

Ensuring Inclusive and Quality Higher Education: the influence of age demographics and socio-economic and political contexts on higher education futures.

ABSTRACT

To ensure their relevance and sustainability into the 21st Century, higher education institutions must develop more nuanced understandings of their national and global contexts and the bearing and significances of these for higher education. This will better position them to respond appropriately and in good time, to the Sustainable Development Goal (SDG) 4 commitment to “Ensure inclusive and equitable quality education and provide life-long opportunities for all.”

Within this ambit, key to a more nuanced understanding of the role of higher education, is an appreciation of global population demographics and dynamics, particularly as they relate to age, and how these will inevitably shape and influence higher education policies, strategies, business models as they respond to SDG imperatives. These include education and training for active and productive participation in societies that will all be impacted upon to a greater or lesser degree by the 4th Industrial Revolution, and concomitantly, by nascent socio-economic and political forces that are directing societies into an uncertain future.

This paper takes the form of a Futures Study as it investigates a variety of demographical statistical data and socio-political and economic factors, possible future scenarios and trends that are likely to impact upon higher education. The ultimate intention of the study is to stimulate discussion and debates about higher education futures and to illuminate the roles of demographics and socio-economic and political forces as factors insofar as they impinge on the achievement of SDG 4.

Key words:

4th Industrial Revolution, age demographics, socio-economic and political forces, social justice, equity, quality, inclusiveness, futures.

1 INTRODUCTION

The UNESCO World Futures Studies Federation (WFSF) asserts the following regarding Futures Studies:

“The WFSF is dedicated to stimulating awareness of the urgent need for long-term thinking in government, policy, civil and educational institutions, to resolve complex local, national, regional and global problems. It encourages and promotes the development of futures studies as a trans-disciplinary academic and professional field in all parts of the world. It brings together academics, researchers, practitioners, students and futures-focused institutions from 60 countries. The objectives of WFSF are:

- to provide a forum where stimulation, exchange and examination of ideas, visions and plans for alternative, long-term futures can take place;
- to make further studies of the future as a field of intellectual and political activity concerning all sectors of psychological, social, economic, political and cultural life;
- to encourage innovative interdisciplinary analysis and critical thinking among all peoples;
- to promote a higher level of futures consciousness in general;
- to encourage democratization of future-oriented thinking and acting;
- to stimulate awareness of the urgent need for futures studies in governments and international organizations and other decision-making and educational groups and institutions to resolve problems at local, national, regional and global levels.”

Sadar, Z (2010) suggests that Futures Studies interrogates the possible, probable and preferable futures and the world views (including myths) that underpin them with the aim of understanding what is likely to continue and

what may plausibly change, while *Princeton Wordnet* simply defines Futurology as: “the study or prediction of future developments on the basis of existing conditions.

It is precisely the current global state of flux, of profound and fundamental reorganization, as well as the disparate and disorganized sources of data and research that abound in all spheres endeavor, which call for a broader, more thoughtful, integrated and nuanced contemplation of higher education futures in pursuit of inclusive and quality education, for all.

2. THE CHANGING HIGHER EDUCATION CONTEXT

Our world is in a period of profound transformation that is changing societies in fundamental ways and heralding a new world order. Key drivers of this transformation include:

- accelerated, exponential, accretive technological innovation undergirded by expanding digitization and (inter)connectivity, growing automation (including robotics), artificial intelligence and neuroscience advances, 3-D printing, rapid advances in the bio and medical sciences, virtualization, “smart” technologies and data science to name but a few (collectively dubbed the 4th Industrial Revolution (4IR));
- escalating concerns about the current sustainability of the planet and its appropriate stewardship for future generations and linked to that, issues of social justice inclusiveness and fairness;
- an increasingly complex, interdependent, borderless and hugely varied world; and seminally,
- a far broader array of (often influential) role players (or actors), stakeholders and participants who come with their own expectations and demands, who style themselves as activists in pursuit thereof and whose voices, causes and agendas are mobilized and boosted via social media and other forms of digital communication and engagement.

