### Higher Education in 2050: Networked Learning for a Shared Destiny

#### Nagla Rizk

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#### *Introduction*

The COVID-19 pandemic has taught us a lesson in interconnectedness. Like no other time, humanity has learned the meaning of a shared destiny – in sickness and in health. The crisis made us realize that we are but nodes in a universal network where our livelihoods are interlocked with our habitat. This recognition should guide future paradigms of higher education. At the heart of this should be a holistic human-centric approach that promotes a clean, healthy and sustainable environment. With that in mind, the world must come together in a unified front to shape a future of learning that is networked, democratic and inclusive.

#### 2050: A Networked Architecture for Learning

The pandemic has pushed us, overnight, into scenarios anticipated for later in the future. Today the new normal has meant more online and increased connectedness. Now the world must come together to construct a global learning architecture that is open, inclusive and collaborative. By 2050, the university model as we know it will hardly exist. It will be but one of multiple venues for learning, existing alongside other sources of knowledge acquisition such as online social platforms, community interactive audio streaming and on demand courses offered independently by educators, practitioners and artists. These models have already emerged since the start of the pandemic and have attracted amateurs and followers from all over the globe.

By 2050, rather than a university per se, I would like to think of a "networked learning hub", with its core being universities working in collaborative partnerships with their peers, but also with other constituencies such as online communities, training centers, private businesses, incubators and/or civil society groups. Universities are at the core of the hubs, usually working in teams and not as single players. They will maintain representative satellite campuses, but the bulk of teaching, learning and research will take place digitally online.

In the "networked learning hubs", content is streamlined online and offered via multiple forms: voice, image, text and video, and is offered to recipients beyond own university "walls". This outreach will mean more experiential and hands-on learning as the teaching comes from unconventional "educators": university professors, businessmen and women, practitioners, environmentalists, technologists, farmers and civil rights advocates, among others. The flexibility entailed in online teaching and learning will engage other members of the community – e.g. women at home, residents of remote areas and workers needing reskilling, upskilling and cross skilling between disciplines.

The "networked learning hubs" will also be universal, extending beyond national boundaries to bridge geographic and developmental divides. Students and educators will come from all over the globe. Teaching and learning will be truly international. Education is interactive, participatory and

dynamic, and students learn from each other. This will help shape more balanced perspectives and correct any prior misconceptions, biases, and stereotypes.

"Networked learning hubs" utilize knowledge content from all over the globe. This restores the imbalance in knowledge content, as more learning materials come from the wealth of knowledge previously confined in remote parts of the globe, specifically the global south. Curricula will be universal, integrating perspectives from various parts of the globe, rather than following preconceived theories or prescribed models, typically developed in the global north.

"Networked learning hubs" push for the democratization of knowledge. They utilize open educational resources (OER), free online content, and ensure access to knowledge for all, fulfilling the promise of knowledge as a non-rival public good whose value increases with sharing. The opportunity arises here to capitalize on non-market incentives for knowledge producers, which is typical of academics. Content is democratized and learning is participatory. Learning materials are shared on social media platforms and phone apps and can be disseminated to less privileged communities via simple technologies like radio and television.

## Alternative Models for University Sustainability

There is little room for the sustainability of the traditional university model as the only venue for higher education as it exists today. Especially given the experience of online teaching and learning during and post the pandemic, it will be a challenge for universities to continue as a vessel for higher education in the future while maintaining a free knowledge commons.

This is part of a larger dilemma inherent in "businesses" dealing with the production of knowledge and creative output. The public good characteristics of knowledge triggers the tradeoff between access (ideally open and free), and incentives (not strong enough to produce a free commodity). This tension causes market failure, and there, the public good (knowledge in this case) stands the risk of under production. This features in scholarship on the Welfare Theory of Copyright. Novel business models and alternative flexible forms of intellectual property governance are called for to ease this tension and expand access to knowledge (Rizk and Shaver, 2010).

In that spirit, and while universities can continue their standard fundraising practices, below are some preliminary thoughts on alternative models for the sustainability of universities. These are in part inspired by copyright scholarship as well as attempts of the music and media industries to adapt to the continuous changes in digital markets. The options below are not mutually exclusive and universities can choose a mix of tools to ensure their sustainability given their respective contexts.

First, international organizations should come together to form a "Global Learning Fund". Global big businesses and governments of developed countries are obliged to contribute to the Fund a percentage of their profits and GDP, respectively. The Fund will be used to subsidize "networked learning hubs", with allocations to each hub in proportion to the number of registered "students". The model will be administered by an intermediary similar to music collecting societies where artists are compensated from music streaming sights in proportion to the frequency of their respective music downloads. Contributions to the fund can also include proceeds from levies imposed globally on the purchase of digital devices, since they are utilized for learning. This suggestion is inspired by the Cultural Theory of Copyright (Fisher, 2004).

