Blended learning in refugee education: the case of the Foundations for All project in Kampala and Kiryandongo, Uganda

Authors

Kate Symons, Sandra Nanyunja, Apollo Mulondo, Juan-José Miranda, Cosmos Lugala, Mary Kampogo, Michael Gallagher, Robert Egwalu, Georgia Cole, Brooke Atherton El-Amine, Martha Akello

Abstract

This paper presents interim findings from the Foundations for All pilot. Foundations for All is a blended learning bridging program aimed at supporting refugee young people and disadvantaged members of the host community in two Ugandan locations to access higher education. Through discussing the Foundations for All pilot's teaching and learning design, multi-partner collaboration, use of technology, emphasis on psychosocial support model, and learner-centred curriculum, we offer relevant practical perspectives applicable to using blended learning in teaching in emergency contexts like the Covid-19 global pandemic, as well as situations of conflict and displacement. Our interim findings contribute to practice through making concrete recommendations for other institutions wishing to embark on a similar model. We contribute to research by proposing a distinction between 'thick' models of refugee access programmes which offer blended or online content along with substantial psychosocial and other support, interaction with specialist tutors, contextually-relevant learning design and content, accessible technology and learning centres and financial support, along with meaningful exit pathways for students, against 'thin' models which offer curated online content for free to refugees without the additional support. A further contribution outlined in the paper is the role which expert psychosocial support can play in enhancing refugee learners' engagement with teaching.

1. Introduction

This paper details the research informing the design and ongoing implementation of a blended learning programme designed to bridge refugee students into higher education in Uganda. The programme itself is titled Foundations for All and was developed across three institutions-the Refugee Law Project, the American University of Beirut, and the University of Edinburgh. It entails a 30 week curriculum spanning five discrete subjects: Understanding Myself and Others (a psychosocial support program), English for Academic Purposes, Maths, Study Skills, and Digital Skills. It is a blended model of education that was taught across two different learning centres by a dedicated tutoring team in Kampala and Kiryandongo, and designed by the three partners in a collaborative learning design approach. This programme, alongside the experiences of the students and project team in navigating the interruptions that Covid-19 introduced, we hope will provide valuable insight into digital learning and teaching in the time of a pandemic and foreground the need for a holistic curriculum that emphasizes personal development alongside academic ability.

The Covid-19 pandemic and digital technology have opened up new avenues to support learners, enabling us to reach and support disadvantaged groups who have traditionally been excluded from higher education. Only one per cent of the poorest 25- to 29-year-olds in low-income countries complete four years of higher education, and even fewer of these are refugees, according to the United Nations High Commissioner for Refugees. While access to education is a human right explicit in Article 26.2 of the Universal Declaration of Human Rights (The United Nations, 1948), only a small fraction of refugee students can access higher education (UNHCR, 2016). Within this context, Uganda itself is one of the largest refugee hosting countries in the world with . Despite some contradictions in implementation (discussed in Awidi and Quan-Baffour 2021), it is considered one of the most progressive in the region, owing to its orientation toward the social—economic protection of refugees.. Uganda has policies and laws that provide refugees with rights to education, work, own private property, healthcare and other basic social services which are all spelt out in the Refugee Act of 2006, and The Refugee Policy of 2010 amongst other relevant laws (Refugee Law Project, 2021).

This paper sets out to discuss the following drawn from our experiences with the Foundations for All programme in Uganda in the hope of surfacing themes that might inform pedagogical responses to both teaching with digital technology and teaching in emergency, remote periods. First, we will discuss the Foundations for All project and the learning design, teaching models and curriculum that underpins it. Significant time and effort was invested in ensuring that the programme itself had overall coherence underpinned by a shared philosophy and programme/learning goals. Particularly in light of the disruptions that Covid and other actors introduced as well as the fact that the programme is drawn from three institutions and taught across two different locations, this coherence has proven invaluable in weathering periods of disruption.

Second is the design of the curriculum itself with psychosocial support at its core. Due to the nature of displacement, having an explicit emphasis on psychosocial support proved vital. We argue integrated and extensive psychosocial support should be considered for mainstream educational and curricular design particularly in the digital and particularly amidst an emergency. Third are the blended and occasionally offline models of learning that pay fidelity to the sociotechnical contexts that the project emerged from. These contexts overlap but exist on several discrete fields of activity: the sociotechnical context of the project team working across three institutions; the sociotechnical context of the teaching team and student cohorts in Kampala and Kiryandongo; and the sociotechnical context that exists outside the Kampala and Kiryandongo learning centres themselves (domestic technological use), a context brought into sharp relief during the lockdown in Uganda during which this paper was written.

2. Literature Review

Foundations for All draws on research from blended learning, education in fragile contexts such as displacement, and decolonisation of education. The literature identifies multiple challenges for refugees entering higher education including acquiring general proficiency in the local language and an academic vocabulary (Felix, 2016; Shakya et al., 2010); gaining understanding of the host country's higher education system (Ferede, 2010; Shankar et al., 2016; Loo,2017); financing their education (Giles, 2018; Loo, 2017; Shakya et al., 2010); having qualifications recognized for students who fled without paperwork (Felix, 2016; Loo, 2016; Tobenkin, 2006); and often significant psychosocial trauma (Streiweiser et al, 2019). In this literature review, we focus on how approaches

to blended learning design can help address these challenges, and highlight research gaps which remain.