The collective impact of these forces on society and institutions of higher learning is calling into question the role of the university and the nature and purpose of education in the 21st Century, and impelling societies, leaders and management, staff (academic, professional and administrative) and students of all ages to unlearn, re-learn and learn anew if they are to be prepared for, and hopefully flourish. Those who are not prepared, resilient and agile enough to make the necessary changes are likely to be the architects of their own diminished status, redundancy or even, obsolescence.

Veldsman (2019) states: “Four examples illustrate institutions’ growing irrelevancy:

- It is estimated that by the third year of their undergraduate studies, half of each student’s knowledge, skills and expertise is already outdated;
- Recipient organisations of graduates claim that it takes graduates at least two to three years to start making a real contribution;
- *At present, 65% of all new knowledge is being generated outside of higher education institutions* [my emphasis];
- The number of corporate universities — in-house learning academies within these organisations — is predicted to soon exceed formal universities or may have already.” (2019: 3)

Universities today will therefore need a different kind of leadership that truly understand and are able to navigate confidently the nexus of academic and the administrative; the plethora of stakeholders and role players who will need (or want or demand) to be consulted and engaged; national and global trends and contexts; and the kind and quality of pedagogy that will ensure the competence and relevance of its graduates. Leaders will have to manage and lead quite radical transformation while ensuring the efficiency and effectiveness of the university through business models (and structures) that reflect a nuanced appreciation of the challenges to be overcome. However, even where an institution has the most inspiring vision and leaders and the best possible rationale for change and transformation, dealing with the resistance of academics to change (often rebutted as an assault on academic freedoms and institutional autonomy) can be a serious sticking point, and given their centrality to the core business of the university, a happy and productive academe must always be an institutional priority.

Changes in society, student expectations and advances in digital technology (including social media) are changing the way in which we teach and how students learn and motivating a re-evaluation of pedagogy and teaching methods. In this regard a number of trends have emerged that facilitate quality, relevant pedagogy in the 21st Century, including blended learning (an optimized mix of classroom and online teaching; collaborative

approaches to the construction of knowledge/building communities of practice, in which the professor is no longer responsible for delivering all of the knowledge or even providing all of the sources for learning, but maintains a critical role as guide, facilitator, and assessor of the learning; the use of multimedia and open educational resources; increased student control, choice, and independence in which the instructor moves away from selecting and transmitting information in large blocks or chunks, such as a one-hour lecture, to guiding students to find, analyze, evaluate, and apply information relevant to a particular subject domain; anywhere, anytime, any size learning; new forms of assessment including e-portfolios, learning analytics and peer assessment; and self-directed and non-formal online learning. (Contact North 2018). These trends emphasize the lesser prominence and centrality of the teacher as the focus and dispenser of learning, the increased involvement of students in their own learning, and a more innovative and considered use of technology in teaching, assessment courseware development and student support.

It should also be noted that the shape and format of these various methodologies and their ultimate success is largely contingent upon access to reliable, functional technological devices and internet access, which is proving to be a challenge even in developed nations, as economic conditions deteriorate and the gap between the “have” and the “have-nots” between and within societies, grows. (OECD 2015; Reuben 2015; Polity 2017; Sipre and Malik 2017).

Questions must also be asked regarding the purpose of education. Conversations around the rise of the robots and the future world of work (Ford 2015; Brynjolfsson & McAfee 2011; Rifkin 1995;) raise the question: ‘what is it that we are educating for?’ The World Economic Forum (2016) predicts [that] “On average, by 2020, more than a third of the desired core skill sets of most occupations will be comprised of skills that are not yet considered crucial to the job today, according to our respondents.” An avalanche of articles speak to a world of majority unemployment and redundancy and in the global North talks around a universal basic income are gaining ground.

Clearly the current societal dynamics and challenges require higher education solutions which are flexible, integrated and holistic and which should not only include transdisciplinarity and engagement with professional bodies, business and industry in the development of courseware and teaching practice, but also an openness to different modes of student support, assessment and credentialing to meet different societal requirements and student expectations. Furthermore, higher education institutions should be open to very fundamental restructuring (including administrative) to ensure the responsiveness and agility that is required to ensure ongoing relevance. This is particularly true in the current global context of massive socio-economic inequality and poverty gaps.