Locally, "networked learning hubs" can seek funding from both governments and the private sector to develop multi stakeholder partnerships. For example, universities can collaborate with the government and private telecommunications companies to expand internet infrastructure for national connectivity, while training teachers in remote areas on online education tools. The civil society can be part of such partnership to ensure inclusion of women, for example, in such initiatives. This is especially relevant to remote areas in countries of the global south and can help address the problem of the digital divide and promote inclusion in poorer regions.

Second, "networked learning hubs" can function on the principle of a "freemium" model, where the basic "product" is freely provided, while add-on goods or services are charged a fee. At the hubs, online course content is free, but students have to pay to receive the actual teaching, acquire credit hours and earn the degree. The hubs can experiment with offering education via a "Netflixlike" model of subscription, with differential pricing by geographical region. Students from the global south are charged zero or minimal subscription fees. Fees can also be adjusted depending on financial situation of the student, following the financial aid system in place in universities. As well, fees can be collected from students who wish to frequent satellite campuses in person for face to face classes or activities.

Moreover, "networked learning hubs" can utilize their libraries as a service to ensure their sustainability. Libraries can levy fees for a range of services beyond being a depository of references. They can offer assistance in finding references, compilations, and in assisting faculty and students with research, editing and publishing.

## Relevant, Dynamic and Holistic Content

By 2050, higher educational content should be more global in nature. Disciplines will merge and silos will blend into seamless areas of interest. New areas of specialization will emerge as content moves to become more humane and aligned with the needs of the global citizen.

Educational content will be more relevant to society and responding to market needs. Not only with there be a marriage of disciplines and new fields, but I also expect the emergence of new types of degrees beyond the conventional ones. These degrees will be shorter in duration and will respond to the needs of the market, which itself will be global given the horizontal expansion of the global platform economy.

I would like to see more influence of the social sciences and humanities to curb the drive to (profit) maximization, and more emphasis on responsible business. I expect that there be new economic thinking, questioning neo liberal models and exploring collaborative production models, non-market incentives and commons-based production. With these comes the study of alternative intellectual property models and novel means of knowledge governance and innovation assessment. I would like to see more emphasis on the economics of failure, and what this means to recovery and future success.

I would like to see emphasis on green economics, green business and green technologies. I hope to see specializations merging to work towards sustainable solutions for a healthier planet. I would like to see focus on the co-existence of humans and nature, on this planet and beyond, exploring interconnectedness with the wider universe.

I would like to see a proactive focus on health economics, science and data; we should never have to witness another pandemic. The "networked learning hubs" should be the main drivers for data driven and other innovations in healthcare, aiming to serve communities all over the globe.

In light of the vast interconnectedness of the world, new technologies like AI, the Internet of Things (IOT), quantum computing, and natural language processing (NLP) take center stage as areas of study and as a means of driving the teaching and learning process. Ethical technologies and responsible Artificial Intelligence (AI) should be deployed as a means towards creating relevant, dynamic and evolving educational content and ensuring its delivery for all. Data science will be integrated in different disciplines, such as data for development and humanizing data. We should not lose sight of simple technologies. Encouraging the use of simple technologies, like radio, TV and simple applications on mobile, are essential to ensure inclusive education for all.

The pool of educational content will expand beyond traditional academic sources to include content from youth. Student publishing should be encouraged, and global student conferences should be the norm, whether virtual or face-to-face. The culture of publishing needs to evolve beyond the rigid closed academic publishing models. Open access journals need to thrive and should seek support from the Global Learning Fund.

# Enabling Technologies, Bridging Divides

Prerequisite to the "networked learning hubs" is strong Internet infrastructure and connectivity for all. This is a challenge given a persisting digital divide on both the global and national levels, with the latter cutting across gender, age, income and geographical location. The gap in access to digital technologies and the know-how to use, produce and shape them, further threatens to marginalize the ill-equipped and exacerbate the developmental divide.

Nevertheless, and perhaps paradoxically, these same digital technologies can be harnessed for purposes of empowerment, inclusion and mitigating inequalities. Using technologies in education is a perfect venue for bridging divides. "Networked learning hubs" have a great role to play in this regard. Utilizing technology for learning has the potential to bridge the very digital divide, but also the larger developmental divide, nationally and globally.

# A Final Word

The future of higher education is one that thrives on a paradigm of collaboration for the benefit of all. Higher education will contribute to better futures if the world learns its lesson and comes together to put education at the service of a humane global citizen who is interconnected to his/her humanity, peers, the environment and the universe. A realization of a common destiny should guide the development of learning networks that connect people and deploy responsible technologies to promote inclusion and bridge developmental divides.

# **Bibliography**

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