

Borderless Higher Education for Refugees: Pedagogical Research Area Literature Review

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I. Introduction

The following review was prepared to support the Pedagogical Research Area of the Borderless Higher Education for Refugee (BHER) project. The objective of the pedagogical research is to explore models that support the participation of refugee populations in higher education. In order to achieve this aim, BHER has designed a program that consists of three “stackable” modules; (first) an academic bridging program will prepare candidates with the language, research, and computer competencies required to successfully function in a (second and third) “work and learn” primary and secondary teacher education program that leads (fourth) to additional university diploma options. Program opportunities will also be available to the Kenyan nationals who live and teach in the town of Dadaab. BHER brings to into partnership Kenyan and Canadian universities and governmental and non-governmental organizations from both countries. Kenyatta University, the primary university partner, is establishing an online and distance education learning centre in Dadaab. BHER’s focus on teacher education is strategic in that increasing the pedagogical skills and knowledge of the mostly untrained national and refugee teaching staff is expected to improve academic achievement at all levels of student learning. With the intention to inform the four key areas of concern to the pedagogical research team, the literature reviewed was analyzed with the following themes and sub-questions in mind:

1. Potential Programs

- *What are the kinds of certificate, diploma and degree programs of interest to community members?*
- *What are the educational needs of the community?*

2. Curriculum Content

- *How do we localize the curriculum in order to take context into account*
- *How do we work with (and sometimes against) traditional knowledge?*

3. Pedagogical Methods

- *What approaches to teaching and learning are appropriate (do concepts like “inquiry-based learning” or “inclusive education” make sense in this context?)?*

- *What could it mean to create learning resources and materials in a context where conventional resources and materials (books, paper, pencils etc.) are in short supply?*
4. Technological Innovation
- *What are the opportunities for technological innovation?*
 - *What kinds of technological infrastructure are already in place?*
 - *How much do community members use what is already available?*

II. Methodology

The literature chosen for this review draws on three lines of research: teacher education in development, education in conflict-affected and fragile states (CAFS), and distance and on-line higher education. Searches for recent publications on these topics were conducted through the York University Library Catalogue, Scholar's Portal, Proquest, the ERIC database, and Google Scholar. The literature selected includes books, peer-reviewed journal articles, and on-line reports/papers from universities/major philanthropic organizations published after 1990. Empirical and more recently published studies that focus specifically on the Dadaab context are given priority. Limitations of the review include that it was conducted solely using resources available in Canada. I did not have access to African University databases or relevant reports that have not been made available online. Few of the articles reviewed were written by African scholars —though an effort was made to highlight ones that were—and only one report was written by a scholar with refugee experience (to my knowledge). The majority of the literature was descriptive rather than evaluative and tended to focus on quantitative inputs and outputs rather than qualitative outcomes and impacts. This observation is true for recent evaluations of education in Dadaab. Formal and informal educational opportunities are described but pedagogical practices and their associated outcomes are not evaluated. Moreover, I have not read a report about what Somali refugees living in Dadaab think about *Education for All* in relation to, for example, Islam, notions of democracy, human rights, culture and traditional livelihoods. Further, while many reports focused specifically on education in the Dadaab camps nothing is known, from the

literature reviewed, about the educational conditions, practices, needs, hopes, and ambitions of the residents of the town of Dadaab. Areas that require additional review include: a) approaches to teaching and learning in resource deprived contexts and b) how does -and should- the education community in Dadaab respond to the particular psychosocial needs of refugee children who are likely to have experienced trauma as a result of displacement (either directly or indirectly), who may not be living with parents or family, and are impacted by additional effects of living in a conflict-affected area. The structure of the review corresponds to the thematic areas. Recommendations for practice and future research are highlighted.

III. Potential Programs – Certificates, Diplomas, Degrees

Contextual Overview

Teacher education now lies at the heart of all development schemes. It has already been recognized as one of the major areas of focus for poverty reduction, economic progress and social and cultural development. Development initiatives...affirm the critical importance of education and the role played by teachers. ~ Teferra & Skauge as cited in Thakrar, Wolfenden & Zinn, 2009.

The question of which educational programs (certificates, diplomas, degrees) BHER might design and deliver to Dabaab village and camp residents is inherently embedded in broader debates that concern the often contradictory impulses of globalization and internationalization within educations. Samoff & Carrol (2007) argue that education that takes an instrumental approach runs parallel to World Bank and IMF structural adjustment policies. They argue that it is important to imagine the end results of certain kinds of educational priorities and programs. Post-independence African nations invested heavily in higher education with hopes for an African intellectual Renaissance (Ntuli, 2002; Mamdani, 1994). Such investments were criticized for failing to explicitly serve the development needs of the nations. Funding patterns shifted to applied, vocational, functional and technical training centers and to primary education with the view that such investments would ultimately support global competition and

economic development. While it is true that preparing students for the world of work is an integral feature of education, it is worthwhile to diversify the labour force by including and valuing intellectual and creative work. Hanson (2010) distinguishes between the influences of globalization and internationalization on education. Globalization within education extends an economic neoliberal agenda that re-entrenches economic, cultural, and social divides; rather than leveling the proverbial playing field, such initiatives reinforce hegemonic and inequitable global power relations. Internationalization, on the other hand, is catalyzed by personal and social reflexivity and embraces intercultural exchange and mutual learning. Refugees consider education as hope, a “key to their future.” Gerstner (2009) reports that for refugees in Dadaab “education certificates are valued more highly than almost any other possession, and education is repeatedly mentioned as the most vital service provided in the camps” (p. 183).¹ The investment in education is tied to hopes for future sustainable livelihood opportunities. From this literature review, it is clear that securing a meaningful livelihood is a central concern of refugees and a defining motivation for pursuing education. This section outlines dominant themes in the relationship between the two.

Education for Livelihoods

There's a lot of problems and you can't say you can do something about everything, but I feel that education is one of the key things ...For someone [in the camps] the whole difference between succeeding in life and not succeeding (getting a D or a C rather than A) is just about getting the right tools – textbooks, teachers – that is all that is going to make the difference. That is where we think we can step in and give back. ~ Mahad as cited in Plasterer, 2011, p. 16.