The Foundations for All programme is delivered as a blended learning model for both pedagogical and logistical reasons. The distributed nature of the programme team and the learning centres being located in Kampala and Kiryandongo necessitated such an approach, and blended learning proved generative despite the ambiguities in how it is often defined (Cronje 2021; Nortvig, Petersen and Hattesen Balle, 2018). For many, it involves merely the combination of face to face instruction alongside online learning activity; what proportion one supersedes or leads the other varies across the literature but the blend in blended learning is often defined, perhaps simplistically, strictly through a binary of technology or not. For others it involves the blend of teaching and learning, context, pedagogy and technology (Nakayama, Mutsuura and Yamamoto, 2016; Kintu and Zhu, 2016; Onguko, 2014). Driscoll (2002: 54) delineates blended learning as a mix of web-based technologies, a range of pedagogical approaches (constructivism, etc.), and more in order to create a particular context conducive to the learning taking place therein.

The context itself is critical to developing a robust position of blended learning that might inform a subsequent learning design, illustrated in the following: "thus in a context where there is lack of access to electricity, Internet is not guaranteed, and schools lack basic amenities including clean and safe learning spaces, learning materials such as textbooks and facilities such as desks, blended learning must be redefined with consideration of the contextual realities" (Onguko, 2014, p. 78). These material and contextual realities are reiterated in the critique of blended learning in the Ugandan educational context (Ali, Buruga, and Habiba 2019), where the possibilities at times outstrip the material and contextual realities of connectivity, ownership, and readiness. Readiness as a potential barrier to the adoption of blended learning more thoroughly in Ugandan education was echoed in Buluma and Walimbwa (2021) who recommended that teacher educators should deliberately adopt the use of blended pedagogy to enable teacher trainees the ability to more readily incorporate blended learning into their teaching, which has been found lacking. Despite the contextual limitations of such an approach, there is a suggestion in the research in Uganda that it does indeed generate better learning outcomes, if seen through the lens of more time on task particularly problem-solving activities and as a growing familiarity with the technological systems that blended learning necessitates (Bhagat, 2020). Particularly with a distributed programme team developing the curriculum and a distributed tutor team teaching in the two learning centres with considerable divergence in terms of student composition, skills, culture, language, and material capital, communication in blended learning across these can become problematic and diffuse the efficacy of any programme, noted in a comparable study in Crea and Sparnon (2017), highlighting the importance of respecting divergence between the two Foundations for All learning centres and the varying skills and learning needs of the students involved.

Linking these possibilities of blended learning and the material and contextual realities involved in refugee education in the Ugandan context is critical for the Foundations for All programme and as such, we drew on the existing research in this space. Dridi et al (2020) detail the technological barriers that mitigate the impact of blended learning, particularly in settlements, and note the cascading effect of poor connectivity and infrastructure on the sense of isolation that refugees experience in pursuing their education through blended models. As such, Dridi et al further argue

that due to these infrastructural challenges as well as the diversity of student needs within these cohorts, that there needs to be a reconceptualisation of pedagogy and technological configuration in blended models serving refugee populations towards models that factor in the need for localization of the curriculum and overall design to accommodate learners' particular challenges. The Foundations for All programme team have noted this need at varying stages of the design process, particularly in our often failed attempts to repurpose existing open education content due to its lack of contextual specificity, a finding noted in similar studies in the research (Abdi, 2016; Crea, 2016; Crea & Sparnon, 2017). We consider this to be a significant gap in current research and practice.

The point is especially important to bear in mind if institutions aim to repurpose or curate existing online teaching content to provide educational opportunities to refugees (e.g. Creelman et al. 2018) As we will discuss further in this paper, universities wishing to provide learning materials to refugees must also consider scaffolding them with bespoke context, accessible technology, and specialist tutor support (especially psychosocial) along with defined exit points and pathways - what we refer to as the 'thick' model. The necessity to adopt a longer-term perspective vis-a-vis proper support for learners, institutional support, accredited learning and planning exit pathways is echoed in the literature, especially in a review paper by Streitweiser et al (2019) which notes that many interventions into refugee education have a short-term and narrow scope, and states that: "For refugees, the completion of a few online courses offered by international learning platforms or MOOC providers does not necessarily lead to an accredited diploma or degree program. Therefore, money spent on these efforts might not in the end effectively help refugees enter or re-enter higher education" (p. 487). For us, this represents a key literature gap.

A further debate where we believe FFA's learning and teaching design can contribute to current research is the issue of the relationship between psychosocial support and learning outcomes. There are several papers emphasising the importance of strong psychosocial support for refugees in the learning environment (Adaku et al., 2016; Stewart et al., 2019). However, the relationship is debated, with Streiweiser et al. (2019) stating that, while evidence that psychosocial support in school appears to help children recover from trauma, the relationship between improved mental health and learning is not clear (it may be that learning itself improves mental health rather than psychosocial interventions being necessary for learning). In addition, the majority of research papers focus on child refugees accessing education in destination countries in Europe, North America rather than the adult refugees displaced locally or regionally (and who may be seeking return rather than permanent resettlement) and members of host communities who participate in Foundations for All.

