Artículo Original

"Reinventing" Higher Education – Rhetoric versus Reality in a Post-Pandemic World

"Reinventando" la educación superior: retórica versus realidad en un mundo pospandémico

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Abstract

The future of colleges and universities in the post-pandemic world is a matter of much speculation and debate. UNESCO has suggested a framework for the future which, while focused, does not fully reflect the realities faced by these institutions – declining public investment, declining public trust, challenges to integrity and free speech and growing commercialization of formerly creative and independent work. An alternative framework – that of the college or university as a permanently failing organization – is presented as a way of interpretation the current reality and this is contrasted with the UNESCO propositions.

Keywords: Futures of the university, permanently failing organizations, equity, academic freedom, inquiry, academic misconduct, gaming the system, sustainable development, collaboration, realism.

Resumen

El futuro de los colegios y universidades en el mundo posterior a la pandemia es un tema de mucha especulación y debate. La UNESCO ha sugerido un marco para el futuro que, si bien está enfocado, no refleja completamente las realidades que enfrentan estas instituciones: disminución de la inversión pública, disminución de la confianza pública, desafíos a la integridad y la libertad de expresión y creciente comercialización del trabajo anteriormente creativo e independiente. Un marco alternativo –el del colegio o universidad como organización en falla permanente– se presenta como una forma de interpretación de la realidad actual y se contrasta con las propuestas de la UNESCO.

Palabras clave: Futuros de la universidad, organizaciones que fallan permanentemente, equidad, libertad académica, investigación, mala conducta académica, jugar con el sistema, desarrollo sostenible, colaboración, realismo.

During May 2022 1,800 people from 130 countries participated in an UNESCO sponsored engagement aiming to look at the future of higher education in a post-pandemic world. With deep concerns about sustainable development and equity, the focus of this work has been on defining the principles that should shape decisions about the future of skills development, colleges, and universities (UNESCO, 2022).

The challenge is that the principles and ambitions do not reflect what is happening in reality – indeed, the actions on the ground suggest that the principles are helping to identify opposite actions, especially in post-modern and neo-liberal societies like the United States and the UK. These real versus ideal differences are the subject of this paper.

One tension is that between public education and private capital. In Canada, which will provide a basis for examples throughout this paper, higher education is increasingly a private enterprise which is highly regulated by public policies. In Ontario – Canada's largest province – the twenty-five public universities and twenty-four public colleges and some six hundred private career colleges are regulated by a variety of legislative instruments. The public

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institutions receive a declining share of their revenues from public sources, with 43% of institutional revenues coming from tuition. The provincial government, which has full regulatory authority over these institutions, funds just 26% of their operating costs – the lowest level of provincial funding in Canada and a level that has been steadily in decline for over a decadeⁱ. Ontario is not untypical of the situation across North America. While public statements declare the critical nature of education for economic and social development, the investment actions do not reflect this commitment. This kind of double-speak is not untypical in relation to other issues, as we shall see.

UNESCO's Six Principles for the Future of Higher Education

Seeking to make sense of the sustainable development goals, reality and the experience of the pandemic, UNESCO has suggested six principles that should guide the development of higher education to 2030 (UNESCO, 2022). These are:

- 1. Inclusion, Equity and Pluralism
- 2. Academic Freedom and Participation of All Stakeholders
- 3. Inquiry, Critical Thinking and Creativity
- 4. Integrity and Ethics
- 5. Commitment to Sustainability and Social Responsibility
- 6. Excellence through Cooperation Rather than Competition.

All of these are deeply problematic when the lens of reality is applied to them. While laudable, they fail to reflect the ideological, operational and fiscal challenges higher educational institutions face.

Inclusion, Equity and Pluralism

The desire for equity and inclusion is laudable. What is more, moves have been made to increase access to and success in higher education around the world and real progress has been made. Between 2000 and 2018, the global gross enrollment of 18-24-year-olds in higher education grew from 19% to 38% with some countries – Mongolia, Albania, Colombia, Saudi Arabia – massively increasing access and success ratesⁱⁱ.

