Flexible and Adaptive Responsiveness – Disruptive Lessons from Higher Education in Refugee Contexts

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Abstract
The delivery of higher education in refugee contexts is no stranger to dealing with the unforeseen and responding to the needs of vulnerable learners. Being flexible and adaptable to a multitude of challenges and obstacles is a core component of any scaffolding that wishes to support refugee higher education programmes. In Zone, an academic and humanitarian programme at the University of Geneva, has empirically developed a flexible and adaptable ‘learning ecosystem’ to scaffold its delivery of higher education programmes in Africa and the Middle East. This chapter explores how this responsive ecosystem has enabled top tier university programmes in some of the most challenging educational environments between 2017 and 2018. The functioning of the ecosystem is explored within the context of the lived reality of learners in the camps and course participation data is shared to evaluate the effectiveness of the learning ecosystem as a scaffold for enabling higher education in refugee contexts. Lessons learned point to recommendations for pedagogical innovations that could be employed to cope with pedagogical disruptions for the wider education world during testing times such as Covid19.

Keywords: Blended Learning, Scaffolding, Refugee Learners, Collaboration, Disruption.

1.1. Introduction: Utilizing OER with Blended Approaches for Enabling Higher Education in Refugee Contexts
Higher education in refugee contexts is a relatively new pursuit in the humanitarian-development space. Long has it been overlooked in favour of the role primary and secondary
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Education can play for equipping some of the world’s poorest people with the skills and knowledge that they need to try to improve their lives. In recent years a shift in thought has begun to take place, with international humanitarian and development policies and practices increasingly considering the role that higher education can play as a solutions for the world’s ever increasing refugee population. The Sustainable Development Goals (SDGs) (2016-2030) have for the first time, put higher education front and centre of global development discourse, with SDG 4 enunciating the importance of lifelong learning for all (UNESCO, 2019). With an increased emphasis on the role higher education can play in this humanitarian development nexus, a space has opened up, particularly in refugee camps, for universities and other higher education providers to deliver their programmes to refugees.

The internationalization of education through western perspectives (Majee and Ress, 2020) coupled with the proliferation of western information communication technology (ICT) in the forced migration management sphere, have led to a situation where western online education reigns supreme in the higher education in refugee contexts discourse (Halkic and Arnold, 2018). This is further compounded by the various geographical, physical, infrastructural and budgetary barriers which limit local universities in becoming active actors in their own catchment areas for refugee learners who are confined to camps which are not easily accessible. All things considered, western online or blended programmes (O’Keeffe and Akkari, 2020), have largely dominate the ‘digital displacement space’ (Mandianou, 2019).

For better or worse, the reality of higher education in refugee contexts looks very different from higher education in the traditional sense. Instead of classrooms, students usually access their online courses via smart phone or a shared laptop. Internet connectivity is intermittent and sufficient scaffolding and support for effective online or blended learning is often not in place (Carron, 2019). The courses on offer are rarely contextualized or accredited and rely heavily on open education resources (OER) like Massive Open Online Courses (MOOCs) as their primary source of content. Feted for their perceived ability to encourage and facilitate education access for all, these OER are, by their nature, educational resources which are publicly and freely accessible to anyone who has the ability to access them. OER, such as MOOCs, are for many teachers and learners constrained by resources, vital tools which they use in their daily pedagogical operations. The free access to information that these OERs provide, enables access to knowledge resources, which otherwise may be off-limits to those who cannot afford to pay subscription fees. This on the surface, makes OER a perfect fit for under resourced and underfunded education endeavors such as those on offer in higher education in refugee contexts.

Education however, is more than providing access to information, and involves ‘knowledge and skill acquisition, instruction, debate, application of acquired expertise, critical inquiry, cultural expression, and transmission to other members of the community and society’ (Moser-Mercer, et al., 2018). As a knowledge source, OERs can be effectively mined to assist in the enabling of learning, but to become true pedagogical tools OERs need the support of effective scaffolding to realise their full potential. For learners in refugee contexts, this scaffolding is different from the scaffolding that traditional higher education requires. Due to the peculiarities of the environments in which these learners learn (low resources, social barriers, education trajectory inconsistencies etc.), scaffolding needs to be flexible and adaptable in order to respond to, and support, the unique needs of these learners, and be robust enough to meet the everyday challenges and changeability of these contexts. In 2020 we have seen how traditional higher education approaches have struggled to cope with the unforeseen disruptions brought about by the Covid 19 pandemic. Robust refugee higher education approaches, while also struggling under the weight of lockdown restrictions, have often evolved to cope with many unforeseen and disruptive events and may offer some lessons for