Finally, we highlight the ways in which Foundations for All can speak to the current decolonisation agenda in education. While decolonisation is a broad and contested term, the concept refers to the processes by which Western-doninated knowledge systems and power structures within a University context are challenged (Jansen, 2019). Decolonisation can include a range of activities including changing learning content to incorporate indigenous knowledge, increasing the number of teaching staff with expertise in decolonial expertise, and acknowledging and changing power relations which replicate colonial structures. Decolonisation therefore represents a political and epistemic process by which university curricula and teaching structures acknowledge colonial oppression and recover colonised world views, discoveries, experiences, expertise and knowledge (Mamdani, 2016). We consider that Foundations for All can offer insights to Universities in the Global North who are

exploring decolonisation agendas about how to improve their ability to partner with experts in the Global South, to take the varied learning experiences of their students more seriously, and to make meaningful steps to overcome structural barriers for potential refugee students. We will expand on these topics in this paper.

3: Foundations for All programme

Foundations for All is a pilot blended learning bridging programme investigating how best to enable learners whose educational opportunities have been limited by displacement and hardship to study at university. The project is a collaboration of Mastercard Foundation Scholars Program partners: the Refugee Law Project, School of Law, Makerere University in Uganda, the American University of Beirut (AUB) in Lebanon and the University of Edinburgh in Scotland, with each bringing relevant experience. The project is funded by the Mastercard Foundation, which has extensive experience in supporting access to higher education for talented students from low-income African contexts through academic scholarships and transformative leadership training, and is planning to increase the number of scholarships offered to refugee students. The Foundations for All bridging programme was launched in March 2021, following participatory research and course development in Lebanon and Uganda and extensive work online. The teaching runs over two 15-week semesters with 40 students split between digitally equipped learning centres in Kampala and the Kiryandongo refugee settlement. The curriculum for Foundations for All emerged from the programme team itself distributed across these three institutions.

The students represent a range of ages, genders and religions and come from nearby countries such as South Sudan, Rwanda and the Democratic Republic of the Congo, as well as disadvantaged members of host communities. They speak a range of languages, including French and English. They have experienced a range of displacement journeys and collectively represent a diverse set of learning and support needs. Many students have never used a computer. This context of limited financial resources and technical skills, and experience of displacement shaped the design of the programme as this paper will discuss.

Due to the uneven nature of technological ownership amongst the student cohort and their distribution in two separate locations (Kampala and Kiryandongo), two learning centres were developed under the guidance of the Refugee Law Project and equipped with dedicated laptops, wifi connectivity, and other instructional materials. Two teams of tutors drawn again from the Refugee Law Project were assigned to these learning centres to lead the teaching of their respective subject. Each of these tutors was also part of a course team, consisting of members from each institution (Refugee Law Project, American University of Beirut, and the University of Edinburgh) who were responsible for developing the content of their respective courses.

Learning Design, Curriculum, and Platform

Foundations for All is based on a collaborative, distributed and tailored design and teaching model. The teaching blends digital lectures, discussion boards and resource lists with face-to-face teaching such as seminars and tutorials. Support is offered by course teams including tutors, Mastercard Foundation Scholar interns and members of each institution. The curriculum consists of courses in Mathematics, English, Study Skills, Digital Skills and Understanding Myself and Others (a psychosocial support program), delivered across two semesters of 16 weeks each (March to June, and then late

July to October). The courses are delivered via a blended learning model, primarily using a platform called Kolibri that works well in areas of low connectivity, and classroom teaching from tutors. The courses are designed to prepare students to take the Makerere University Mature Age Entry Exam (currently anticipated in December 2021) and other relevant scholarship and University entrance exams, as well as for other exit points such as employment and community work.

Curriculums for these courses were developed from 2019-2021 by teams spanning the Refugee Law Project, the American University of Beirut, and the University of Edinburgh. These teams included the course organizer, the course tutors, 1-2 other Foundations for All team members to provide feedback and additional curriculum development support, and a Mastercard Foundation Scholar "course assistant" recruited to assist each course development team with collating resources and acting as a 'critical friend' during their conception and implementation. These course teams reported at intervals to the larger programme team to ensure that coherence was maintained through the programme development process.

Many teaching materials have been uploaded on to Kolibri, an open-source platform designed for making online educational content available offline, a functionality that has proven particularly critical in establishing learning continuity during Covid lockdowns (Toquero 2021). Kolibri can be set up on a range of hardware including Windows, macOS, and Linux (including Raspberry Pi) computers (Koomar et al 2020). Kolibri is installed onto a local device, and imports channels of content at intervals or when connectivity is at its greatest. Learners can interact with Kolibri offline, directly from that device or from a nearby client device that is connected to it while replicating an online Learner Management System user experience. Kolibri includes an extensive library of preloaded content, as well as providing the option to upload new teaching materials such as videos, readings and information sheets, and even interactive elements such as quizzes into dedicated course channels that each learning centre could then access. Tutors can tailor their weekly lesson plans and teaching to fit the classroom setting, their particular students, and the delivery speed at which they are working. By combining the resources from the Kolibri repository with the ones specifically developed for the context, courses draw on a wide variety of material to enrich their learning.

Kolibri has been used to some educational effect in Uganda and beyond. For example, government schools in Uganda during lockdown in their use of Kolibri noted significant potential in augmenting education in resource-constrained environments (Kabugo 2020). Cruz et al (2021) note the role of platforms like Kolibri in empowering learning communities through access to open educational materials with minimal technological requirements; this was especially true in the case of Foundations for All where tutors downloaded new content created by the course teams at weekly intervals for use the next week.

