Digital Higher Education in Crisis Contexts, potential and risks for achieving the Sustainable Development Goals

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Introduction

The concept of education for sustainable development (ESD) was born from the need for education to address the growing challenges facing the planet (UNESCO 2018:4). ESD is designed to "empower learners to take informed decisions and responsible actions for environmental integrity, economic viability and a just society, for present and future generations, while respecting cultural diversity […] (and) promotes holistic and transformational education." (UNESCO 2018:5) Biodiversity, sustainable production and consumption, global justice, disaster risk reduction, poverty reduction as well as climate change are an integral part of ESD. Delivering on such a comprehensive agenda, education at all levels must employ innovative pedagogical approaches, enable learner-centered design which supports explorative, action-oriented and transformative learning through the acquisition of critical thinking skills as well as of values and behaviors that promote a sustainable future for all. Our learning environments, whether face-to-face, digital or blended, must adopt wholistic approaches across the 17 SDGs, particularly through strengthening SDG 4 targets. Establishing cognitive, social-emotional and behavioral learning objectives that represent outcomes for life-long learning, should be at the heart of all education, irrespective of the context for which it is designed. While Education in Emergencies (EiE) has established particular priorities designed to support learners living in crisis contexts, these priorities should not be seen as existing outside of a framework for sustainable development. With conflict and crises becoming increasingly protracted, the entire education spectrum is challenged to design beyond immediate crises and incorporate design for change and sustainable development right from the outset. To this end, pedagogies and technologies that meet the need of supporting the SDGs should promote learning outcomes across learning contexts, including those that are crisis-affected. Crisis response

has hitherto incorporated the notion of immediacy and short-term action to respond to human suffering. Increasingly, however, the link between humanitarian assistance and more medium- and long-term development action, the so-called humanitarian-development nexus, is seen as vital to building resilience and addressing different types of risk often considered to be responsible for natural disasters and conflict.

HE and ICTs: Contribution to the 2030 Development Agenda

Although none of the 17 SDGs appears to refer specifically to ICTs, several targets do mention ICTs and associated technologies (WU et al. 2018), and the 2030 Agenda for Sustainable Development refers to ICTs as having the potential to accelerate the development progress, to bridge digital gaps and to construct knowledge communities (United Nations 2015). ICTs could be the key catalysts to all 17 SDGs, and appear to be crucial to reaching the SDG targets. With SDG 10 and 16 focusing on "Peace" (fostering peaceful, just and inclusive societies, free from fear and violence), the civic dimension of academe's vision stands out as an important link that HE creates to the SDGs. While the role of universities during the period of globalization had become increasingly complex (Altbach 2008), the current decade has seen renewed commitment to universities' civic mission and the way this mission can be realized through engaged scholarship and community-based research (Cuthill 2012). Today, such civic engagement cannot only be realized through assisting refugees to study at HE institutions in their first country of asylum, or in third countries (Smit 2018), but when it is technology-enabled increasingly in an array of settlements, including refugee camps and refugee-hosting communities, which HE institutions would otherwise not necessarily reach. While the former options of admitting refugee learners into HE institutions in third countries provide "an important opportunity for academic communities […] to enrich their diversity, foster inclusive communities and to unite around the cause of assisting refugees to continue with their education, and to raise awareness more generally of the plight of refugees and refugee youth" (Smit 2018:35), they reach but a comparatively small number of refugees. New forms of digital academic communities embedded in refugee camps and disadvantaged refugee-hosting communities hold the promise of gradually increasing opportunities for refugee youth to co-create digital and blended academic communities in refugee-hosting countries. International collaboration among HE institutions engaged in the refugee context can go a long way towards building HE capacity in struggling low-income countries through digital collaborative scholarship that is sustainable, addresses refugee-hosting countries' needs and strengthens host-country HE institutions, which in turns creates more quality HE opportunities for refugees.