Somalis, the vast majority of the population in the Dadaab refugee camps, are a communal people. Therefore, the ability to contribute, to give back, is tremendously important. Students and

¹ Gerstner adds that while refugees place tremendous significance on certificates “It is unknown how and if refugee’s certificates are recognized in third countries” (p. 189). They cannot legally work in Kenya and recent reports demonstrate how difficult it is for refugees to gain meaningful employment in Canada.

parents are motivated, in part, to pursue education because of the culture imperative to support each other as best possible (Plasterer, 2011). By preparing students for a livelihood, education is a future-oriented investment (Dryden-Peterson, 2011, p. 47; 2006). Both UNESCO (2011) and the INEE (2010) emphasize the need to understand the relationship between gainful employment and education: the need to reconcile “current and future livelihoods in both policy and its implementation cannot be ignored” (Dryden-Peterson, 2006, p. 82). For education to contribute to the alleviation of poverty, it is essential that it increases livelihood opportunities. INEE (2010) recommends a labour market analysis “to ensure that [education] programmes are relevant” (p. 76) within a specific context. Declines in poverty and declines in violence are positively correlated. The most recent *Education for All Global Report* (UNESCO, 2011) observes that “when higher levels of education are not matched by expanded opportunities...the resulting frustration can have the opposite effect” (p. 179). Kirk (2009), while emphasizing the need for providing official and internationally recognized certificates for educational achievements, cautions that high unemployment can reduce the value of the certificate. Mohamud (2010), witnessing the effect of seeing returned DAFI scholars waiting for employment after completing a university education, writes “the presence of the graduates with no paying job in the camps may in one way or the other act as an inhibiting factor to the performance of the schooling children” (p. 49). Similarly, a refugee youth with an article recently published by the Integrated Regional Information Network (IRIN) writes:

...these [unsatisfactory] employment conditions discourage those who are still in school. They complain that there is no need for them to go to class for twelve years and end up unemployed or working without dignity. Even the few who get diplomas and degrees remain underpaid. Under Kenyan law, refugees cannot move out of the camp, let alone access work permits (Hujale, 2011).

Mohamud (2010) theorizes that the lack of job opportunities contributes to the development a dependency syndrome. Not only does this situation unsettle community belief in the potential of education to offer “a way out” (Gerstner, 2009), but for the returned scholars it produces “a hundred hopes in the blues” (Mohamud, 2010). Kirk recommends that “efforts to ensure certification of learning need to be situated within more comprehensive policy and programme frameworks for displaced populations” (p. 54). In the context of Dadaab, young people have limited employment opportunities. The tremendous importance of linking education to the procurement of gainful employment is something that the BHER project team will need to give considerable thought going forward. With this caveat in mind, the next section provides a rationale for the argument that teacher education is a strategic investment for two reasons: 1) it will address the need for additional teachers; and, 2) it will spur job creation in other fields as a result of increased educational competencies.

Teacher Education

UNESCO (2011) reports that for *Education for All* to be achieved, 1.9 million teachers will have to be recruited – half of them from Sub-Saharan Africa (SSA). However, the need extends well beyond employing primary school graduates to lead students in didactic call-and-response lessons. Experts agree that “teacher quality matters more than any other single factor for student achievement, and significant training is required for teachers in order to foster the most effective teaching strategies” (Dryden-Peterson, 2010, p. 18). Provision of quality education defined as successful completion of schooling accompanied by acquisition of portable cognitive skills is positively correlated to enrollment and persistence. Hardman (2009) finds that formal professional teacher education improves the quality of “teacher-pupil interaction in whole-class, group-based and individual activities... [and it is] central to the process of enhancing teaching and learning as ultimately educational quality is obtained through pedagogical processes in the classroom” (p. 66). Students do not attend—or if they do attend, they leave—schools where learning outcomes are poor. Therefore, investment in teacher education is

critical. The need for trained teachers is immense. There is a high teacher turnover rate in the Dadaab refugee camps due to low pay and poor working conditions (Umbima, Koelbel, & Hassan, 2010). The recent UNHCR and CARE *Joint Review and Assessment of the Education Sector in the Dadaab Refugee Camps* (Umbima, Koelbel, & Hassan, 2010) finds that there is a need for improved and ongoing teacher capacity-building as well as increased psychosocial supports for teachers. Dryden-Peterson (2011) argues for increasing teacher incentives in order to promote retention. Lacking sufficient teacher capacity, the teacher-student ratios in a Dadaab primary school classroom can be as great as 1: 100 (UNHCR & CARE, 2009; Umbima, Koelbel, & Hassan, 2010). In Kenya, only 11.5 % of teachers in refugee camps have training. Dryden-Peterson (2011) explains that the minimum requirement to be counted as trained is 10 days of training. While still acknowledging that refugee teacher training and compensation is contingent on funding frameworks that are woefully inadequate, it is obvious that the need for trained teachers in Dadaab and SSA is tremendous. For refugees hoping to repatriate, teacher training is a portable and employable skill. UNESCO contends that access to education is critical to Somalia's future. However, "Somalia has the dismal distinction of having the world's highest proportion of primary school-age children not in school" (UNESCO, 2005 as cited in Moyi, 2012, p.24). Therefore, it is hard to imagine that the skills of teachers trained in Dadaab would not be put to good use in Somalia.

Specialized Teacher Education

The literature also suggests that there is an acute shortage of adult and school-based literacy teachers in both Kenya and Dadaab (UNESCO, 2011; Mohamud, 2010). The number of learners has increased but teacher training has not kept pace with the need. When students arrive to attend school in Dadaab their competencies are assessed. Pupils are often on par in math but not in English and are therefore placed in a lower grade level (Gerstner, 2009, p. 187). Training teachers specialized to support the accelerated student acquisition of the camp administration's official language would greatly benefit the recently arrived students and as a result they would not need to be separated from peers of their

chronological age. There is a diverse system of informal schools for specialized tutoring in Dadaab that specialize in the subjects with which students struggle. Private tuitions (similar in purpose and function to Canadian tutoring centres) are in demand for English, math, and Kiswahili which are felt to be the weakest subjects in the camps (UNHCR & CARE, 2009). Mohamud argues that secondary school graduates applying for scholarships abroad require additional instructional support to adequately learn English. There is only one TOEFL instructor who is shared by all students in the three camps. On regular occasion, transportation for the instructor is not available and this has significant impact on the students' English language progress. The joint assessment also reported a need for disability training and support as very few teachers are trained to accommodate students with special needs (Umbima, Koelbel, & Hassan, 2010, p. 25). Certificate and diploma programs that specialize in English Language Learning and special needs education would likely increase the livelihood opportunities of teachers with such training.

Tertiary Education

Refugees who have completed secondary school universally voice the desire to attend university. ~ Dryden-Peterson, 2011, p. 49

Hujale (2011) shares a lament common to refugee students living in Dadaab who are seeking access to tertiary education:

I completed my secondary education in 2009 and attained an [average] grade of C+, a grade that qualified me to join any university in Kenya. But all my dreams were shattered abruptly. There was no more! The authorities said even secondary education was a privilege for refugees, and there was no possibility of higher learning.

Mohamud (2010) reports that 95% of form four refugee graduates cannot access post-secondary scholarships. UNHCR receives between 20 -30 applicants per available DAFI scholarship (Dryden-Peterson, 2011, p. 49). Donors are not easily persuaded to fund post-secondary education in cases

where primary and secondary education is not accessible to all. However the desire for university education within the refugee community is only expanding with each cohort that graduates from form four.