Growth has also occurred in Sub Saharan Africa. Enrolment in higher education in this region grew by an astonishing 125% in this same period (2000-2018). While the growth in the number of available places has not kept pace with demand, it is enabling these countries to begin a shift from labour intensive agriculture and manufacturing to a more sustainable economy.

In aggregated terms, all regions except for Sub-Saharan Africa saw women either become the majority of their students or increase their share if they were already a majority in the period since 2000. Still, few countries have reached gender parity, most of them having one gender or the other being overrepresented.

Despite the overall positive picture of the average increase in enrolment levels worldwide, not all segments of society are equally able to benefit from higher education. There are still significant differences in access, particularly for low-income groups. The poorest population continues to lag behind, with 10% access to higher education in 2018 compared to 77% of the higher income sector in that same year. The upper-middle-income group benefited from the greatest increase: it more than tripled its enrolment rate, with an increase of 35%. Put simply: higher education is an engine of inequality.

Ethnic minorities and indigenous peoples in the Americas are also not well represented in the university sector. In Canada, the completion rate of indigenous students in programs at Canadian universities is 48% compared to 61% for their non-indigenous counterparts (Henry et al., 2017), perhaps reflecting the fact that less than 1.5% of professors are indigenous and that the wage-gap between indigenous professors and their non-indigenous counterparts is 15-20% depending on the discipline they teach (CAUT, 2018). What is worse, these figures have been consistent for many years.

Academic Freedom and Participation of All Stakeholders

In some countries, universities and their academics are under attack. The neo-nationalist government of Hungary is actively trying to close the Central European University. In Russia, Hong Kong and China dissenting academics feel under threat from repressive governments (Douglass, 2021). Following the attempted 2016 coup in Turkey, the government dismissed over 8,500 faculty and an additional 1,350 non-academic staff with over 533 of these being taken into custody. This same government also asked the German government to take similar action against German academics who signed a petition objecting to these actions, especially those who also held Turkish citizenship.

Worldwide, there are an increasing number of examples where the academic right to free speech is curtailed by political correctness and a concern with upsetting specific groups. Academics are threatened with suspension or dismissal when they speak their minds or cite evidence which suggests their views differ from the emerging orthodoxy about an issue – for example, the Free Speech Union (UK) is currently dealing with issues related to alleged anti-Muslim bias, (Bristol) promoting Christianity (Oxford), gender and gender identity (Abertay University, Scotland), free market economics (LSE) and humanism (Edinburgh).

Though some forms of speech are legally prohibited – for example, inciting violence or hate speech – others are protected in Canada under the Charter of Rights and Freedoms, though there are questions as the extent to which the Charter applies to universities (D'Orazio, 2020). Academics freedom is based on a principle of academic integrity – what they say needs to be based in their understanding of evidence and the epistemology of that evidence. A Professor cannot use a class intended to present world religions, for example, and dismiss all religions as nonsense except one. Equally, a scientist teaching about climate change may dissent from mainstream opinion if they can do so through an evidence-based analysis – something which both Professor Judith Curry (Georgia Tech, now retired) and Professor Roger Pielke JR (Boulder, Colorado) did successfully.

Some sixty universities in the UK have deployed a webspace called Report+Support developed by the UK firm *Culture Shift* which permits students to anonymously report micro-aggressions displayed by academics and others working within a university. A microaggression can include (according to this website):

- Changing body language when responding to those of a particular characteristic.
- Backhanded compliments.
- Avoiding or turning ones back on certain people.
- Being misgendered (especially after sharing one's pronouns)
- Referring to a woman as a "girl"

- reports posted on this space have led directly to suspensions, inquiries, and dismissals (Carr, 2021).

Concerns about the ability of established universities to support academic freedom has been growing for some time as their ability to maintain freedom for its academic is in decline (Reichmann, 2019; Morgan, 2009). Applebaum (2021) has recently called these developments "the new puritanism" and provides examples of the consequences of the fear and anxiety it has given rise to on campuses across the US and in other parts of the world.