Considering that the post-2015 agenda has placed much more emphasis on post-secondary education, but bearing in mind that only a small share of aid is currently intended to strengthen higher education systems in recipient countries, many of which are also refugee-hosting countries, building capacity in these countries to strengthen higher education systems should be seen as a major driver to deliver quality education to their populations. And yet, about 70% of aid to post-secondary education is intended for scholarships to study in donor countries (UIS & EFA 2015). But to play their role effectively, higher education systems must be locally relevant yet globally aware, adaptive and evolving, flexible, and of high quality (Salmi & Bassett 2010). While primarily not focused on education, the World Bank has through its two publications, *Constructing Knowledge Societies: New Challenges for Tertiary*

Education (2002) and *Education Sector Strategy Update* (2005) made the case for effective higher education systems. In the words of former World Bank president J.D. Wolfensohn (2000),

> "It is impossible to have a complete education system without an appropriate and strong higher education system ... You have to have centers of excellence and learning and training if you are going to advance the issue of poverty and development in developing countries . . . the key . . . is higher education, not just on the technological side, *but to create people with enough wisdom to be able to use it*." *(emphasis added by the author)*

Digital HE in crisis contexts allows developing countries to exchange knowledge; it allows for knowledge learned in developing countries to come forward on an equal basis with the knowledge of developed countries; such knowledge can then be shaped and described in a way that can be effective and useful both in industrialised and developing countries. Local relevance promotes local capacity-building; high quality HE strengthens the local knowledge base; ICTs do not only contribute substantially to the creation of quality local knowledge and innovation, but enable its global exchange and leverage the potential of reverse innovation.

SDG 4 and Higher Education

Education is a central theme throughout the 2013 Agenda, which includes a stand-alone education goal as well as education-related targets within seven of the seventeen SDGs. SDG 4 aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all" by 2030 (UNESCO-UIS 2018). Target 4.3. covers quality TVET and tertiary education and proposes to ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university. No distinction is made within this target between formal and non-formal education, with the latter being much more difficult to measure than the former, but the target clearly states that formal and non-formal education and training can be offered in a variety of settings including schools and universities and workplace environments, and that they can have a variety of durations. HE initiatives in crisis contexts often include a mix of both formal and non-formal HE; this is in part due to the legal constraints in refugee-hosting countries regarding HE initiatives that are not part of the national HE system, in part due to the lack of stability and continuity that characterizes refugee contexts making it necessary to plan with flexibility in mind; it is also in part due to the fact that refugees often do not hold credentials allowing them to be registered in a HE program prior to credential verification for equivalence and authenticity. HEiE actors have thus often tried to bridge the waiting period with non-formal HE programs, many of which can be as rigorous as their formal counterparts.

Target 4.4 (Technical and vocational skills) features the indicator 4.4.1 "Proportion of youth and adults with information and communications technology skills, by type of skill" (UNESCO-UIS 2018:19), with ITU listed as additional custodian agency to report on this indicator. As part of this target ICT skills are seen as determining the effective use of information and communication technology and lack of mastery is seen as the biggest barrier for women to benefit from ICTs. The indicator creates a link between ICT usage and impact, a methodology developed by Eurostat and adopted by UNESCO-UIS. Many non-formal, and even informal, education initiatives in crisis contexts contribute to this indicator by offering courses on basic computer literacy, coding and other basic programming skills, thus offering ways in which

vulnerable youth can learn how to use the ICT tools that might ultimately pave the way to their HE engagement.

Target 4.7 (Knowledge and skills needed to promote sustainable development) is of particular importance to HEiE and its digital instantiation, as this target focuses on the acquisition of knowledge and skills needed to promote sustainable development through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development, with the indicator 4.7.1. covering global citizenship education and education for sustainable development, gender equality and human rights that are to be mainstreamed at all levels of education. Some of the examples below point to the potential of sound digital pedagogies to contribute to progress on this target.

Digital pedagogies and EiE

In his report (Human Rights Council 2015) the Special Rapporteur of the Human Rights Council looks with concern at the rapid increase in the number of private education providers and the resulting commercialization of education, and examines the negative effects of this on the norms and principles underlying the legal framework of the right to education as established by international human rights treaties. He highlights the repercussions of privatization on the principles of social justice and equity and analyses education laws as well as evolving jurisprudence related to privatization in education. Preserving education as a public good and fostering the humanistic mission of education, rather than focusing solely on the pursuit of material values conducive to the market economy, with learning systems devoid of cultural diversity, emerge as key messages from this report. Especially over the past two years much effort has been spent on linking tertiary education to employability and employment in crisis contexts; given the complexity of labor laws and the lack of scalable solutions regarding employment for refugees with advanced skills and competencies, and bearing in mind the importance of social-emotional learning for youth, such a more utilitarian vision of HE has to be critically reviewed in light of the Special Rapporteur's report.