Limited and sporadic connectivity, however, had made it difficult at times for the students and tutors to download the materials from and upload the materials to Kolibri. As is common during the introduction of blended learning methodologies and tools, there has been varying levels of uptake among tutors, and an ongoing need to support tutors in becoming more comfortable with the tool and integrating it into their teaching. The tutors have nonetheless shown enormous initiative in sharing relevant materials via social media and email when they have been unable to access the computer-based online versions.

4: Pedagogy and our perspectives on blended learning

The following represents a selection of themes emerging from our experiences on the Foundations for All programme that might inform pedagogical responses to both teaching with digital technology and teaching in emergency, remote periods for all levels of education. Indeed, it is necessary to see these themes as increasingly essential to all educational programme design informed by digital technology, particularly in periods of discontinuity.

Psychosocial support is vital: Any programme involving refugee students must have integrated and extensive psychosocial support. The Refugee Law Project has developed a dedicated, unaccredited module entitled Understanding Myself and Others, provided training for tutors to support students and created a system for effective referrals to other services. All courses are designed according to key principles of social justice, mutual respect, equity and inclusion to create supportive and non-hierarchical learning environments.

The Understanding Myself and Others course is foundational to both the Foundations for All curriculum and the programme's overarching design and ethos. The Foundations for All team, inspired and informed in particular by Refugee Law Project's extensive experience supporting mental health among displaced populations, recognises that programmes involving refugee learners must have integrated and extensive psychosocial support. Previous work by the Refugee Law Project makes a direct link between student wellbeing and their ability to benefit from academic learning, something also suggested by other research (e.g. de Wal Pastoor, 2015; Stewart et al., 2019). The Refugee Law Project therefore drew on this experience to develop this dedicated, unaccredited course - Understanding Myself and Others - for all students enrolled in Foundations for All. RLP also provided ongoing training for tutors to support students and a system for effective referrals of students to other services. More broadly though, all courses have been designed according to key principles of social justice, mutual respect, equity and inclusion in order to create supportive and non-hierarchical learning environments. The benefits of the Understanding Myself and Others course have already been noted by tutors on the course. Students have shared examples of how they have translated discussions from this course into their own lives, such as through allocating more time to friends and families and employing strategies to communicate more effectively with others. The course content is helping them to manage their stress, both at home and school.

Learners are critically engaged with the differences between them, and how this affects their learning experiences, though there are still challenges as well as opportunities resulting from the wide range of cultures, ideas and behaviours present in the classroom. The classes are nonetheless extremely interactive, with refugee learners and host learners generally being extremely friendly and respectful towards each other. Learners have also opened up to sharing traumatic experiences. In the Kampala Learning Centre, counselling sessions have been held with four learners to discuss anxieties around the course, conflicts with family members and work-related stressors. During the selection exercise for potential students in Kiryandongo in early January 2021, five prospective students were referred for counselling during the interviews with anxiety and worry due to a missing parent, trauma, divorce and minimal family support, academic distress, and career guidance. Since the inception of the programme, the Kiryandongo study centre has organised counselling sessions for 10 learners with most of them reporting family stress, academic stress, and trauma from what

happened to them during the war. These counselling sessions are organised around the teaching scheduled for Foundations for All to ensure that students can receive support while continuing to attend classes and maintaining their academic goals. Due to the trust that Foundations for All tutors have built with their students, the programme has thus also provided an important space through which students can be referred to appropriate services and support.

The programme has also referred students to services both within and outside of Refugee Law Project when they have required support that cannot be provided through the curriculum or by Foundations for All tutors. This has become more necessary as in the process of getting to know students better, and particularly through the Understanding Myself and Others course, students have felt more comfortable sharing substantial psychosocial issues. The counselling techniques used are trauma focused cognitive behaviour therapy, person-centred approaches, solution-focused grief therapy and basic psychological first aid techniques. Students have commented that the content for Understanding Myself and Others is appropriate and relevant, and it is delivered in a variety of ways including through group work, role plays, lectures, group discussions and independent study.

Set clear expectations: Learners must understand the programme goals, and what pathways are available after taking the courses. The academic content must give students a reasonable chance of passing relevant higher education exams, the closest to home for learners in this case being the Makerere University Mature Entry Exam, which focuses on literacy, numeracy and specialist subject areas. While the Foundations for All pilot is unaccredited, students consulted during programme development reported that they would like to see further iterations of Foundations for All to carry internationally recognised credit. Before starting the course, all the successful learners were given admission letters and asked to sign a contract that clearly detailed what the course would offer. This was designed to ensure that student expectations were aligned with those producing and implementing the programme. There is also a danger that digital/ blended courses, and particularly those without formal accreditation, are taken less seriously as learning environments. Through formalising the learning relationship through a stipend, however, we hoped to show the students that this is a rigorous course taken seriously by the instructors and students.

Collaboration and open communication have been key to the successful design and implementation of Foundations for All. The course design teams speak regularly, primarily through Whatsapp groups but also through regular online team meetings, to make sure that all team members are informed about the progress and challenges associated with the ongoing delivery of Foundations for All. We have recognised the complementary strengths and resources that individuals within each team can bring, in particular given varying access to a reliable internet connection and to teaching and academic resources, and have drawn upon these to support the delivery of the programme in Kampala and Kiryandongo. We also realised the importance of ensuring that certain positions were filled by known experts in their fields, such as the Maths tutors, to maintain the academic rigour of the course's delivery and have relied upon specialist teams within Refugee Law Project - such as their IT team - to provide much-needed support for the technical dimensions of the programmes' set-up and delivery.