Nowhere is this more evident than in the pursuit of an understanding of the changing climate. Academic intolerance of views other than the so-called consensus science view of manmade impact is rampant, as evidenced by a variety of events and analysis. Suggesting that cloud patterns, the actions of the sun or more complex factors need to be part of our understanding of complexities of climate (Curry & Wesbter, 2013; Hossenfelder, 2017) or that the warming models used to predict future global temperatures are problematic (Pielke & Ritchie, 2021) are often denied platforms or publication. Science, in this case, is not being pursued (at least in the sense that Popper (1959) outlined) but is being denied.

Many in the university assume that their right to academic freedom is protected in law. Except in so far as individual contracts of employment may protect certain aspects of these rights, labour tribunals in Canada have taken a variety of stances on the extent to which contracts protect certain actions. Their rulings on the right to express one's opinion about the institution and its administration *(intramural academic freedom)* and the right to free expression of opinion on matters of public interest (*extramural academic freedom*) are mixed. This may be because arbitrators are struggling to balance traditional employment law concepts, such as the principle of the duty of loyalty owed to an employer, with the unique features of the academic freedom includes the broad, but not absolute, right of professors to determine their own grades, to claim ownership over their course notes, and to decide the content of their university courses unless their contracts of employment explicitly indicate otherwise.

But this is not the case in the US. Ginsberg (2011) suggests that academic freedom only pertains to certain faculty and not all. Given that app. 70% of all teaching in US universities is undertaken by sessional staff who, given their hand-to-mouth contractual status, do not want to lose the opportunity for contract renewal, academic freedom should only be thought to apply to tenured staff. US courts have not always supported tenure staff in disputes over the use of their position to outline unpopular or controversial ideas or research, almost always siding with the administrators of the institution.

Nelsen (2017) suggests that the emerging tension between academic freedom and the power of management is at the heart of the challenges to academic freedom. Management want performance and productivity without the distraction of dissent either from students, faculty or others – a point reinforced by Fleming (2021). Given the reliance of the university on both student revenue and corporate support, any turbulence in the "atmosphere" is seen by management to have the potential of disrupting the brand, its market potential, and its revenues (Rhodes, 2017). Money – not integrity – guides action.

Some governments, such as the Quebec Government in Canadaⁱⁱⁱ, have introduced legislation giving governments the right to intervene to protect free speech – often a signal that they are likely to do exactly the opposite, often unintentionally (Lakier, 2021).

Inquiry, Critical Thinking and Creativity

Pressures to secure revenues from inventions and patents pressure researchers to see their work in commercial terms. Research in pure science, humanities, arts, philosophy, literature, or music is seen as less important (more accurately, less revenue-valuable) than work in artificial intelligence, robotics, biochemistry, or health. The privatization and commercialization of research has distorted the purpose of the university and, in doing so, constrains and sometimes inhibits inquiry and creativity.

As government investments in public education fall, universities need to find new sources of revenues. Research which leads to new revenue, new contracts for research or funding of academic appointments by private interests is actively sought after as a way of not only "building brand" but also securing revenues. These "enterprise" activities at universities like Warwick and University College London in England, Monash (Australia) or the Arizona State University have become role models for other institutions to aspire to. Yet their ability to replicate the success of these institutions is clearly problematic.

In a typical year, Canada universities will file approximately 850 patents – some 20% of all patents filed by Canadian entities - and 540 license. These numbers have been relatively flat over the last five years^{iv}. This is despite continued injection into Canada's universities of substantial research funds – app. \$2.8 billion from Federal government sources alone in 2019/20 (an increase of 4.5% over 2018/19)^v, though the portion of GDP spent on R&D from all sources has been in decline since 2002^{vi}. Disclosures are 2.42 per \$10 million in R&D spending, ahead of the performance in the US.

Return on these investments, however measured, seems meagre. Universities secured \$127 million from patents and licenses in 2020, but spent close to \$75 million in staffing and legal fees, netting just \$52 million from \$6.975 billion 2020 spending on R&D.

Another indicator used in the number of start-ups created. In 2020 Canadian universities created 104 start-ups and claimed 726 start-ups were still operating from previous years. Since 2015, Canadian universities have supported the creation of 642 start-ups or 0.15 start-ups per \$10 million in R&D spending, modestly ahead of their US counterparts.