The desire to attend university is again tethered to hopes for securing meaningful and adequately compensated work. Refugees believe that a university qualification will increase their chances of employment (Mohamud, 2010, p. 45); they are not wrong. However, certain university degrees offer higher chances of gainful employment than others. In fact, likelihood of employment has become a criteria for the scholarships that DAFI sponsors. As a result, Humanities degrees have declined because DAFI prioritizes funding “studies that are relevant to the job market and that would contribute to rehabilitation and development of the community and society at large” (Morlang & Watson, 2007, p. 26). A recent study of employment outcomes of fifteen years of the DAFI scholars reflect favourably on the likelihood that teacher education will result in employment. Morlang and Watson (2007) find that while only 8% of African DAFI scholars study education, 28% of all DAFI graduates are ultimately employed by the education/social services sector. 100% of African DAFI scholars with degrees in education and development found employment. Other areas with high employment rates include: engineering, agriculture, and computer science (Morlang & Watson, 2007). The most popular field of study for African DAFI scholars has been commercial and business administration. This field represents 20-25% of enrolment but graduate employment rates are lower than the fields above (Morlang & Watson, 2007).² The study reports that in 2006:

...twice as many DAFI scholars were enrolled in social and behavioural sciences. This may be in response to a demand for skills in post-conflict counseling and social mediation and development in refugee communities. A similar increase occurred with

² In the case of refugees in Dadaab, there may be an interest in commercial and business administration programs because refugees are permitted to pursue self-employment in Kenya. Additionally, if a refugee is self-employed in a host country that doesn't recognize refugees as citizens it is likely that there are few statistics to indicate outcomes of a commercial or business administration program of study.

mathematics and computer science, which is due likewise to a higher demand for information technology skills necessary to develop or restore infrastructure in a post-conflict society.

The possibilities of employment opportunities related to ICT and education are addressed in Section 7 – Technological Innovation.

While the DAFI evaluation is impressive in its results, there are real negative impacts to consider when DAF I scholars return to Dadaab educated and either cannot find employment or are underemployed. Mohamud (2010) recounts of DAFI scholars:

...on returning to the camps, they will not secure a paying job except the incentive employments with the agencies as there is no work permit for the refugees. Their redundancy in the camps frustrates everybody that had confidence in them as the paper-made diplomas and degrees don't make much difference in their lives. This is contrary to their earlier dreams that on completion of their university/ college studies, their lives will drastically; positively change by getting paying jobs (p. 48).

The link between education and future livelihoods is a theme that is consistently repeated in the literature. Richard and Bekele (2011) raise the concern that because “people have very high expectations that education will ensure future employment...at worst, the consequences of this expectation not being met may well exacerbate some types of conflict. And indeed, communities were vocal in their opinion that education was not yet delivering the expected results in terms of jobs” (p. 49). In providing certificate, diploma, and degree programs to Dadaab village and refugee camp residents, BHER should have a good sense of how such programs will contribute to the procurement of future employment opportunities that are relevant in both local and international contexts.

Educational Needs

To address the educational needs of the Dadaab town and camp residents, an analysis of the sector should take place in concert with that of other humanitarian organizations (INEE, 2010, p. 21). INEE asserts “coordination and collaboration between education and other emergency sectors are essential for an effective response that addresses the rights and needs of all learners” (p. 4). Presently multiple organizations do collaborate to provide education in the Dadaab camps. CARE International provides primary education and Windle Trust Kenya (WTK) provides secondary education. The World Food Program provides a school-based feeding program. The Norwegian Refugee Council runs the Youth Education Pack which provides vocational training to primary school graduates. The National Council of Churches of Kenya (NCCCK) provides health and peace education. The German Agency for International Cooperation (GTZ) runs environmental programs and offers health services. The Association of Volunteers in International Service (AVSI) provides teacher training and rehabilitates school facilities. Save the Children UK provides safe spaces for children and Handicap International supplies learning and mobility aids to children with disabilities. Umbima, Koelbel and Hassan’s (2010) recent joint review recommended the adoption of a regular coordination schedule.³

The camp context presents a particular challenge for comprehensively assessing the resident’s educational needs in terms of numbers. Even the latest reports on the sector are now out of date given the recent influx in arrivals. The best this review can offer is an overview of the trends. With the increased demand for education, it is unlikely that the conditions have improved or that the need has decreased. What the students in Dadaab need, like students anywhere else, and at every level of schooling, is quality education. The INEE asserts that access to education is only meaningful if the educational programs offer quality teaching and learning. INEE defines “quality education” as that which is “available, accessible, acceptable and adaptable” (p. 7). Dryden-Peterson extends this definition

³ We should ask if these meetings have been implemented.

by insisting that quality education must produce cognitive learning outcomes. She asserts that while quality education has been defined in the past in terms of inputs (student-teacher ratios, stats on number of students accessed, numbers of desks and textbooks, etc.), a shift is required in which outcomes are assessed.

Provision of 'Protective' Education

The Machel Report (1996) brought the impact of conflict on education to international attention and provided a foundation upon which an argument for including education in humanitarian relief efforts was built. She argued for peace education as a preemptive deterrent to conflict. Bush and Saltarelli (2000) describe education as having “two faces”: one which can instigate violence and one that can promote peace. Nicolai and Triplehorn (2003) recognized the potential for schools to provide students with psycho-social protection by offering normalcy and routine in the midst of upheaval. Dryden-Peterson (2011) cites the Executive Committee of the High Commissioner's Programme identification that “core protective factors in schools include adequate teacher/student ratios; elimination of humiliation, bullying and corporal punishment; and safeguards against sexual abuse and exploitation” (p. 29). Moreover, a situational conflict assessment should be conducted with respect to the content and structure of education “including curriculum, language, and relationships between actors; supporting peace education in all operations” (Dryden-Peterson, 2011, p. 65).⁴ She further and most importantly contends that protection involves more than accessing a physically safe space but that “protection must be linked to the core objectives of schools: teaching and learning” (Dryden-Peterson, 2011, p. 31).

In order to provide access to quality and protective education, head teachers must be equipped to support teachers reporting to her in the form of classroom observations and critical feedback (Dryden-Peterson, 2011, p. 53). Dryden-Peterson argues for the critical role formative assessment and

⁴ From the literature reviewed, it is not clear if such an analysis has taken place in Dadaab.

ongoing monitoring of progress plays in providing protective education – education where children learn. Formative assessments that are “conducted in a holistic, transparent and participatory manner” are advised by the INEE (2010, p. 35). Presently assessment is conducted through high-stakes testing. Without ongoing monitoring it is difficult to know how well students are retaining or comprehending their lessons. Dryden-Peterson shares an example of hearing a student recite a book by heart but when asked to read from a particular page she was unable to recognize a word. She proposes the implementation of early grade reading and math assessments (Dryden-Peterson, 2011, p. 28).