3. SOCIAL JUSTICE, EQUITY AND ACCESS

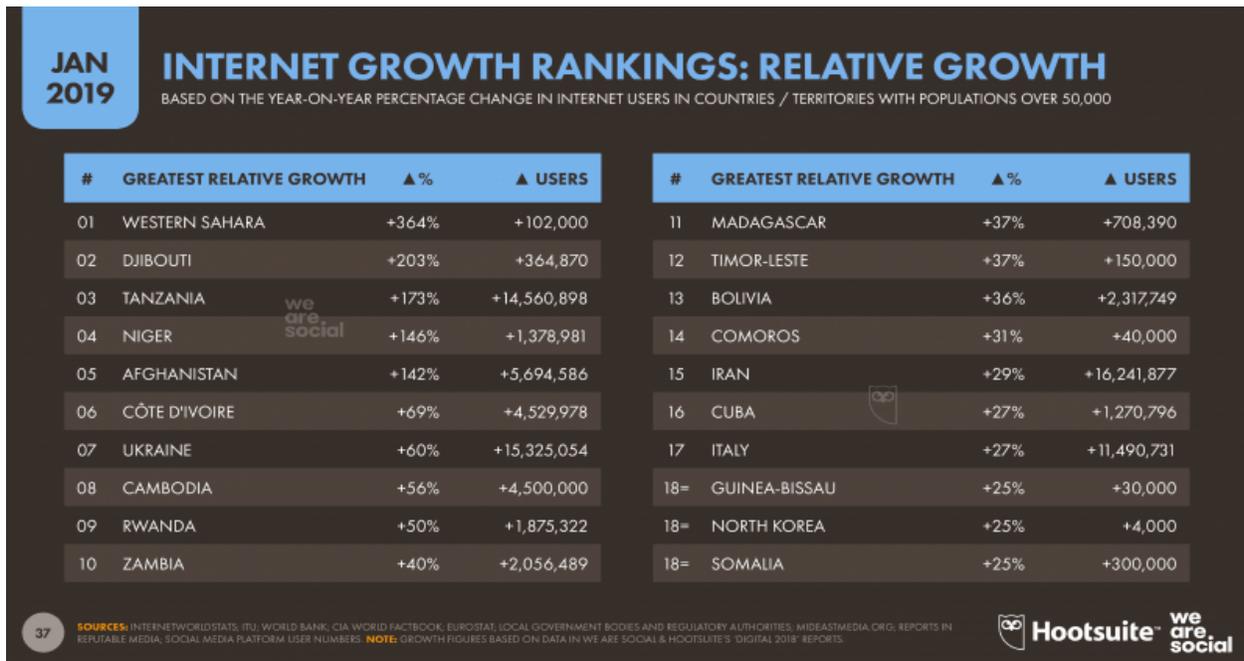
The pervasive reality of inequality is confirmed in the OECD report: “In It Together: Why Less Inequality Benefits All” which states:

In most countries, the gap between rich and poor is at its highest level since 30 years. Today, in OECD countries, the richest 10% of the population earn 9.6 times the income of the poorest 10%. In the 1980s, this ratio stood at 7:1 rising to 8:1 in the 1990s and 9:1 in the 2000s. Higher inequality drags down economic growth and harms opportunities.... A main transmission mechanism between inequality and growth is human-capital investment. *While there is always a gap in education outcomes across individuals with different socio-economic backgrounds, the gap widens in high-inequality countries as people in disadvantaged households struggle to access quality education. This implies large amounts of wasted potential and lower social mobility* [my emphasis] In many countries, younger workers, especially those with only temporary work contracts have a lower chance of moving on to a more stable, career job.... Women have made substantial progress in narrowing the participation, pay and career gap with men and this has put a brake on rising inequality. But they are still about 16% less likely to be in paid work and earn about 15% less than men (OECD 2015).