When compared with other high performing nations, Canada underperforms in R&D. Canada ranks 11th of 16 peer countries on innovation rankings, according to the Conference Board of Canada^{vii}, let down by the lack of business R&D, poor labour productivity, a lack of venture capital and weak patenting performance (especially by the private sector). No amount of public investment will solve these problems and university-based research, patents and start-ups are not a substitute for entrepreneurial activity, private sector investment and robust firm performance.

Traditional research approaches, measured by publications in peer reviewed journals, has also become problematic. Academic publishing is big business – valued at \$25.2 billion in 2018 (Smith, 2018) - it is dominated by five publishing companies (Wiley-Blackwell, Elsevier, Springer Nature, Taylor & Francis, ACS) which between them control three quarters of all academic journals and academic databases in the world. These companies earn profits of 40% or higher on their journals and books (Puehringer, Rath and Griesebner, 2021). Despite a requirement from many research grant providers that all research associated with the grants they provide should be available through open access journals, profit continues to drive the academic publishing industry and profitability makes access to journals expensive.

Further, open access journals now charge academics fees for publishing their papers, making them less "open" and "accessible". Though deemed essential, they are becoming a costburden with one jurisdiction (Austria) spending app. one quarter of its university budget subsidising academic publishing through salaries, direct payments, and subscriptions as well as subsidies (Puehringer, Rath & Griesebner, 2021).

Over 2 million peer-reviewed articles are published annually. However, many are ignored even within scientific communities - 82 per cent of articles published in humanities are not even cited once. No one ever refers to 32 per cent of the peer-reviewed articles in the social sciences and 27 per cent in the natural sciences. If a paper is cited, this does not imply it has been read. According to one estimate, only 20 per cent of papers cited have been read. It is estimated that an average paper in a peer-reviewed journal is read completely by no more than

10 people. Hence, impacts of most peer-reviewed publications even within the scientific community are minuscule (Biswas & Kirchherr, 2015).

Since publications and citations are critical to academic employability, especially in tenure-track positions, academics have become victims of predatory publishers who, in exchange for fees, will publish academic papers in the journals they have created to meet demand for citations (Shrestha, 2021). These predatory publishers behave unethically, do not use effective peer review, and often misrepresent their advisory boards, reach and impact (Ward, 2016). Academics and publishers are now having to "game" the system so as to stay in the system.

One way of gaming the system is the practice of "CV padding" – seeking to increase the probability of employment or promotion through the addition of references and citations to a CV – something that is becoming more common. The Guinness Book of Records includes an entry for the most authors cited in a single paper – over 15,000 authors – each of whom will include the paper on their CV and also cite it. It is an example of gaming the system.

Some papers are just nonsense. Between 2008 and 2020 over 240 nonsensical papers generated automatically by a computer program (SCIGen) were published in a variety of journals, some of which were peer reviewed and behind paywalls. While most were in the fields of computer science, some were in other disciplines. Not all have been retracted or removed from the databases in which they are held (Cabanac and Labbé, 2021; Labbé and Labbé, 2013).

Underlying these concerns and issues is the importance of academic integrity, which relies heavily on self and peer monitoring. Major publishers have integrity managers tasked with ensuring the thoroughness of their selection and review processes and following up any concerns expressed about the integrity of their journals. Elsevier, in 2021, issued notes of concern related to over 400 papers published in their journals and later in the same year Springer Nature also issued concern notices for 400 papers. Both publishers reported that editors' emails and materials had been hacked, leading to papers being accepted which were problematic. No one editor or journal was targeted, but several^{viii}.

Integrity and Ethics

During the pandemic, concerns over the possibilities of academic misconduct – especially related to examinations and cheating – reached new heights. There were also concerns, especially in China, related to the emergence of "fake paper" factories (Else and Noorden, 2021) leading to the establishment of warning systems for scholars and journal editors. Academic integrity and ethics is not just about students: faculty cheat too (Tong, et.al, 2022).