Infrastructure and Resource Needs

In addition to more teachers trained in pedagogical practices to support high-quality protective education, the educational needs in the camp are many. While primary school is free, drop-out rates are high and only 1/5 of students that graduate primary school (P1) go to secondary school (S1) due to lack of capacity (Gerstner, 2009, p. 186). Wright reiterates the finding that demand exceeds provision especially at the secondary school level.⁵ Graduation from Grade 8 does not ensure access to secondary education (Wright, 2010, p. 85). Hujale (2011) reflects on the experience of his friends in the camp: “those who didn't get the chance to go to high school had no chance. They were left stranded. Having nothing to do, most of them started abusing drugs that can be bought in the market. Many others must

have joined the militia fighting back home.” At all levels class sizes are big and therefore students do not feel supported (Wright, 2010,

After the results were released by the Kenya national examination council, UNHCR and its partners in Dadaab had to see how much funding was available and decide how many refugee pupils could be admitted to high school. It didn't matter how many qualified candidates there were. Out of more than 800 pupils who sat for the exams, only 120 were selected from Ifo camp to continue their studies. I was among the lucky ones. ~ Hujale, 2011

⁵ It is important to remember that while secondary education is free for refugees in the camps, it is not free for Kenyan Nationals. Tuition and ancillary fees to attend secondary education are a significant barrier all across Kenya. Many Kenyan students are forced to leave school after primary school because they cannot afford secondary school.

p. 71). Poor quality of education acts as a disincentive and contributes to increased numbers of school leavers (Wright, 2010, p. 70). Wright also endorses the implementation of a flexible admission policy that takes into account school disruption and provides additional supports for students who require accelerated learning in certain subjects in order to bring academic level and chronological age into alignment (Wright, 2010, p. 74). Supplies are in high demand including textbooks; at the primary school level the average textbook: student ratio was last reported as 1:24 (Umbima, Koelbel & Hassan, 2010). The Joint Assessment (Umbima, Koelbel & Hassan, 2010) identified the need for more primary and secondary schools with good facilities including latrine and water access (the last reported toilet ratio was 1:86; it should be 1:40).⁶ Additionally, there is a need for more schools so that students (especially girls) do not have to walk a long distance in hot sun (Wright, 2010, p. 56). Distance to schools deters parents from sending their children on what could be a dangerous walk for multiple reasons. The Joint Assessment estimated that in order to provide primary education for all students, they would need to be build 88 more schools (Umbima, Koelbel & Hassan, 2010). Since the time of that estimate the population has grown by nearly 100,000 people.

Schools for girls

Providing access to education for all presents unique challenges in the case of girls in Dadaab whose social roles are different than boys. Girls are traditionally assigned domestic responsibilities that take priority over formal education and interfere with the school attendance. In addition to chores before and after school, it is common for girls to experience complications related to female genital mutilation, difficulty in returning to school in the evening to participate in study groups due to safety issues, and early, arranged or forced marriages (Gerstner, 2009, p. 186). There is a need for female teachers. Dryden-Peterson reports that only 13.5% of refugee teachers in Kenya are women.

⁶ An educational reading specialist who works in rural Kenya (south of Nairobi) and Nairobi slums for the Mennonite Central Committee told me in a recent conversation that she had seen pictures of the schools in Dadaab and that they were “beautiful” in comparison to the facilities where she works.

Moreover, girl positive education should “offer flexibility in timing, venue, and curriculum, which accommodate the domestic demands, safety concerns, and relevancy requirements of parents” (Lewis and Lockhead as cited in Dryden-Peterson, 2010, p. 23). Wright identifies the need for resource libraries and study spaces that are safe for girls (p. 74). Mohamud (2010), a young male WUSC scholarship recipient, recognizes a need for increasing access to secondary education for girls. He says that members of his generation see the value, and actively support the provision, of improved access to high quality and protective education for girls. Where safety is a concern, Umbima, Koelbel and Hassan (2010) suggest that “block leaders and elder should support the establishment of community security patrols to ensure students (particularly girls) are safe on their way to and from school” (p. 40). Such community support would fulfill an additional identified requirement of protective and high quality education: community support and involvement.

IV. Curriculum Content

This section of the review responds to two questions. First, how might we localize the BHER teacher education curriculum in order to take context into account and second, how do we work with (and sometime against) traditional knowledge. I begin with an overview of the literature on curriculum design in complex emergencies, conflict-affected states, and education in displacement. A closer examination of areas relevant to the localization of primary and secondary curriculum in Dadaab follows: peace education, nomadic pastoralism, biophysical and built environment, language and traditional culture.

Overview

Primary and secondary schools in the Dabaab camps, operated by CARE and WTK respectively, follow the Kenyan curriculum, with eight years of primary education (Standard 1 to 8) and four years of

secondary (Form 1 to 4). The language of instruction and examination is English. When Somali refugees first arrived in Dadaab in the early 1990's they set up community schools which followed a Somali curriculum. However, because there was no formal education system in Somalia which could accredit the refugee student's learning, a decision was made in 1996 to certify the students through the Kenyan system (Gerstner, 2009, p. 187). This decision contradicts internationally identified best practices and has significant implications particularly with respect to language.

The INEE minimum standards recommend that in cases of displacement the curriculum adopted should have the goal of repatriation in mind: "curriculum policy should support the long-term development of individual students and of society and, for refugee populations, should be supportive of a durable solution, normally repatriation" (Sinclair as cited in Kirk, 2009, p. 56). This is consistent with UNHCR's preference for repatriation over local integration and resettlement. Moreover, where possible, the language of instruction should be the mother tongue as this is deemed to aid repatriation (Kirk, *ibid*). However, in protracted refugee situations like Dadaab, the INEE (2010) advises that students should be given the opportunity to learn the host language as "this enables them to function within the host community and to continue to access education and employment opportunities" (p. 81). In the case of Dadaab, English language proficiency does increase access to host country education opportunities but due to the policy of encampment it does not increase chances of employment.

The relationship between host and refugee communities requires careful examination especially with respect to conflict about and from education (Gichiru & Larkin, 2009; Dryden-Peterson, 2010; Richards & Bekele, 2011). In the event that a host country experiences large influxes of refugees whose presence puts additional demands on limited resources, the exacerbation or creation of conflict is possible (Dryden-Peterson, 2006, p. 81). Therefore, education must take into account both the conflict that caused refugee migration and the potential for conflict to emerge as a result of "languages, worldviews, ethnicities, and accompanying power structures" coming into contact (Dryden-Peterson,

2011, p. 59). Curriculum has the potential to ignite or quell conflict. Conflict exacerbates inequalities which work against aims to ensure protection through education. Curricula inscribe norms, common experiences, and collective cultural narratives that are intertwined with identity. The curriculum privileges and encodes social, generational, physical, ecological, cultural, geographic, economic and political ways of knowing. Moreover, “what is taught, especially in history classes, and how it is taught can strongly influence the ways students view their identity and the relationship of their ‘group’ to others” (UNESCO, 2011). Hujale (2011), a student in Dadaab describes his experience:

Throughout my primary education, I rarely heard about my home country. Most of my history classes were about Kenya and when we learned about East Africa, Somalia was a side note. I can list all the different tribes of Kenya and explain the country's history and political system, but I know almost nothing about the people, history and politics of my native soil. We memorized the Kenyan national anthem. I forgot that of my motherland.

Whether explicit or implicit, a curriculum that devalues a student’s cultural identity can act as a barrier to access. When a student cannot see themselves represented in the curriculum, when it lacks cultural relevance, it has the potential to produce a disincentive for students to pursue formal education. For the BHER project, it will be important to ask refugee incentive teachers how they respond to or adapt (localize) the Kenyan curriculum as this is not reported in the literature reviewed.