The final draft of the Global Compact on Refugees (UNHCR as at 26.06.2018) devotes relatively little space to education, essentially paragraphs 68 and 69, with an additional reference in the section on complementary pathways for admission to third countries on scholarships and student visas. Paragraph 68 provides for "States and relevant stakeholders" to "contribute resources and expertise to expand and enhance the quality and inclusiveness of national education systems to facilitate access by refugee and host community children (both boys and girls), adolescents and youth to primary, secondary and tertiary education." To meet the specific education needs of refugees the Compact proposes to leverage "safe schools" and "innovative methods such as online education".

As we try and bring together the different strands of Higher Education, Sustainable Development Goals, Higher Education in crisis contexts and ICTs, a rather challenging agenda emerges for digital HE. Crisis contexts favor scale and speed of delivery, and technology-enabled education with its focus on scale and global reach supported by stakeholders that include SMEs, donors and INGOs appears to offer some immediate solutions. However, both

Kirk (2007) and Thierney (2011), addressing ways to fix failed states which give rise to large-scale displacement, emphasise the importance of rethinking education to effectively deal with building back better. For this technology-enhanced HE holds both promise and carries significant risk. Technology-enhanced HE in crisis contexts designs and embraces innovative pedagogies for internationalization (EMBED-EADTU 2018) while being relevant to the local context in terms of culture and language and cognizant of the protection and social-emotional learning needs of its students. With learners coming mostly from very transmissive pedagogical cultures, technology-enhanced HE needs to ensure that learners are at the center, engaged in active meaningful learning that embraces the 21st Century skills, well scaffolded in their learning and motivated to contribute to their local community, however fragile it may be. Building back better starts in crisis contexts, it cannot be merely an afterthought. Digital learning has come a long way over the past two decades; and yet, some education institutions specializing in on-line education and tasked with accepting large numbers of refugee learners, fail to deliver on a quality digital HE experience, using technology merely for enabling on-line access to learning materials and engaging peers to provide learning assessment. With English as a medium of instruction (EMI) on the rise world-wide the authors (Galloway et al. 2017) raise a number of concerns regarding this phenomenon, including cultural (Western dominance) and social issues, as well as students avoiding asking/answering questions, code-switching, impoverished discourse, increased pressure, extra time needed for preparation and instruction, simplified disciplinary content and difficulty explaining it. Digital HE may create access for refugee learners, but requires significant planning and pedagogical design if it is to support quality education that is responsive to the local context, mediates the creation of indigenous knowledge and is designed with sustainability and capacity-building in mind. Much may depend on how HE actors active in crisis contexts invest in terms of research effort that will support their understanding of the needs of the refugee student population and of the contexts in which they live or move to.

For those who creatively integrate technology and pedagogy in a refugee context the results can be astounding: simple apps as part of a collaborative research project allow students to map health risks emanating from animals to humans in camps that are situated in pastoral societies; Open Educational Resources, when responsibly scaffolded pedagogically through blended learning give rise to refugee community initiatives and leverage the creation of indigenous knowledge, often in collaboration with host-country HE institutions; on-line collaboration between students in Western Universities and students in fragility allows for the transfer of simple technologies that have the potential to change the behavior of entire communities as recently observed in a Global Health course where an app to rapidly test water for Vibrio cholerae bacteria was shared with refugee learners in a camp; or the pedagogically varied use of WhatsApp forums to support refugee student learners semi-synchronously as they identify engineering problems in their environment and proceed to design their own technical solutions. Open Education Resources also pave the way for scholars in exile to resume teaching and to support refugee learners from their former communities.

As one of the main features of these technologies is ease of access on mobile phones, communication channels between refugee learners, professors, lecturers and student tutors in Western universities, and scholars in the diaspora are created. Their dynamic can be very

encouraging, but has also raised concerns regarding refugee protection. Squaring this with the right to information and academic freedom represents yet another challenge for digital HE.

Positioning technology as a solution to complex challenges has had a varied history; the One-Laptop-per-Child initiative or the Hole-in-the-Wall computer project may have taught us that children can learn how to use computers, but there is no evidence that they actually are effective for quality learning. Similarly, simply focusing on digital learning as a way to create access and subsequent scale, is in light of the numbers of forcibly displaced an understandable endeavour. It does, however, mostly fall short of what HE is capable of in terms of creating quality digital learning environments for all learners, whether they live in fragile contexts or not, whether they are on the move due to conflict or enjoy virtual mobility across established and well-connected HE institutions. HE has the capacity and innovation power to harness technology to make access to HE more inclusive, but more importantly, it has the mission to design technology-enhanced learning in ways that lend support across the 17 SDGs and ensure quality learning across all contexts and for all learners.