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1 The Sustainable Development Goals (SDGs), are a set of 17 global goals and a universal call to action to end poverty, protect the planet and ensure that all people enjoy peace and prosperity (UNDP, 2018).
traditional approaches. This chapter looks at InZone’s collaborative learning ecosystem as scaffolding for utilising OERs and enabling higher education in refugee contexts by exploring the ecosystem’s flexibility and adaptability to respond to the unique challenges that refugee learners face in Azraq and Kakuma refugee camps. In addition, by presenting course data for 9 InZone higher education courses that took place in Azraq refugee camp and Kakuma refugee camp between 2017 and 2018, the chapter aims to show how high completion rates can be achieved even in difficult, disruptive and uncertain conditions, which the refugees face on a daily basis.

**OER in the Information Age**

While no universally accepted definition of OER exists (Deimann and Farrow, 2013), and the accessibility of OER can be dependent on resources such as technology, the following definition is widely accepted amongst education scholars as capturing the essence of what OER are.

OER are teaching, learning and research resources that reside in the public domain or have been released under an intellectual property license that permits their free use or repurposing by others. OERs include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge (Atkins et al, 2007).

Via the information revolution, efforts made to satisfy an increased demand for education, and higher education in particular, across the world (UNESCO, 2017), have helped to propel OERs into a position of prominence in recent years. People who are unable or unwilling to pay for knowledge, can now access all kinds of resources, as long as they have the technology and internet connection to do so. The rapid development and proliferation of ICT has changed social, economic and political spaces globally in a very short time (Edewor et al, 2014). OER bound up within these spaces, coupled with the positioning of education as central to various global development initiatives, such as the Sustainable Development Goals for 2030, have resulted in a growing awareness that education is key to unlocking personal and societal transformative development potential (UNESCO, 2018). This increased awareness has helped to catalyze pedagogical approaches, such as connected learning, to bring learners, teachers and technology together, with the aim of maximising learning potential across the world. OER, largely due to their accessibility, compliment such approaches by providing the resources that are economically advantageous and available at the touch of a button.

**MOOCs – an OER Phenomenon in Blended Learning Models**

In the education information space, Massive Online Open Courses (MOOCs) have emerged as the leading type of OER that provide higher education opportunities across the world. In the wider global cultural context, the phenomena of MOOCs, bolstered by the creation of various MOOC providers such as Edx, Coursera and Udacity, reached fever pitch in 2012 with the New York Times declaring that year ‘The Year of the MOOC’ (Anders, 2015). With many new providers in the market offering this type of OER as an education platform, universities across the world quickly got on board this new ‘education revolution’ (Martin, 2012). The awe inspired by the increased access and lower cost potential for education

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2 According to UNESCO the number of students in higher education across the world doubled from 100 million in 2000 to 207 million in 2014. Please see http://unesdoc.unesco.org/images/0024/002478/247862E.pdf for more details.

3 Connected Learning - The development and exchange of knowledge and ideas among students and faculty through the use of information technology that enables learning not bound by geographical limitations in contexts of fragility. It promotes authentic self-knowledge, embeddedness in local and global learning communities, adaptive critical thinking and new media literacies to nurture a culture of adaptive life-long learning. This is achieved through linking student interest to relevant, flexible, accredited and sustainable academic programs, creating interconnected and global learning communities and ensuring academic achievement through dedicated learner support (CLCC, 2017)
delivery contained in the innovation of MOOCs (Papano, 2012) began to wane by 2013, when the increased attention shone a spotlight on their short comings in terms of high attrition rates, high development costs and the main demographic profile of their users being well-educated professionals (Anders, 2015).

The quick rise and stumble of the MOOC phenomenon, spurred on by the criticism levelled at it, has paved the way for their reinvention and reimagining in the educational space and in particular their integration into blended approaches to delivering education (Holotescu et al., 2014).

While blended models come in many forms, and do not necessarily have to contain MOOCs in their recipes, there is a growing interest in their inclusion in blended learning approaches (Zawacki-Richter & Naidu, 2016) and evidence to confirm their positive impact on teaching and learning in such models (Bralic and Divjak, 2018).

Following on from the major criticisms levelled against MOOCs (high attrition rates, demographic specificity, high cost of production etc.), blended learning has also been embraced as ‘buzzword’ in the higher education space (Garner and Oke, 2014). This approach typically features a mixture of face-to-face and online activities and the integration of synchronous and asynchronous tools, as deemed optimal, for heightening learning processes on a case by case basis (Holotescu et al, 2014).