According to Bush and Saltarelli (2000) educational curriculum can have two faces and depending on standpoint it can be one of peace and one of conflict. Curricula have additional dimensions for refugees: one which faces “home” and one which facilitates either local integration or resettlement, all possibilities benefit from peace education. In order to minimize present and future risk, refugee education should be as adaptive as possible without threatening identity. Curriculum content should respect different views and perspectives.

UNESCO advocates that curriculum adopt an inclusive approach that, if successfully implemented, could help to address the barriers that curriculum can create. There are several elements to this inclusive approach. First, the curriculum should develop understanding and respect for differences (2005b, p. 30). Second, it should “recognize that while every learner has multiple needs – even more so in situations of vulnerability and disadvantage – everyone should benefit from a commonly accepted basic level of quality education” (2004, p. 147). Third, curriculum should be flexible so that learners need not learn the same things, at the same time and by the same means and methods, but instead can learn according to their needs and abilities ~UNESCO, 2005 as cited in Dryden-Peterson, 2010, p. 37

UNICEF (as cited in Richards & Bekele, 2011, p. 48) contends: “mixing of school children of different ethnicities, coupled with a social inclusion model to facilitate dialogue, communication, and joint action among students, teachers, school management, and parents can be very positive.” Richards and Bekele (2011) recommend providing opportunities for youth to acknowledge positive aspects of their identities and heritage through the informal curriculum. To mitigate conflict between the host and refugee community, schools could organize “exchanges” or visits and undertake joint activities. The same kind of exchanges can happen between camps.⁷ Wright (2010, p. 31) reports that the three Dadaab camps separate clans and subclans and that sometimes there is tension between them. Presently several organizations facilitate peace education within the Dadaab schools and camps. The details of the peace programs are unknown as well as whether or not they include students from the town of Dadaab.

Nomadic Pastoralism

Future security – economic, political, and social – is less connected to where one is geographically and more to skills, capacities, and knowledge that can accompany an individual no matter where that future may be. ~Dryden-Peterson, 2011, p. 79

Nomadic pastoralism is the traditional livelihood of ethnic Somalis on both sides of the Kenya-Somali border. Access to grazing land has been, and continues to inspire, resentment and conflict between the host and refugee communities. This is contextually relevant to curriculum matters.

Nomadic pastoralism is a sustainable livelihood for the region. The introduction of boreholes in the

⁷ Exchanges between camps are happening in Dadaab particularly in the form of sports competition.

region provides a constant water supply which in turn has led to the creation of permanent settlements whose increased resource needs put pressure on the fragile arid and semi-arid ecosystem and hastens desertification. Recognizing this, the Kenyan government has created a policy intended to preserve the region's arid and semi-arid lands (ASALs). The Kenyan strategy recognizes the sustainability of nomadic pastoralism and supports a plan for mobile education for pastoralist students. Although mobile education is not currently implemented due to lack of funding, the rationale for recognizing, respecting, and understanding the relationship between traditional nomadic livelihoods, ASALs, and education is important.

Epstein's (2010) study of the Dinka of Southern Sudan, a people that also practice nomadic pastoralism, is informative; there is potential to draw useful parallels to the Dadaab context. Epstein explains that the Dinka resisted colonial education because it was not relevant to their cultural or livelihood context. Education was considered a poor investment in that it restricted Dinka children from "opportunities to learn, by observation and experience, the skills of a highly specialized transhumant pastoralist and it diseducated [them] from the fundamental roles of adults [within their society]" (Sanderson & Sanderson as cited in Epstein, 2010, p. 19). It was not until students returned to Southern Sudan after completing an education in the Kakuma refugee camp in Northern Kenya, that the Dinka saw the benefit of education. According to Epstein (2010), education became a strategic investment "to enable access to resources capable of rehabilitating a vulnerable pastoralist political economy and also membership in an economic and political world order both of which are considered preconditions to access the wealth and power necessary for resisting persistent state sponsored oppression" (p. 23). Schooling benefits Dinka pastoralism when graduates are able to use their political, economic, and cultural knowledge to advocate for their traditional lifestyle. Even upon recognizing the potential return on an investment in education in the form of an increased capacity to advocate for their cultural traditions, the Dinka would send only children with a "disposition for books" to school.

Cultural and livelihood context and an irrelevant curriculum produce deterrents to education. In contexts of forced migration, children are expected “to contribute to the household economy in new, often amplified, ways” (Mann, 2008 cited in Plasterer, 2011, p. 24). Plasterer’s (2011) interviews with WUSC refugee scholars further confirmed Mann’s observation. The WUSC scholars shared their reflection that “the experience of being displaced to Kenyan refugee camps introduced heightened obligations for contributing to the household economy from a young age” (p. 5). Two recent studies, one in Northern Somalia and the other in Eastern Ethiopia on the Somali border, find that because of livelihood activities, children are not encouraged to attend formal education (Moyi, 2012; Richards & Bekele, 2011). Richards and Bekele report: “the factors that influence whether children are enrolled appear to be the more traditional and economic, such as parent awareness of the value of education, cost, and competing priorities such as helping the family with livelihood activities such as herding or family duties” (p. 39). Moyi (2012) similarly finds due to an irrelevant curriculum and the inflexibility of the school structure, rural children are significantly less likely to attend. The divide between urban and rural educations is linked to access but access must also be understood in terms of cultural relevance.

A further deterrent is the underlying individualistic logic embedded in dominant modes of formal education. Kratli (2001, as cited in Epstein) contends that “the idea of *Education for All* is extraneous to the logic of the pastoral enterprise. Education is provided in a logic of individual specialization, but it is consumed in one of household diversification.” For pastoralists it makes more sense to diversify. Furthermore, Epstein considers that low gross enrollment ratios may be an indication of wealth because “children need to work to support the family enterprise (herding, cooking, etc)” (Epstein, 2010, p. 19). He finds that scarcity is correlated with education enrollments particularly when food is distributed at the school.

Because of the protracted conflict in Somalia, and the length of time students spend in exile or migration, curriculum should support the acquisition of skills and knowledge that facilitate present and

future cultural integration or re-integration as the case may be. Observing the Somali diaspora, Plasterer (2011) contends that “Somali society as a whole has been globalized; it is no longer confined to the borders of a nation state.” Diasporic, transnationalized communities have hybridized identities and hold commitments to more than one society. It is important neither to essentialize Somali culture nor to curb student opportunities by implementing a curriculum that is localized to such an extent that it eliminates future possibilities. However, as recent research shows, traditional livelihoods remain important to ethnic Somalis in the region. Not only is nomadic pastoralism sustainable in that it avoids resource exploitation and environmental degradation as recognized by the Kenyan government, but it provides an important contextual variable to which educational curriculum in the Dadaab village and refugee camp teachers and schools must respond.