Growing poverty, often scaffolded on pre-existing socio-economic inequality, is directly linked to a lack of digital equity, which is the social-justice goal aimed at ensuring that everyone in a society has equal access to technology tools, computers and the Internet, as well as the knowledge and skills to access and use them effectively and beneficially. (A definition of digital equity can be a state “in which both the digital divide and the participation

gap are bridged.”) Lacking these opportunities causes people to encounter educational, economic and social limitations that negatively impact their quality of life and exacerbate the disadvantages which already exist, despite (ironically) the undeniable potential of technology to advance access, equity and social justice. Clearly the affordances of the digital revolution, when it comes to access to a quality and affordable education have not realized to the extent that it could be claimed to have made a measurable impact on the lives of those who need it most (Bennet & Kent, 2017; Kalman, 2016).

Historically those who have been, and continue to be, excluded from education opportunities and concomitantly social justice, equity and access come from emerging nations and economies, many of who reside in the so-called global South. Although many strides have been made towards digital access in these countries (Kemp 2019), challenges remain intractable and are set to worsen when one considers the population age demographics.



4. CHANGING GLOBAL AGE DEMOGRAPHICS AND THEIR IMPLICATION FOR HIGHER EDUCATION

There is evidence globally, that higher education is becoming increasingly fragmented and polarized and that the notion of education in itself, is being reshaped in line with technological advancements and the entry into higher education of an avalanche of for-profit providers eager to leverage the affordance of technology for financial gain. The significance of these forces is exacerbated when one considers the picture of population demographics for the emerging nations, and their implications for the provision of higher education and the achievements of the SDGs.

The statistics below have been selected to emphasise the disparities that exist across key population groupings and how these will impact on higher education delivery. Perhaps the most sobering statistic is the mean age.

Table A below illustrates the mean age of selected countries/continents to demonstrate the significant disparities in mean age:¹

¹ <http://www.worldometers.info/world-population>

COUNTRY	MEAN AGE (2019)	MEAN AGE BY 2050	% OF PEOPLE UNDER 25
USA	37.8	50	UNDER 25 = 32%
EUROPE	41.8	46.6	UNDER 25 = 33%
INDIA	27	37.5	UNDER 25 = 50% +
CHINA	37.3	48	UNDER 25 = 12.78 %
AFRICA	19.4	24.8	UNDER 25 = 60 % +

TABLE B² : MEDIAN AGES, BY CONTINENT

Continent	Median Age
Europe	42 years
North America	35 years
Oceania	33 years
Asia	31 years
South America	31 years
Africa	18 years

TABLE C³ provides an indication of the five oldest countries, along with the five youngest. All the youngest (in fact, the 10 youngest) countries are all in Africa:

Rank	Country	Median Age (Youngest)	Rank	Country	Median Age (Oldest)
#1	Niger	15.4 years	#1	Monaco	53.1 years
#2	Mali	15.8 years	#2	Japan	47.3 years
#3	Uganda	15.8 years	#3	Germany	47.1 years
#4	Angola	15.9 years	#4	Italy	45.5 years
#5	Zambia	16.8 years	#5	Slovenia	44.5 years

From the data one discerns an ageing population in the global North, which has perhaps resulted in a focus on lifelong learning, particularly via ODeL, for the upskilling of more mature students. Populations in North America, Europe, Japan and even China (the impact of the previous ‘one-child policy’ is perhaps a factor) are growing older and fewer young people are coming into higher education. However, one should not ignore the potential explosion of further migration to some of these countries, which might improve the mean age on the one hand, but present serious socio-economic and political challenges, and further disruption of education, on the other. Currently though, efforts to attract foreign student are not realizing the success that was envisaged, with countries such as China evidencing a decline in international enrolments (Barnes, 2018; Fischer 2019; Magnier and Bases 2019). The volatile socio economic and political contestations playing out in this hemisphere are possibly contributing to the state of flux in higher education, making it exceedingly difficult to predict or plan with any certainty, education futures and needs. This is contributing to the fragmentation of global higher education into regional “enclaves” which are more contextually focused and needs-driven.