**Time, Fidelity, Space and Humanness of Blended Learning Models**

Blended approaches have the ability to be flexible and adaptive enough to fit the pedagogical requirements of a particular course and cohort of students. While MOOCs are situated along a spectrum from prescriptive learning (hierarchical, centrally controlled, transmitted at scale to users) to emergent learning (decentralised and distributed, collaborative and self-organised, created at scale by users) (Williams et al., 2011, Williams et al., 2012), blended learning approaches, due to their flexible and adaptive nature, have less rigidity in their over-riding theoretical frameworks. According to Graham (2006) a 4-dimensional key framework of Time, Fidelity, Space and Humanness can help to better understand blended learning approaches and how they can be capitalised on to promote student learning (Garner and Oke, 2014).

- **Time** relates to a deliberate focus on how much time should be allocated to the online components and the face-to-face (F2F) components of a particular course.
- **Fidelity** relates to how engaging of the senses and how stimulating interaction is, in all learning processes in a course.
- **Space** represents a continuum that ranges from fully F2F to totally online.
- **Humanness** is a continuum that delineates learning experiences that are human delivered or machine delivered (Garner and Oke, 2014).

Blended learning, while not a new phenomenon, has effectively been utilised in many different industries and settings, prior to its current ‘en vogue’ position in higher education. From its use as an instructional tool in corporate leadership programmes (Hovis, 2012) to customer service training (Strauss, 2008), blended learning may intuitively fit the modern world better than other more traditional pedagogical approaches do. This presupposes that creators and users get right the optimal recipe of Time, Fidelity, Space and Humanness for a particular contextualised course. It also assumes that the context in which the learners operate supports this approach. While it may be easy to implement and operate blended learning courses in a well connected and supportive context (global pandemic lockdowns aside), enabling blended learning in low resource, challenging and changeable contexts, such as refugee camps, may not be so simple.

**Blended Learning in Refugee Contexts**

Education, depending on the nature of design and implementation, can be a beneficial force for inclusion and development within a given context. However, it also has the potential to
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perpetuate or entrench the dynamics of fragility (INEE, 2010). Understanding the context in which higher education operates in and the barriers that learners face are therefore fundamental consideration to ensure that education at least ‘does no harm’ (INEE, 2010).

Technical, social, political, geographic and economic barriers all place heavy burdens on learners when enabling higher education in refugee contexts. Internet connectivity may place limits on the amount of time that can be devoted to the online component of blended learning courses; technology deficits can impact on the humanness of the courses; social mores may restrict certain groups from accessing higher education opportunities or influence pedagogical ‘fidelity’; political disturbances and more evidently global health catastrophes may disrupt learning spaces; national containment policies often mean that refugee camps are located in remote, inhospitable and hard to reach places; financial factors may force would-be students to work instead of studying. There is a wide range of obstacles and barriers that can impact on higher education in low resource, challenging and changeable contexts that would not normally impact on it in higher resource and more stable contexts.

The ability of programme delivery to adapt and overcome these obstacles is fundamental in these education spaces and may provide some important lessons for other education spaces to learn from – especially in the current Covid 19 climate where delivery of traditional classroom-based approaches has suddenly become an impossibility for many.

InZone’s Collaborative Learning Ecosystem for Enabling Higher Education in Refugee Contexts

InZone’s collaborative learning ecosystem model for enabling higher education in refugee contexts has been developed specifically to address various obstacles faced by learners in low resource and challenging contexts and to provide scaffolding support which enables blended learning in these contexts. The learning ecosystem uses, Collaborative Learning theory as a framework from which a learning ecosystem can utilise various support mechanisms to enable learning. The theory, at its most basic level, can be said to describe and govern a situation where two or more people learn together, or attempt to learn together (Dillenbourg, 1999). It is born out of the Vygotskian perspective which sees learning as essentially a sociocultural process that understands cognitive development as requiring interaction between two or more people (Lantolf and Pavlenko 1995; Lantolf and Thorne 2006). Learning from this theoretical perspective is not just a matter of peers interacting and learning from each other, but can also require individuals interacting with mentors and more knowledgeable peers who enable learning through a process of guidance and/or collaboration (Lin, 2015). The InZone collaborative learning ecosystem embraces this perspective by placing the learner at the centre of an ecosystem where he or she interacts with his or her peers, as well as interacting with other the actors in the learning ecosystem who facilitate and collaborate in the learning process.