Biophysical and Built Environmental Context

The names of the three refugee camps in Dadaab were literally derived from Somali words. Dadaab is a Somali word meaning a big rock. Dagahaley was derived from the word “dagax” meaning stone while Hagardhera derived its name from an indigenous tree that grows in Somalia called “Hagar” and “Ifo” is derived from “If” meaning light. Never the less, narratives from the native Dadaab people have a different way to explain some of the names. They say Ifo was the name of the first man who settled in Ifo long before the arrival and the settlement of the refugees. The local name “Hawojibey” of Ifo 2, Section N, which was newly formed after the floods hit Ifo in 2006 was based on two main theories; the first one says that an old woman by the name Hawo who settled first at that place died and was buried in that section early before the coming of the refugees thus named after it. While the second theory says that, that same old woman by the name Hawo was raped there by bandits and on realizing that the woman was very old, they felt pity with her and gave her fifty Kenyan Shillings for compensation and therefore, “Hawojibey” was named because of that incident. In general, the name “Hawojibey” is associated with a former settler of that locality. In Hagardhera, locally it is sub-divided into two sects: Gaduudeey and Bacaadweyn. The names of these divisions are based on the nature of the soil of the two parts. Gaduudeey was named after the color of its soil which is red loam. Literally “gaduud” means red in Afsomali while Bacaadweyn is based on the sandy nature of its soil. Bacaad literally means sand soil in Afsomali. ~ Mohamud, 2010, p. 10-11.

The UNHCR describes the Dadaab refugee camps as located “in one of the harshest environments imaginable, with semi-arid conditions and temperatures often reaching 40 to 50 degrees Celsius. To compound matters, Dadaab suffers numerous environmental crises, such as a three-year drought followed by severe flooding in the latter half of 2006, which badly affected 100,000 refugees”

(as cited in Gerstner, 2009, p. 184). Hujale (2011) recalls the impact the environment had on his education: “many were the days when we missed classes due to heavy rains that the tree did not shield us from. Since we couldn’t all fit in the classrooms, we were forced to stay away from school until the ground dried.” Mohamud’s (2010) description above demonstrates a relationship between place, language, culture and history. One wonders whether or not local knowledge such as this is integrated into the current curriculum – informally by teachers? A localized curriculum could draw on the environmental conditions to explain science, math, and history concepts. Gichiru and Larkin (2009) suggest that the curriculum be connected to the camp experience, “for example, connect mathematics to the economic and social dynamics of the camp” (p. 233). Geography could be taught by examining the land; history could draw on oral traditions – thus including the elders’ “funds of knowledge” and strengthening intergenerational understanding that is often eroded in refugee contexts due to changing family roles and responsibilities. Moreover, the curriculum could connect learners to the world beyond the camp using ICTs but also through interviewing NGO workers and community members that have lived elsewhere. Not only could the camp itself become part of the curriculum but the curriculum could be used to provide youth who are very “eager for better educational and livelihood opportunities that will enable them to be agents of change in their communities” (Plasterer, 2011, p. 14) with skills needed to assist with camp maintenance and provision of water, food, and health. Mohamud (2010) tells us that flooding hits Ifo “on account of its lowland location and the fact that there are no set drainage systems” (p. 12). The need for drainage systems is a learning opportunity. Likewise, Hujale (2011) describes his school as “a compound [that] was fenced with thorny branches cut from the bush. The walls of the classrooms were made of flattened metal recycled from the USAID oil tins that were attached to one another and fixed round the walls.” Maintenance and infrastructure improvement is called for in the recent joint assessment of education in Dadaab. It may be possible to localize (and internationalize) the curriculum through experiential learning opportunities in areas such as engineering which require and

apply science, math, and design skills. As expressed by the respondents in Plasterer's study, refugee youth have the desire to apply their education to development "from below." Curricula should support refugee ambitions to contribute to social development whether "at home" or abroad.

- **Research recommendation** - BHER should ask the incentive teachers to what extent the Kenyan curriculum is currently adapted to the local context as this is not addressed in the literature reviewed.

Linguistic Context

In contexts of forced migration where the language of home and the host community is different, the language of curriculum, instruction, and examination is often politically and culturally contentious and a challenge to achieving positive learning outcomes (Dryden-Peterson, 2011, p. 61). Moreover, language of instruction implicitly indicates a durable solution. Dryden-Peterson (2006) explains that the language of the host community points to local integration while the language of home points to repatriation (p. 91). Localizing the language of the curriculum presents particular challenges in Dadaab. Somali is the mother tongue of ethnic Somalis on both sides of the Kenya-Somali border. There is no Ministry of Education for Central Somalia, the area from which the majority of Somali refugees living in Dadaab originate. However, both Puntland and Somaliland have Ministries of Education, but they are structured differently. Whereas the language of instruction in Somaliland is Somali at all levels, in Puntland, Somali is the language of instruction as the primary school level and at the secondary level English is the language of instruction (Moyi, 2012). As explained earlier, the Kenyan curriculum was adopted in the camps out of concern for accreditation. The Somali government did not have the capacity to certify learners either internally or externally. As a result the language of instruction is English which points to local integration as a durable solution but because of Kenya's official policy of encampment local integration is presently not an option.

The INEE Minimum Standards advise that “learning content, materials and instruction are provided in the language(s) of the learners” (INEE, 2010, p. 77). This standard privileges the durable solution of repatriation but it is also founded on extensive research that demonstrates that language comprehension is the single most important factor in the learning process. Dryden-Peterson (2006) insists that “language, as a critical point of access to education, needs to be recognized as a potential stabilizing force in the lives of refugee children” (p. 83). Teachers should be fluent in the language(s) of the students, parents and community (INEE, 2010, p. 81). In cases where the language of instruction is not the mother tongue, the teacher should be fluently bilingual. Multiple studies report that student learning achievement is lower when the teacher herself is not fluent in the language of instruction. It is proven that “children are better able to acquire literacy initially in their first language and then to transfer those skills to the target language of instruction” (Dryden-Peterson, 2011, p. 60). Furthermore, mother tongue instruction positively impacts learning outcomes, enrollment, and completion (Dryden-Peterson, 2006).

A recent study of pedagogical practices in Kenya found that although the language of instruction is English over a quarter of teachers observed employed code-switching in the primary levels (Hardman, et.al., 2009, p. 70).⁸ BHER should investigate the prevalence of code switching among incentive teachers in Dadaab. The same study advocates for “relaxing the official policy of teaching through the medium of English” because it leads to teachers engaging in “safe talk” (Hardman, et.al., 2009, p. 82). Safe talk presents learning barriers for students because teachers do not veer from the curriculum and rely on “chorusing responses.” They do not engage students in interactive discussions because they are uncomfortable doing so in English. While the universities involved in the BHER project are all English language institutions, the teacher education program should provide instruction and training on mother tongue, second-language instruction, and code-switching in the lessons (Hardman, *ibid.*). Not only does

⁸ There are 69 languages spoken in Kenya. See http://www.ethnologue.com/show_country.asp?name=KE.

code-switching and mother tongue instruction improve learning outcomes but it validates the cultural background of the students. Hardman et al. argue that language adaptation is “central to making the curriculum more relevant by connecting the learning to the pupil’s experience, environment and culture” (ibid.).

