://www.insidehighered.com/blogs/higher-ed-gamma/let%E2%80%99s-not-return-old-normal> (Accessed 14 February 2022).
- Roquette, T. (n/a): The Disruptive Forces That Will Transform Higher Education. <https://www.fullfabric.com/articles/the-disruptive-forces-that-will-transform-higher-education> (Accessed 13 February 2022).

- Saracco, C. (2022): How should HE respond to the new geopolitical dynamics?
https://www.universityworldnews.com/page.php?page=UW_Main (Accessed 14 February 2022).
- Vander Ark, T. (2021): 5 Changes, 5 Shifts, and 5 Implications for What's Next in Education. <https://www.ascd.org/el/articles/5-changes-shifts-and-implications-for-whats-next-in-education> (Accessed 13 February 2022).

Prof. Dr. JP Rossouw, North-West University, South Africa