Keep content relevant: the promise and peril of OER: Courses in English, study skills, digital skills, mathematics and numeracy, and a unique psychosocial support module have been designed to equip

students with skills and knowledge that will assist them in accessing and succeeding in higher education. The curriculum is contextually and culturally relevant, especially important if reusing or adapting open educational resources (OER) from universities in the Global North, which can serve to reinforce a Western-centric perspective of what constitutes knowledge (Almeida 2017) and mitigate social inclusion and the empowerment of Foundations for All tutors and students, groups that might otherwise be excluded from knowledge production (Jhangiani & Biswas-Diener, 2017). The Foundations for All team created contextually and curriculum-aligned OER content and drew from additional contextually-relevant OER (largely from the Kolibri platform) specifically for the learning needs of this particular student group, a practice that sits at odds with a scaling of education provision but is consistent with practice emerging from the research (Arinto et al 2017).

Prioritising student-centred needs and approaches: the Foundations for All programme was conceived and designed to respond to the learning needs of students that have experienced instability, requiring in turn a pedagogical approach that was rooted in agility. This was amplified by the pandemic and the repeated openings and closures that it put in motion.

Foundations for All is committed to supporting student's diverse practical and psycho-social needs, which has implications for the design of the courses. Tutors have had to contend with diverse learning speeds and aptitudes, which vary week to week based on student's changeable responsibilities and situations, thus requiring a flexible approach to content delivery and assessment. For the Maths course, for example, there is an extremely wide range of pre-existing knowledge among the students, which has required the tutors to provide remedial resources like sample papers and additional exercises for practice to some students in order to address some gaps in fundamental knowledge. The teaching has also progressed at different speeds across the two sites, reflecting holidays/disruptions as well as the different baseline competencies of the students. Students and tutors have requested more time for certain courses than was originally allocated. English for Academic Purposes is one example, where the time assigned for the teaching has been insufficient for the students to effectively work through the rich and detailed materials provided. Many of the materials are also digital, which the students have worked through at a slower pace than hard copies.

We have seen the importance of developing and providing flexible material that enables tutors on the ground to respond to student's needs. Hosting 'toolkit' style material on Kolibri which can then be adapted by tutors has yielded encouraging results. This has ensured that the material can be adapted to cope with technical challenges as well as a range of abilities/ experience across the two sites. Learners, tutors and course organisers are nonetheless learning how to use a new learner management system, which has raised issues that are being resolved on an ongoing basis.

Flexible and adaptable design, however, has required open and clear lines of communication between course organizers, tutors on the ground, and others involved in curriculum design and delivery. There are over 15 people involved in teaching across the five courses at two sites. To ensure a consistent approach for students, as well as to informally monitor and improve the curriculum, the regular team meetings and other forms of interaction about the educational programme have been very valuable. Each course team also has at least monthly meetings as well as active whatsapp groups where collaborative problem-solving can take place.

In order to prioritise collaborative development processes and to include Mastercard Foundation and refugee-background Scholars as team members - which is central to the ethos, methodology and outcomes of the project - also requires investment of staff capacity and an adjustment to longer timeframes. Engaging in equal and participatory collaboration with team members in different roles across the three institutions -- including tutors, Mastercard Foundation and refugee Scholars, faculty members, Foundations for All programme participants, and staff administrators -- is nonetheless fundamental. We are committed as a team to ensuring that both our research and practice (manifested in the Foundations for All program) are informed by key stakeholders and especially by perspectives that are often left out -- those of students from disadvantaged and refugee backgrounds and the front-line practitioners and educators who work with them. This approach links in with wider decolonising movements in education and beyond which suggest that learning design and content should be contextualised rather than dominated by Western institutions, and universities should include knowledge systems and approaches developed in the Global South (Pimblott, 2020). We suggest that our approach, which prioritises the experience and expertise of Universities in Uganda and Lebanon as well as the refugee learners themselves, exemplifies this aspect of the decolonization agenda.

Blended learning: Account for uneven connectivity and capacity: Our teaching materials are uploaded on to Kolibri, an open-source platform designed for making rich online educational content available offline. Kolibri includes an extensive library of preloaded content, as well as providing the facility to upload new teaching materials such as videos, readings and information sheets, and even interactive elements such as quizzes. Tutors can customise the weekly lesson plans and teaching to fit the classroom setting, their particular students, and the delivery speed at which they are working. There is a digital divide amongst the cohorts, which is most notable between students in Kampala and those in Kiryandongo, with the Kampala students in general having more digital literacy and personal access to hardware and internet. Some students would like to access material online outside of the learning centres through their smartphones. To address the needs of students who do not have personal access to hardware and internet, the learning centres have been opened for the whole day so that students can access the laptops and internet there, and a number of students, especially in Kiryandongo, are making use of this time. In light of local lock-downs where physical access to the Learning Centres is not possible, the course teams have made provisions to create and curate resources which are then distributed to learners for remote access.