- **Program recommendation:** *Include code-switching/mother tongue instruction methods in BHER’s Teacher Education program.*

How do we work with (and sometimes against) traditional knowledge?

Identity is integral to one’s self-esteem and how one interprets the world.
~Richards & Bekele, 2011, p. 48

The role of informal Koranic schools, duksis and madrasas, cannot be underestimated in the education of children in Dabaab. Parents choose these informal schools over the formal school offerings in the Dadaab camps for a number of reasons central to which is the issue of cultural relevance and the affirmation of language and tradition. Winthrop and Kirk (2008, as cited in Dryden-Peterson, 2010, p. 23) assert that “Perhaps the key is not the means by which learning is delivered (e.g., physical structure, location, salaried or trained teachers) but rather if what students are learning is recognized by the broader community.” The theme of community relevance, addressed previously with respect to livelihood and language is now addressed with respect to culture.

Moyi’s (2012) survey of the state of education in Somalia finds that Koranic schools are abundant; they outnumber formal schools. When enrollments fell in public schools during the political upheaval of the early 1990’s, they increased in the informal Koranic sector. He marvels that despite colonization and civil conflict, the Koranic schools persist. He attributes this to levels of community involvement and investment that are not present in the formal education system. Moyi also posits that for children of rural pastoralists, the Koranic schools are more popular than formal schools because the former offer flexibility and therefore do not interfere with their livelihood responsibilities.

A recent UNHCR & CARE (2009) report on informal schools in the Dadaab camps found that Madras education is significant. In part, their significance can be contributed to the low quality of education offered by the formal system. Though teachers at informal schools have little training, parents believe that the quality of instruction exceeds that which is offered in the formal schools and there is better discipline. Cultural relevance and language of instruction is also a factor in their popularity.

There are two types of madras schools: traditional (old) and “new integrated madrasas” (UNHCR & CARE, 2009, p. 13). Old madrasas provide all twelve years of instruction in religious subjects as well as math, science, history, civics, and Arabic. The old madrasas were founded by an organization in Saudi Arabia. The funding for these schools became inadequate and therefore very few remain. New integrated madrasas offer a curriculum that is similar to the “old madrasas” but additionally they commonly integrate the Kenyan curriculum. Instruction is provided in English, Kswahili, and Arabic. Students complete their primary school education at informal schools and then join the formal secondary school system.

The Parent Teacher Associations for Koranic schools are very active in Dadaab (UNHCR & CARE, 2009, p. 9). Where distance or safety is a barrier to access, some informal schools provide transportation. Teachers of informal schools are open to teaching Dadaab village students and refugees from countries other than Somalia (UNHCR & CARE, *ibid.*). Some scholars have suggested that the informal schools could be utilized to achieve *Education for All*. However, “the question of how Koranic schools may be used to expand formal schooling while maintaining their cultural role in the community remains unanswered” (Moyi, 2012, 170). UNESCO decided against collaborating with Koranic schools in Somalia because the barriers to achieving academic standards required for certification were too great.⁹ Though the enrollment numbers are extremely high, this review has not uncovered outcome and

⁹ This was in the 1980’s. See Retamal, Devedoss, & Richmond.

completion statistics for the Koranic schools. The BHER project should discuss the possibility of opening the program to teachers in the informal system.

Though informal schools are more accessible in some respects than formal schools, when it comes to gender equity they are less accessible. Koranic schools as “customary institutions” reproduce traditional gender roles. These include the family responsibilities and domestic duties that interfere with the time required for school attendance. Girls enter into early, arranged or forced marriages, are subject to higher rates of gender based violence, and often experience genital mutilation even though it is illegal in Kenya. Successful strategies for combating barriers to education for girls have included incentives for the family such as sugar or milk. Dryden-Peterson (2010) highlights a study in Afghanistan that found the involvement of key community leaders in schools helped to dispel “the misconception that girls’ education is anti-Islamic” (p. 43).

In the context of migration, the maintenance of social institutions and cultural traditions can have a stabilizing effect on communities. However, in the context of the Dadaab refugee camps protracted displacement and conflict has contributed to the erosion of social norms. For example, “the growth of female heads of household and breadwinners has not only challenged men’s traditional duty to provide for wife and family” but also “opened doors to [female] participation in clan matters that were once accessible only to men” (Hammond, 2010 as cited in Plasterer, 2011, p. 11). Multilingual and educated young people act as liaisons between their community and aid workers; they take on the role of advocates and interpreters for their elders (Plasterer, 2011). As a result of displacement, children and youth are contributing to the family and community in new ways. Two of the WUSC scholars interviewed by Plasterer (2011) explain “how they had gone from providing assistance by ‘fetching water, washing clothes and cooking’ in the camps – to providing moral and financial assistance transnationally” (p. 25). While the destabilization of social hierarchies and reconfiguration of roles and

responsibilities has the potential to generate conflict, the young WUSC scholars interviewed by Plasterer hold out the hope that it can lead to greater gender and ethnic equality.

Though inter- and intra-clan conflict is not the driving force of the migration of Somali refugees to Dadaab, these tensions do work against the creation of long-term peace. The WUSC scholars who formed the Student Refugees for Students (SRS) organization, a non-profit education that supports community-based secondary schools in Dadaab, identify education as critical to the achievement of a lasting peace. SRS members interviewed by Plasterer (2011) expressed appreciation for the efforts of older generations to establish schools to meet the educational needs of the camp youth. However, they also believe that “the older generation has failed to see the fundamental importance of gender [and clan] equality” (P. 28). One of the aims of SRS is: “to create a Somali association in Canada free of clan divisions that strives to neutralize those kinds of tensions and give all students a feeling of belongingness and ownership for something they can contribute to, so they can feel they can do something together” (Plasterer, 2011, p. 16). These youth express a commitment to “providing informed leadership to eradicate tribalism and establish effective governance” (Plasterer, 2011, p. 26). Plasterer’s study suggests that young Somali refugees have the desire for a curriculum that supports youth to transcend traditional inter and intra-ethnic conflicts and that does “something for a bigger cause” by embracing education for peace as a durable solution.