Through a decade long experience of working with learners and other education actors in low resource and fragile contexts, InZone has accumulated extensive knowledge into the obstacles and barriers faced by learners and the context in which its programmes operate in. From this informed perspective, the InZone collaborative learning ecosystem model has been developed to incorporate 5 key actors who collaborate in a flexible and adaptive manner to enable higher education courses in the locations in which it operates in - students, lecturer, course coordinator, onsite facilitator, and online tutor. The key actors collaborate together in the

4 ‘Do no harm’ is an approach which helps to identify unintended negative or positive impacts of humanitarian and development interventions in settings where there is conflict or risk of conflict. It can be applied during planning, monitoring, and evaluation to ensure that the intervention does not worsen the conflict but rather contributes to improving it. ‘Do No Harm’ is considered an essential basis for the work of organizations operating in situations of conflict (INEE, 2010b).

5 InZone is an academic research and humanitarian programme at the University of Geneva which pioneers innovative approaches to multilingual communication and higher education in refugee contexts. For more details on InZone’s work please see http://www.unige.ch/inzone
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ecosystem to enable tailored higher education undergraduate blended learning. InZone enables these courses in Azraq refugee camp in Jordan and Kakuma refugee camps in Kenya. The following diagram illustrates collaboration among the actors in the InZone collaborative learning ecosystem. This diagram is followed by a brief outline of the key actors and their roles.

Key Actor Roles and Responsibilities.
1. The Lecturer delivers the course material over a learning platform (for example via MOOC courses freely available on Coursera or EdX), encourages the generation of new knowledge, and evaluates the students’ learning. In the ecosystem, the delivery of knowledge via an online platform enables the transmission of information to the students, who through discussions, group work and so on, acquire and develop new knowledge.
2. The Online Tutor is a subject matter expert or a peer with a more advanced level of subject knowledge. The tutor plays a pedagogical role in this collaborative learning ecosystem by ‘meeting’ the student regularly over an ICT platform (for example Whatsapp) to stimulate new knowledge acquisition, discuss the student’s progress and offer advice on being a successful learner.
3. The Onsite Facilitator provides onsite technical and guiding support to learners, helping them to access the learning platform on location and navigate the physical learning space. The Onsite Facilitator is a critical contact point in the education relationship between the students and the other members of the collaborative learning ecosystem as they are in frequent physical contact with the students.
4. The Course Coordinator has the overall responsibility for the day-to-day running of the course and liaises with the other members of the learning ecosystem to ensure a smooth operation.
5. The Student is the focal point of the learning ecosystem. This means that they are central to the collaborative learning model and the entire learning ecosystem is designed to support their optimal learning by meeting their educational needs and promoting progressive learner autonomy.

Flexibility and Adaptability at the Heart of InZone’s Collaborative Learning Ecosystem

While all actors in the collaborative learning ecosystem are necessary for the success of the model, the structure of the learning ecosystem in the collaborative process is flexible and adaptive. By ‘flexible’ it is meant that the ecosystem can adjust the amount of ‘collaboration’ each of the actors participates in, depending on the needs of the learners and the particular course.

The learning ecosystem exists in a pulsating state of flux where tutors, coordinators, facilitators, lecturers and students can adjust their pedagogical input and interactive participation according to a particular moment in the lifecycle of a course (for example, if a student is having difficulty with a specific learning point, tutors and facilitators can work
together to develop extra discussion and understanding of the learning point to aid its pedagogical reinforcement).

By ‘adaptable’ it is meant that the ecosystem can adapt easily to new situations and contexts which spontaneously occur in the life cycle of a course (for example sudden loss of access to a learning space, as has happened during Covid 19 lockdown, can be mitigated by students studying at home with facilitators adapting their in-person facilitation to an online facilitation until circumstances improve). The adaptability of the learning ecosystem is also evident in its utilization as a pedagogical framework for different courses in different contexts (for example the same learning ecosystem framework which helps to enable a Human Rights course in Kakuma helps to enable a Community Health Care course in Azraq).

The flexibility and adaptiveness of InZone’s learning ecosystem as a pedagogical scaffolding accommodates learners in refugee contexts where technical and other learning supports are not always consistent or reliable. Frequent internet connectivity and electricity outages, relocation of students and other disruptions such as lockdown restrictions on movement and sudden decrees where students cannot gather together for classes are frequent occurrences in such environments.

The flexibility and adaptability of the learning ecosystem has been developed in accordance with, and in response to, such challenges in order to mitigate potential disruptions to the learning process. During the current Covid 19 pandemic, in order to continue enabling learning, the learning ecosystem has had to adjust to the heavy lockdown restrictions resulting in more emphasis being placed on the online component of courses over the face-to-face component. While the uncertainty and insecurity of the current lockdown continues, at the very least this flexibility and adaptability of the ecosystem has enabled learning to continue.