A whole industry has emerged aimed at detecting cheating, whether in examinations or through plagiarism, with AI-enabled analytics, surveillance technologies and blockchain solutions being deployed to "catch" those breaching college and university rules. Plagiarism detection is now a \$900 million industry and is expected to grow to over \$2 billion by 2027^{ix}. The examination security sector is also a significant sector – currently valued at around \$350million but is expected to grow to \$1.1 billion by 2027^x. There are also a growing range of professional academic assignment writing services emerging, some charging over US\$1000 for a 5,000 word essay.

It is important, therefore, to focus on academic integrity and ethics for all in the academy and doing so will help restore trust in the work academicians and their students do. But there are some challenges to this work.

For students, the challenge is the poor design of assessment and the continued reliance in many institutions on examinations which are a form of high stakes. The higher the stakes, the more likely the risk of cheating. A move to more authentic assessment and competency based assessment could increase the relevance of assessment and reduce the risk of academic misconduct (Sotiriadou et al, 2020).

Commitment to Sustainability and Social Responsibility

Universities and colleges are responding in a number of ways to the challenges of sustainable development. Most obviously, through their research, teaching and learning activities – many of which are imbued with a focus on the future of communities, land and peoples. The other way is by taking direct action to reduce their own impact on the environment. There are collectives of post-secondary institutions focused on this challenge, such as the Association for the Advancement of Sustainability in Higher Education^{xi}, the Universities Climate Change Coalition^{xii}. There is also a league table capturing the extent to which universities are responding to the challenge of sustainability^{xiii}. The Commonwealth of Learning – an intergovernmental organization dedicated to distance and flexible leaning – is committed to "learning for sustainable development".

The issue of social responsibility is more complex for colleges and universities. In many countries, they are challenges to be open and accessible to many who are traditionally denied access to or success in higher education. Canada is a good example – indigenous peoples are under-represented both in the student body, in the graduating class and at the faculty table. The Truth and Reconciliation Commission, reporting in 2015, called for greater access to higher education for First Nations, Metis and Inuit students. While progress has been made, much more is yet to be achieved. Similar challenges exist around the world.

Excellence through Cooperation Rather than Competition

In 2021 three hundred and forty-two universities engaged in partnerships with online program management companies (OPMs) to further their institutional objectives^{xiv}. At the same time the number of collaborative programs – joint degrees, diplomas, or other credentials – has grown. Collaboration is becoming the "DNA" of higher education systems.

A particularly interesting development is the integration of MOOCs, such as those offered by Coursera, into degree programs. Coursera has partnered with the University of North Texas to offer a Bachelor of Applied Arts and Sciences with a significant component of the degree completed through MOOC courses. Similar developments have occurred with the edX where specific MicroMasters programs are accepted for credit in graduate programs at universities such as Columbia, Indiana, University of British Columbia, Boston, Queensland, Edinburgh and Delft. The emerging eco-systems for learning approach can significantly lower the cost of degree completion while increasing flexibility in degree programs.

A growing list of partnerships between higher educational institutions and industry is also part of the emerging scene. Whether we look at Siemens and their active engagement in the design, development, and promotion of programs in mechatronics^{xv} or IBM's partnerships with leading universities around the world to accelerate research and learning related to quantum computing^{xvi}, significant new alliances and partnerships are emerging which better prepare students for the emerging realities of work and society.

Linked to these developments are micro-partnerships at the program level, especially through the significant growth of work-integrated learning and micro-credentials (Ashcroft et.al, 2021). New developments here include the use of virtual co-operative learning using IBM Watson enabled simulations pioneered by Athabasca University^{xvii}.

Permanently Failing Organizations

The idea of the permanently failing institution was developed by Meyer and Zucker (1989). Their idea was simple: some organizations persist and prevail even though their performance is clearly in decline, sustained by stakeholders whose vested interest ensure that the organization continues. This idea was further refined by Rouleau, Gagnon and Cloutier (2008) who explored exactly how stakeholders act daily to sustain organizations which, across several indicators, are clearly failing but also suffer from inertia and a lack of courageous and transformative leadership. While some universities and colleges thrive, many can be classified as falling into the category of permanently failing, as evidenced by their failure to meet social, political, and economic expectations and by the decline in the acceptance of their role in active citizenship and in public discourse and the decline in trust.