² <https://www.visualcapitalist.com/mapped-the-median-age-of-every-continent/>

³ <https://www.visualcapitalist.com/mapped-the-median-age-of-every-continent/>

Declining youthful populations, and a growing proportion of aging citizens is realizing in the establishment of several universities for the “mature” students, as well as changes in the kind and quality of courseware as many working age citizens turn to for upskilling to prevent redundancy. However, there must inevitably be a tipping point where the proportion of those who can no longer work or study exceeds the proportion of those who can and who must also, through their taxes, provide for everyone. One can only speculate as to the future direction and impact of these institutions, who are driving the technological revolution, which somewhat ironically must be embraced and leveraged by a majority of “have-nots”, who arguably, do not have the wherewithal to optimize their potential.

If one looks at the Continent of Africa, a hugely sobering picture emerges. 41% of the African population is under the age of 15 and the mean age of the continent is only 18 (some put it at 19). In less than a decade, all these young people will be eligible to access higher education. The active working age population (25-64 years) has grown more rapidly than any other age group, from 123.7 million (33.3 per cent) in 1980 to 425.7 million (36.2 per cent) in 2015.

“The population of Africa is currently projected to quadruple in just 90 years, with a growth rate that will make Africa more important than ever to the global economy....Nigeria is currently one of the most populous countries on earth, and as China's population shrinks and India's plateaus, Nigeria will reach nearly 1 billion people by 2100 and come close to surpassing China.....Nigeria is set for one of the biggest population booms in world history and it's expected to increase by a factor of eight in just two or three generations. [However] the boom in Africa's population will be in sub-Saharan, including growth in countries like Tanzania, which is one of the poorest countries on earth. Just 13 years ago, the country's population was 34 million, which has now grown to 45 million but is projected to reach 276 million by 2100, which is close to the current population of the U.S. Many consider Africa's population growth a bit frightening, with predictions placing the continent's population at 2.4 billion by 2050. By 2100, more than half of the world's growth is expected to come from Africa, reaching 4.1 billion people by 2100 to claim over 1/3 of the world's population “....^{4,5,6}

These data have very serious implications for the fulfilment of SDG 4 and the provision of a quality education and higher education on the Continent and there is no doubt that ODeL, together with a dedicated focus on collaborations that includes the sharing and leveraging of facilities and capacities, will be the most viable means of managing what is likely to be a crisis of education provision, as early as the next decade. There is however a possibility that one might see a huge upsurge in international enrolments, provided that such is made affordable and accessible, (which is currently not the case).

This global cohort of young people represents our global future. And yet continentally, and in several other emerging nations a situation exists where some very senior leaders are holding on to power and making decisions about a future which they will not live to see. This is something that needs to be engaged urgently and seriously, given that some elders may not fully appreciate the “new” world into which their citizens are being born.

3. CONCLUSION

We can deduce two certainties from these statistics. Firstly, at present, the only viable means of accommodating the millions of students globally and especially in the developing world, who will want university education in the next few decades, is ODeL, and it is going to have to be hugely innovative and efficient ODeL if it is to produce graduates who will be soon taking over the reins of government and business, who will be expected to exercise responsible, critical, global citizenship, and who will be ensuring progress and development rather than further decline and decay.

Secondly, individual institutions will not be able to service such student numbers on their own, and there is even less of a chance of producing the kinds of research needed to realise the vision of SDG 4. This means a

⁴ <http://worldpopulationreview.com/continents/africa-population/>

⁵ https://esa.un.org/unpd/wpp/Publications/Files/WPP2017_KeyFindings.pdf

⁶ https://www.visualcapitalist.com/mapped-the-median-age-of-every-continent/?utm_source=email&utm_medium=social&utm_campaign=SocialWarfare

concerted focus on collaboration and the leveraging of our collective resources on the one hand, as well as the harnessing of our collective knowledges and research capabilities and capacities across the globe.

Finally, universities that wish to survive have no other option than to reinvent themselves through a futures-centric mindset that includes a multi-stakeholder, broadly participative leadership and management, collaborative business models, a fundamental commitment to sustainability through ethical stewardship of the institutional and the planets resources, a genuine appreciation of the people who comprise the university community, and quality, relevant courseware, assessment practices and student support, that will prepare graduates for an uncertain future and provide a foundation for future flourishing.

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