1. Data - the Flexibility and Adaptability of InZone’s Learning Ecosystem as Scaffolding in Different Contexts

InZone’s Learning Ecosystem has been empirically developed over a decade of experience enabling higher education programmes in refugee contexts. For the purpose of demonstrating its flexibility and adaptability as scaffolding model for enabling different courses in different contexts, the following table gathers data from 9 InZone courses which took place between February 2017 and August 2018. The table lays out the raw course data to help illustrates the flexibility and adaptability of the learning ecosystem across 2 locations (Azraq and Kakuma) where 116 students enrolled in these courses and 97 completed (82.56% completion rate).

### InZone Course Data 2017-2018

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<th>Course Name</th>
<th>One Health</th>
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The table shows data for 7 courses held in Kakuma refugee camp and 2 in Azraq refugee camp. All courses employed InZone’s learning ecosystem as scaffolding to support InZone’s collaborative learning pedagogy.
As is evidenced by the table, the courses varied in terms of the ‘ingredients’ used in the collaborative learning pedagogy. For example, some courses used Coursera as their learning platform and others used Edx or the University of Geneva’s Moodle platform, some courses had prescribed number of hours for tutoring assigned, while others had no defined number of hours devoted to tutoring, some courses had two facilitators assigned to manage the day-to-day running of courses, while other had one facilitator. Different ‘ingredients’ aside, all courses were scaffolded using the same InZone collaborative learning ecosystem structure. By averaging the course completion rates of the 9 courses we get an overall completion rate of 82.56%. In a synthesis of literature looking at online retention rates Baiwa (2016) points out that between 40% and 80% of online students drop out of online courses. Maintaining motivation, technological capacity and social issues are the main reasons pointed out by Baiwa as to why drop out is so high. The drop out figure for MOOCs may be even higher (90%) according to a report commissioned by the Erasmus programme in 2016 (Mook Maker, 2016). While no one consistent figure represents all blended learning approaches (by their very nature they constitute a ‘recipe’ of a certain percentage of face-to-face and a certain percentage of online pedagogy depending on each particular course’s individual make up), it appears that retention rates for blended courses in general appears to be higher than online courses. Authors such as Bonk and Graham (2012) point out that the increased interaction and motivation afforded by blended approaches may help to augment retention. Bonk and Graham (2012) further suggest that proactive blended approaches to meet the needs of students, rather than reactive approaches that try to ‘fix’ the problem of dropout rates is more affective in retaining students. InZone’s collaborative learning ecosystem, through its student centered focus takes a proactive approach and achieves a retention rate (82.56%), which exceeds the average retention for purely online courses. Thus this approach validates Bonk and Graham’s assertion that the increased interaction and motivation afforded by blended learning augments retention.

3. Conclusion

The collaborative learning ecosystem which InZone has developed for refugee students in refugee contexts, is a system that works in unison with students and fluctuates according to their particular pedagogical needs. The flexibility and adaptability at the heart of this learning ecosystem is, at its core, a responsive pedagogical mechanism that enables learning in disruptive, challenging and changeable contexts. While it may follow the usual blended learning model approach of mixing face-to-face interactions with online learning, the learning ecosystem goes further by allowing the recipe of face-to-face and online components to fluctuate according to the particular needs of the students at a particular point in time. Further illuminating its flexibility, is the learning ecosystem’s use of OERs for learning content. By utilizing OERs, within top level well-scaffolded higher education programmes, higher education in refugee contexts has become a successful reality in some of the most disruptive and resource deprived environments in the world. The content and support which enables InZone’s refugee students to successfully complete accredited courses, at a higher than average completion rate, attests to the validity of this approach. With the right mix of support and resources, barriers to higher education success can be reduced.

As higher education the world over grapples with the sudden disruption to our systems that Covid 19 has ushered in, there is a lot we can learn from approaches that succeed despite heavy barriers. In the West, the main institutional response to Covid 19 shutting down our classrooms, has been the move to online models of delivery. This has caused many teething problems for students and teachers who are used to vast resources, different pedagogical modes and big emphasis on facilitative, peer-to-peer and interactive learning. A sudden change to isolated online learning has not been an easy adjustment for many. The responsive approach, which allows students and teachers to be flexible and to adapt to each other’s needs, may hold the key to succeeding despite this sudden barrier.
The realization that new innovative pedagogical approaches are needed, has never been more pertinent than it is now. Many lessons relating to flexibility and adaptability can be learned from refugee education which has a long experience of coping with unforeseen disruptions, and in some cases, triumphing despite adversity. Approaches such as InZone’s collaborative learning ecosystem show how ‘flexible and adaptive responsiveness’ can achieve excellence in higher education, even in situations where peoples’ normal lives have been turned upside down.

References


https://en.unesco.org/partnerships/partnering/education-sustainable-development


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