References

Altbach, P. (2008). The complex roles of universities in the period of globalization. In Global University Network for Innovation (ed.), *Higher Education in the World 3* (pp. 5–14). New York: Palgrave MacMillan.

Galloway, N., Kriukow, J., & Numajiri, T. (2017*). Internationalisation, higher education and the growing demand for English: an investigation into the English medium of instruction (EMI) movement in China and Japan.* ELT Research Papers 17.02. British Council: https://www.teachingenglish.org.uk/sites/teacheng/files/H035%20ELTRA%20Internationalisation_HE_and%20the%20growing%20demand%20for%20English%20A4_FINAL_WEB.pdf (Last accessed 26.10.2018).

Cuthill M. (2012). A "Civic Mission" for the university: Engaged scholarship and community-based participatory research. In McIlrath L., Lyons A., Munck R. (eds), *Higher Education and Civic Engagement.* New York: Palgrave Macmillan.

EMBED-EADTU (2018). https://embed.eadtu.eu (Last accessed 12.10.2018).

Kirk, J. (2007). Education and fragile states. *Globalisation, Societies and Education* 5(2):181-200, DOI: 10.1080/14767720701425776

Macpherson, I., Robertson, S., & Walford, G. (eds.) (2014). *Education, Privatization and Social Justice: Case Studies from Africa, South Asia and South East Asia.* Oxford: Symposium Books Limited.

Salmi, J. & R.M. Bassett (2010). Transforming higher education in developing countries: The role of the World Bank. In P. Peterson, E. Baker, & B. McGaw, (Eds*.), International Encyclopedia of Education* (4:590-596). Oxford: Elsevier.

Smit, A. (2018). *Higher Education Scholarships for Refugees: A Reference Framework for Providing Protection and Solutions Opportunities through Complementary Pathways of Admission to Europe.* Geneva: IOM (in the framework of the European Resettlement Network - UNHCR, IOM, ICMC).

Tierney, W.G. (2011). The role of tertiary education in fixing failed states: globalization and public goods. *Journal of Peace Education* 8(2):127-142. DOI: 10.1080/17400201.2011.589256

UNESCO-UIS (2018). *Quick Guide to Education Indicators for SDG 4*. Montreal: UNESCO-UIS.

UNESCO Institute for Statistics (UIS) & EFA-GMR (2015). A growing number of children and adolescents are out of school as aid fails to meet the mark. *POLICY PAPER 22 / Fact Sheet 31*. Paris: UNESCO.

UNHCR (2018). *Global Compact on Refugees.* http://www.unhcr.org/events/conferences/5b3295167/official-version-final-draft-global-compact-refugees.html (Last accessed 25.10.2018). Geneva: UNHCR.

United Nations (2015). *Transforming our world: the 2030 agenda for sustainable development. United Nations General Assembly Resolution A/70/L.1*. New York: UN General Assembly.

UNESCO (2018). *Issues and trends in Education for Sustainable Development.* http://unesdoc.unesco.org/images/0026/002614/261445e.pdf (Last accessed 20.10.2018).

United Nations Human Rights Council (2015). Report of the Special Rapporteur on the Right to Education: *Protecting the right to education against commercialisation (A/HRC/29/30).* http://www.right-to-education.org/sites/right-to-education.org/files/resource-attachments/UNSR_Report_HRC_Commercialisation_Education_2015.pdf (Last accessed 20.10.2018). Geneva: Human Rights Council.

Wolfensohn, J.D. (2000). *Building Knowledge Societies: Access, Empowerment, Governance*. World Bank: Speeches of World Bank Presidents. https://openknowledge.worldbank.org/handle/10986/26179 (Last accessed 21.10.2018).

Wu, J., Guo, S., Huang, H., Liu, W., and Xiang, Y. (2018). Information and communications - Technologies for Sustainable Development Goals: State-of-the-Art, needs and perspectives. *IEEE Communications Surveys & Tutorials* 20(3):2389-2406. DOI: 10.1109/COMST.2018.2812301