Without careful consideration, employing the digital in teaching and learning as the pandemic has made a necessity will ultimately impact issues of justice and social inclusion. The 'unequal provision of out of school education through the digital platform discriminates upon the poor families in their quest for basic education as they cannot afford to purchase the digital infrastructure to equally learn from home just as their counterparts of means hence not giving them equal opportunity and this perpetuates inequalities' (Ngwacho 2020). The Foundations for All programme, being rooted in the very ideas of social justice and inclusion yet bound to some degree due to the pandemic in engaging with the digital, has sought to alleviate this in several ways and would offer recommendations for other ways this might be alleviated. First is the organisation of the dedicated learning centres, the acquisition of the laptops therein, and the use of Kolibri as a learning platform which allowed for some offline or local area network (LAN) learning activity to take place. This was disrupted by the

pandemic and the lockdown that was put in place in Uganda in June-August of 2021, necessitating the investigation of other measures to ensure connectivity.

Second is that it is is critical to equip learners with the skills needed to fully engage with digital materials and platforms and to do so requires a physical environment conducive to this. As such, our learning centres are open all day: in the morning they are used for classes, but they remain open in the afternoons to provide students with an opportunity for independent study using the laptops. On Fridays, when there are no classes, the learning centres are open from 9-4pm for the students to work on their assignments independently.

Provide mentorship, explain university study, and provide practical advocacy: Foundations for All students have the opportunity to pair with volunteer mentors, who are students already enrolled in courses as Mastercard Foundation Scholars, a scholarship aimed at talented African students who are financially disadvantaged, at American University Beirut, University of Edinburgh, and Makerere University. This virtual peer-to-peer support provides opportunities for mentors and mentees to enhance their personal development through learning from each other.

We have continued to draw on relevant pedagogies around refugee access to higher education. An important learning has been the need to demystify University study and to be very explicit about specialised knowledge. One hidden barrier to higher education is the implicit nature of university practice, terminology and norms. Students with high social capital often have these knowledges, whereas students form non-typical backgrounds (including refugees but also some adult learners, students in incarceration or other controlled environments, and students from particular socio-economic classes) are excluded from such knowledge. We have learned from this access literature to ensure that we make university 'legible' and explicit to Foundations for All students, such as through the guest talk in Study Skills which explained university norms and practices.

It is key to demystify university to first-generation students by making explicit the skills, norms and practices that surround it (Loads, 2005). In all our resources, we stress that it is legitimate to receive support with skills such as using digital tools, organising and planning studies, and critical thinking and writing. Though the course has significant online components, learners were informed about the programme through a mix of adverts circulating on social media and physically posted in strategic places usually accessed by both refugees and hosts in Kampala and Kiryandongo. In places with lower internet prevalence and digital literacy, it was important to engage those who were not already sourcing knowledge and information from online platforms. Practical assistance must be provided to ensure students have access to study facilities, IT and connectivity, as well as advocacy and support to navigate the complexities of higher education entry and scholarship availability.

5: Conclusions and recommendations

Power relations in refugee access to higher education matter

In the course of our research we have interacted with multiple university administrative processes and procedures in order to shape Foundations for All learning outcomes in ways which will meet local and international University admissions. These interactions have suggested several challenges for University bureaucracies, especially wealthy and powerful institutions in the Global North, in improving refugee access to higher education. In this paper, we have proposed a distinction between

'thick' models of refugee blended learning programmes and 'thin' models, and in designing and implementing Foundations for All we have drawn on research which cautions against simply offering reused online educational content from the Global North without adapting for context (however well-meaning these free offers might be). However, the provision of a thick model requires substantial time and investment to work in partnership with experts in refugee education and psychosocial support to develop content. At a time when university teachers in Western institutions are burdened with increasing workloads, this presents a further challenge. In addition, a model like FFA requires team members who are willing to engage with decolonial pedagogies, again requiring specific expertise and resources.

We also suggest that admissions staff members for target institutions be involved at early stages in creating refugee access programmes, which may lead to tensions between contextually-relevant teaching and international admissions standards, as well as time and resource pressures on admissions teams. Finally, but importantly, we also note that many of our Foundations for All students have asked us about local and international scholarships. While we can offer our support to find and apply for existing opportunities, we note that there are very few available. We suggest that if Universities are serious about refugee access to higher education and the role that this can play in decolonisation ambitions, then much more investment needs to be made into dedicated access programmes and meaningful, funded pathways for refugee students to continue their education.

Evolving sociotechnical contexts and programme responsiveness matter: this has significant impact on teaching and learning in these contexts

Throughout the period of time (2019-present) that the Foundations for All programme has been conceived, co-designed, and implemented, it has evolved to align with the contextual realities of Kampala and Kiryandongo (and more broadly with the extended course teams in Lebanon and Edinburgh). These contextual realities have shifted considerably in this timeframe as has the way that blended learning has been structured and positioned in response to them. The learning design process acknowledged the contextual realities of ownership, access, and use of ICTs within these student cohorts and focused activity on two, purpose-built, learning centres in Kampala and Kiryandongo. This further validated the already held position within the programme team of the necessity of onsite tutoring for the courses in the programme.

However, the Semester 1 activities being curtailed in June 2021 as Uganda went into national lockdown as a result of Covid-19 forced a rethinking of how the learning of the Foundation for All programme might be maintained despite the lack of access to the learning centres, the tutors, and the technologies contained therein. Adjustments were made: Kolibri self-study materials were provided for those students with technology, stipends were reworked to address mobile data costs, mobile devices were secured for those without any access to technology, and course designs were adjusted to allow for more asynchronous work to complement synchronous activity. Despite these adjustments, we seek to maintain a 'thick' model of refugee blended learning design, one where the tutors are 'present', context remains contextually relevant, and psychosocial support is woven throughout. We suggest that programme teams providing blended learning in evolving contextual realities need to be responsive to these evolving sociotechnical contexts in their design.