The challenges universities and colleges face post-pandemic are significant. While finances and performance issues will determine many of their futures, the key challenge relates to purpose. As they continue the drift from being enlightened centres for research, scholarship, and the pursuit of truth to increasingly commercial entities seeking to have social impact, issues of organizational identity and strategic intention are becoming growingly contentious (Alexander & Manolchev, 2020).

Meyer and Zucker (1989) and Rouleau *et al* (2008) outlines these features of permanently failing organizations:

- There is a growing divergence between the interests of the "owners" governments and the public in the case of the university and the dependent owner-actors (administrators, academics, students) which leads to distrust and concerns about performance.
- While all agree that decline is undesirable, they cannot agree either on what success looks like or what should constitute performance.
- The result is that "low risk" stop-gap measures are taken to slow or reverse the decline when transformative and significant change is required owners and leaders take the line of least resistance.
- Inertia the inability to rise above low performance and a failure to meet expectations sets in and decline continues.
- No single group is to "blame" for the continued decline the eco-system of conflicted interests sustains the organization and its low performance.
- One challenge faced by the all in the ownership-actor eco-system is that there are competing understandings of both what the organization is and what performance should look like. Whenever owners seek to define purpose e.g., by focusing on the labour market outcomes or the role of the university in stimulating economic development their understanding of purpose is challenged by one or more stakeholder groups. Owners see themselves in a no-win situation.

UNESCO's suggestions for the future of higher education seem to begin from a starting point on building on success rather than recognizing the systemic challenges and problems of higher education. They also assume the presence of courageous and determined leadership, which few would suggest as a common feature of the leadership landscape of these institutions. There is a gap between the rhetoric of the UNESCO view and the reality for those "on the ground" at these institutions. It is time for a more direct, focused, and challenging discourse. In the words of the baseball legend Yogi Berra, "the future is not what it used to be".

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End Notes

^{iv} See https://www.ic.gc.ca/eic/site/cipointernet-internetopic.nsf/eng/h_wr04873.html#Section6

viii See summary of these cases at https://retractionwatch.com/2021/07/12/elsevier-says-integrity-and-rigor-of-peer-review-for-400-papers-fell-beneath-the-high-standards-expected/ and

also https://retractionwatch.com/2021/09/28/springer-nature-slaps-more-than-400-papers-with-expressions-of-concern-all-at-once/

ix See https://www.fortunebusinessinsights.com/anti-plagiarism-for-the-education-sector-market-104552

- xii See https://secondnature.org/initiative/uc3-coalition/
- xiii See https://www.savethestudent.org/extra-guides/university-sustainability-environment-league-table.html

xiv See https://www.holoniq.com/notes/100-universities-established-opm-bootcamp-pathways-partnership-q1-2022/

^{xv} See https://www.canadianmanufacturing.com/technology/siemens-launching-mechatronics-program-ont-colleges-145517/

ⁱ Source: Usher, A (2022) Ontario in a Nutshell. May 30th, 2022. Available at https://higheredstrategy.com/ontario-in-a-nutshell/

ⁱⁱ Source: https://www.iesalc.unesco.org/en/2020/12/23/understanding-access-to-higher-education-in-the-last-two-decades/

ⁱⁱⁱ See https://www.cbc.ca/news/canada/montreal/academic-freedom-bill-tabled-1.6410128

^v See https://www150.statcan.gc.ca/n1/daily-quotidien/210610/dq210610e-eng.htm

vi See https://tradingeconomics.com/canada/research-and-development-expenditure-percent-of-gdp-wb-data.html

vii See https://www.conferenceboard.ca/focus-areas/innovation-technology/innovation-report-card

^x See https://www.theinsightpartners.com/reports/online-exam-proctoring-market

xi See https://www.aashe.org/role-higher-ed-un-global-goals/

^{xvi} See https://newsroom.ibm.com/2019-04-25-Leading-universities-partner-with-IBM-to-accelerate-joint-research-and-drive-educational-opportunities-in-quantum-computing

^{xvii} See https://news.athabascau.ca/faculty-of-business/announcement-ai-powered-virtual-cooperative-learning-experience/