Psychosocial support and designing for an ethos of care matters: extending the provision: the pandemic has surfaced the need in education broadly for the need for psychosocial support embedded within blended learning. There is growing evidence of psychosocial support being provided in pandemic educational responses and this is increasingly being enacted in the digital. The MANODARPAN project in India is illustrative of a national level effort to provide psychological support to students, counseling services, online resources, and a helpline (Sharma 2021). In Kenya, there are calls for the Ministry of Education to develop content on COVID-19 psychological support awareness and safety measures to disseminate to schools and universities, and to strengthen counseling departments and programmes in schools (Ngwacho 2020); in Turkey dedicated psychosocial support mechanisms for students are being augmented at the national level (Mahmut 2020).

Yet these are national level initiatives or broad, often ministerial, calls to action rather than a discrete programme-level psychosocial provision as the Foundations for All programme felt necessary and implemented. We believe this has significance for all teaching and learning through the digital in this pandemic period and beyond, particularly in the reformulation of digital pedagogy and curriculum around an ethos of care; care itself, often equated as intentional emotional support in education enacted pedagogically (Busteed 2015). An ethos of care and a range of pedagogical practices designed to support this ethos has been found to mitigate the feelings of isolation, disempowerment, and anonymity that can accompany digital learning (Rivera Munoz, Baik, and Lodge 2019; Rose 2017). Burke and Lamar (2021) in advancing an online pedagogy of care presents a position of teaching and programme design that aligns neatly with the Foundations for All programme:

"An online pedagogy of care must be orientated towards a compassionate, student-centred approach, acknowledging the complexities of students' lives and providing responses that support student learning. Such responses may include offers of additional phone or video-link consultations, extensions for assessment, awareness that online learners will approach their learning with greater flexibility, and assisting in tailoring study approaches for students with unique learning needs." (2021: 607).

It is our position that such a care-oriented ethos, one that provides a diversity and flexibility in its approaches to addressing a wide range of student needs, is critical to any sort of teaching and learning in periods of emergency or disruption, pandemic or otherwise.

References

Abdi, F. A. (2016). Behind Barbed Wire Fences- Higher Education and Twenty-first Century Teaching in Dadaab, Kenya. Bildhaan- An International Journal of Somali Studies, 16(1), 8.

Adaku, A., Okello, J., Lowry, B., Kane, J.C., Alderman, S., Musisi, S. and Tol, W.A., 2016. Mental health and psychosocial support for South Sudanese refugees in northern Uganda: a needs and resource assessment. *Conflict and Health*, *10*(1), pp.1-10.

Ali, G., Buruga, B. A., & Habibu, T. (2019). SWOT analysis of blended learning in public universities of Uganda: A case study of muni university. J, 2(4), 410-429.

Almeida, N. (2017). Open educational resources and rhetorical paradox in the neoliberal univers (ity). Available

https://academicworks.cuny.edu/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1143&context=ny_pubs.

Arinto, P., Hodgkinson-Williams, C., & Trotter, H. (2017). OER and OEP in the Global South: Implications and recommendations for social inclusion.

https://library.oapen.org/bitstream/handle/20.500.12657/29431/171204-AM-ROER4D-combined-Web.pdf?sequence=1#page=592.

Awidi, S. J., & Quan-Baffour, K. (2021). Situating Adult Learning and Education in Refugee Livelihood Adaptation and Progression Toward Self-Reliance: The Case of Refugees in the Kyaka II Settlement in Southwestern Uganda. Adult Education Quarterly, 71(2), 148-165.

Bhagat, K. K. (2020). The Impact of Blended Learning at the Uganda Management Institute. Available: http://oasis.col.org/bitstream/handle/11599/3625/2020_Bhagat_Impact_of_Blended_Learning.pdf?sequence=1&isAllowed=y

Buluma, A., & Walimbwa, M. (2021). Blended learning pedagogy and the development of digital competences among teacher trainees in a predominantly face-to-face teacher education program. SN Social Sciences, 1(4), 1-30.

Burke, K., & Larmar, S. (2021). Acknowledging another face in the virtual crowd: Reimagining the online experience in higher education through an online pedagogy of care. Journal of Further and Higher Education, 45(5), 601-615.

Busteed, B. 2015. "The Magical Elements of College Linked to Long-term Success in Work and Life." About Campus 19 (6): 2–9. doi:10.1002/abc.21173.

Crea, T. M., & Sparnon, N. (2017). Democratizing education at the margins: Faculty and practitioner perspectives on delivering online tertiary education for refugees. International Journal of Educational Technology in Higher Education, 14(1), 43. Available:

https://www.biomedcentral.com/openurl?doi=10.1186/s41239-017-0081-y

Crea, T. M. (2016). Refugee higher education: Contextual challenges and implications for program design, delivery, and accompaniment. International Journal of Educational Development, 46, 12-22. https://doi.org/10.1016/j.ijedudev.2015.11.005

Creelman, A., Witthaus, G. and Rodriguez, B.C.P., 2018. Refugees' educational resources—RefER project final report. Open University. Available at: RefER Project Final Report.pdf (open.ac.uk)

Cronje, J. (2020). Towards a new definition of blended learning. *Electronic journal of e-Learning*, 18(2), pp. 114-121.

M. Cruz, X. M., E. Honrado, J. L., Joseph C. Libatique, N., L. Tangonan, G., M. Oppus, C., M. Cabacungan, P., ... & Cruz, J. G. (2021, January). Design and Demonstration of a Resilient Content Distribution and Remote Asynchronous Learning Platform. In Adjunct Proceedings of the 2021 International Conference on Distributed Computing and Networking (pp. 98-103).

de Wal Pastoor, L., 2015. The mediational role of schools in supporting psychosocial transitions among unaccompanied young refugees upon resettlement in Norway. *International Journal of Educational Development*, *41*, pp.245-254.

Dridi, M. A., Radhakrishnan, D., Moser-Mercer, B., & DeBoer, J. (2020). Challenges of Blended Learning in Refugee Camps: When Internet Connectivity Fails, Human Connection Succeeds. The International Review of Research in Open and Distributed Learning, 21(3), 250-263.

Driscoll, M., 2002. Blended learning: let's get beyond the hype. E-learning, 1(4), pp.1–4.

Jansen, J. ed., 2019. Decolonisation in universities: The politics of knowledge. Wits University Press.

Jhangiani, R. S. & Biswas-Diener, R. (Eds.). (2017). Open: The philosophy and practices that are revolutionizing education and science. London: Ubiquity Press. Retrieved from https://www.ubiquitypress.com/site/books/10.5334/bbc/

Kabugo, D. (2020). Utilizing Open Education Resources to Enhance Students' Learning Outcomes during the COVID-19 Schools Lockdown: A Case of Using Kolibri by Selected Government Schools in Uganda. Journal of Learning for Development, 7(3), 447-458.

Kintu, M.J. and Zhu, C., 2016. Student characteristics and learning outcomes in a blended learning environment intervention in a Ugandan University, Mountains of the Moon University and Vrije Universiteit Brussel. The Electronic Journal of e-Learning, 14(3), pp.181–195.

Koomar, S., McBurnie, C., & Allier-Gagneur, Z. (2020). Effective Teacher Education in Low-Connectivity Settings. Available:

https://docs.edtechhub.org/lib/UQSMRFBF/download/3AV467A3/Koomar%20et%20al.%20-%20202 0%20-%20Effective%20Teacher%20Education%20in%20Low-Connectivity%20Se.pdf.

Loads, D., 2005, June. Signposts to success: an academic literacies approach to orientation. In Napier University staff conference: Using the Curriculum to Address the Needs of Individual Students. Napier University.

Mahmut, Ö. Z. E. R. (2020). Educational policy actions by the Ministry of National Education in the times of COVID-19 pandemic in Turkey. Kastamonu Eğitim Dergisi, 28(3), 1124-1129.

Mahmood Mamdani (2016) Between the public intellectual and the scholar: decolonization and some post-independence initiatives in African higher education, Inter-Asia Cultural Studies, 17:1, 68-83, DOI: 10.1080/14649373.2016.1140260

Nakayama, M., Mutsuura, K. and Yamamoto, H., 2016. Student's reflections on their learning and note-taking activities in a blended learning course. Electronic Journal of e-Learning, 14(1), pp.43–53.

Ngwacho, A. G. (2020). COVID-19 pandemic impact on Kenyan education sector: Learner challenges and mitigations. Journal of Research Innovation and Implications in Education, 4(2), 128-139.

Nortvig, A.-M., Petersen, A.K. and Hattesen Balle, S., 2018. A literature review of the factors influencing e-learning and blended learning in relation to learning outcome, student satisfaction and engagement. *The Electronic Journal of eLearning*, 16(1), pp.46–55.

Onguko, B., 2014. JiFUNzeni: A Blended Learning Approach for Sustainable Teachers' Professional Development. Electronic Journal of e-Learning, 12(1), pp.77–88.

Refugee Law Project (2021). Relevant Resources. Available:

https://www.refugeelawproject.org/index.php?option=com_sppagebuilder&view=page&id=28&Ite_mid=223.

Rivera Munoz, C. A., C. Baik, and J. M. Lodge. 2019. "Teacher and Student Interactions in the First Year of University." Journal of Further and Higher Education 1–13. doi:10.1080/0309877X.2019.1664731.

Sharma, A. (2021). Education through ICT Initiatives during the Pandemic in India. Available: https://csd.columbia.edu/sites/default/files/content/docs/ICT%20India/Papers/ICT_India_Working_Paper_42.pdf.

Stewart, J., El Chaar, D., McCluskey, K. and Borgardt, K., 2019. Refugee student integration: A focus on settlement, education, and psychosocial support. Journal of Contemporary Issues in Education, 14(1).

Streitwieser, B., Loo, B., Ohorodnik, M., & Jeong, J. (2019). Access for refugees into higher education: A review of interventions in North America and Europe. Journal of Studies in International Education, 23(4), 473-496.

Toquero, C. M. (2021). Emergency remote education experiment amid COVID-19 pandemic. IJERI: International Journal of Educational Research and Innovation, (15), 162-176.

United Nations High Commissioner for Refugees. (2016). Left behind. Refugee education in crisis. UNHCR. Retrieved from https://www.unhcr.org/59b696f44.pdf