- **Research Recommendation:** *interview Somali students and supportive community elders for ideas about how to achieve gender and clan equity through the curriculum.*

V. Pedagogical Methods

Pedagogy is a critical aspect of quality; studies indicate that the absence of certain pedagogical methods “may act as barriers to enrollment, attendance, and learning” particularly in conflict-affected and fragile states (Dryden-Peterson, 2010, p 40). The prevailing pedagogical approach in Sub-Saharan Africa is didactic, though extensive teacher education efforts are underway throughout the region

(Dryden-Peterson, 2010; Hardman et al., 2009; Kisirkoi & Kedenyi, 2011). Interactive pedagogical approaches may facilitate inclusion. A student from Dadaab identifies difference in pedagogical practice as an incentive to move from the formal school system to the informal sector: “Teachers explain more here (informal). In the other school (formal), the teacher just wrote on the board and didn’t ask questions” (CARE & UNHCR, 2009, p. 11). Didactic teaching methods can be attributed to lack of training and prior educational socialization (the teacher reenacts the teaching methods she experienced as a student). An empirical study that examined teaching approaches in Kenya found “that the kinds of questions teachers asked were overwhelmingly “closed,” meaning that they called for a single response or fact; only 2 percent of questions asked over 90 lessons were “open,” meaning that they called for more than one answer (Ackers & Hardman, 2001 as cited in Dryden-Peterson, 2010, p. 40). As highlighted earlier, the teacher-student interaction may be less active in cases where the teacher is not fluent in the language of instruction. Dryden-Peterson (2010) explains:

Call and response or asking children to copy what is written on a blackboard does not demand as much fluency in English, for example, as highly participatory strategies. It also allows for much greater control of learners’ language choices in order to maintain the appearance of a monolingual English (or other language) classroom where such is expected. Teacher-centered strategies also allow teachers to preserve authority over what transpires in the classroom and to maintain their own position of power (p . 41).

Furthermore, there is a relationship between the pressures of high-stakes end-of-level examinations and teacher-centred pedagogy (Hardman, et.al., 2009, p. 82). Other and more iterative modes of assessment may have the secondary effect of changing teacher-student interactions. Hardman and colleagues (2009) also advise us to move beyond dichotomous debates about ‘child-centred’ versus ‘teacher-centred’ instruction as both approaches have benefits and operate best when skillfully integrated (p. 82). They argue that the unit of analysis and primary site of intervention should therefore be the

classroom. UNICEF advocates for “child friendly schools” that are “inclusive, healthy and protective for all children, effective with children, and involved with families and communities – and children” (UNICEF, 2004 cited in Dryden-Peterson, 2010, p. 41). The next section examines the appropriateness of inclusive and active pedagogies for education in Dadaab.

Inclusive Education

The underlying logic of inclusive education is highly compatible with Kenyan and Somali cultural orientations. WUSC scholars repeatedly referenced the importance of communal values to Somalis and emphasized that “Somalis are a nation of sharing” (Plasterer, 2011, p. 18). They spoke of a “we culture” where youth are “raised to share everything” (Plasterer, *ibid.*). Echoing this ethic of selflessness, the concept of “harambee” is foundational principle within the Kenyan nation. Harambee was promoted by the first president of Kenya, Jomo Kenyatta. The literal translation of harambee is “to pull together” (Gichiru & Larkin, 2009). The concept was mobilized, post-independence, by Kenyatta in order to unite the many ethnicities within the Kenyan nation. In fact, there are many community-based “harambee” schools throughout Kenya that were initiated in response to Kenyatta’s call for “collective social action in local contexts” (Gichiru & Larkin). The Somali “we culture” and the Kenyan principle of harambee are fundamentally congruent with inclusive pedagogical approaches.

While an inclusive approach to education is compatible with the cultural context of Dadaab, and international policies and agencies promote the concept widely, there is little evidence that current pedagogical practices in Kenya are inclusive. Hardman et al.’s (2009) review of the relatively few observational studies of pedagogical practices in Kenya found “a heavily directive form of teaching dominated by rote, recitation and the transmission of facts through teacher explanation” (p. 69). A study conducted in Kenyan schools in 1999 in order to establish a baseline from which to compare teacher education interventions “examined 102 video-recorded lessons covering the teaching of English, mathematics and science at Standards 3 and 6” reported the following:

- lessons were dominated by lecturing punctuated by a question-and-answer routine, pupils copying from the chalkboard, written exercises and teachers marking pupils' work
- the vast majority of questions were 'closed' (i.e., calling for a single response or offering facts) as opposed to 'open' (i.e., calling for more than one answer): open-ended questions accounted for only 2% of the total
- pupil questions were rare, making up 1% of the questioning exchanges
- boys were nearly twice as likely to be asked a question by the teacher than girls;
- over a third of pupil responses were given by choral response
- feedback to a pupil response was often absent, particularly in choral responses, non-committal or followed-up with a simple affirmation
- paired/group work was observed in only 3% of lessons
- 96% of lessons used a traditional classroom layout with desks set out in rows facing the chalkboard
- teaching and learning resources were very scarce with an average pupil/textbook

Hardman's follow-up evaluation after ten years of the teacher education intervention found little evidence of change to more inclusive pedagogies though that was the purpose of the intervention. The recent report summarizes findings thusly: "choral responses were the dominant method of responding to teacher initiations, particularly cued elicitations and teacher checks, followed by individual answers where boys, as in the 1999 NPB, were almost twice as likely to be asked to answer a question as girls" (Hardman, et.al., 2009, p. 73). In contrast to the observations above, Gichiru and Larkin (2009) identified key best pedagogical practices to support an inclusive classroom. The findings from their extensive literature review are summarized below:

- Teachers should have a clear sense of their own ethnic and cultural identities
- High expectations for the success of all students(and a belief that all students can succeed) are communicated to all students
- Teachers are personally committed to achieving equity for all students and believe that they are capable of making a difference in their students learning

- Teachers have developed a bond with their students and cease seeing their students as “the other”
- Students are provided with an academically challenging curriculum that includes attention to the development of higher level cognitive skills
- Instruction focuses on the creation of meaning about content by students in an interactive and collaborative learning environment
- Learning tasks are seen as meaningful by students
- The curriculum is inclusive of the contributions and perspectives of different ethnocultural groups that make up the society
- Scaffolding is provided by teachers that links the academically challenging and inclusive curriculum to the cultural resources that students bring to school
- Teachers explicitly teach students the culture of the school and seek to maintain students sense of ethnocultural pride and identity
- Parents and community members are encouraged to become involved in students education and are given a significant voice in making important school decisions in relation to programs
- Teachers are involved in political struggles outside of the classroom aimed at achieving a more just and humane society (p. 232- 233)

In addition to inclusive teaching and learning practices, the GLOBAL education cluster identifies participatory methods as an essential component of high-quality pedagogical practice (Dryden-Peterson, 2011, p. 51). The next section examines active learning methods and their importance to participatory approaches to education.

Active Learning

As opposed to teacher dominated call and response teaching methods, active learning is interactive and participatory. The aim is to involve students in developmentally appropriate activities in order to build individual competence and interpersonal skills and relationships with the teacher and classmates. Dryden-Peterson (2010) provides an example from Afghanistan: “the classes were held often in teachers’ homes or a guest room of the local *shura*. The emphasis was on creating a cooperative

environment in which learning was fun, involving much work in small groups and pairs” (p. 32). Active learning is equally relevant to the Kenyan context. Hardman and colleagues (2009) reported that pupils interviewed in urban and rural Kenyan schools identified that “group work helped them learn better” (p. 80). Additionally, they found that in classrooms where students’ learning took the form of “practical, problem-solving group activities” learner outcomes were markedly higher (Hardman, et.al, 2009, p. 67). In the context of large classes interaction can be facilitated through “group work, project work, peer education, role-play, telling stories or describing events, games, videos or stories” (INEE, 2010, p. 87) . INEE advocates for active learning methods “to be incorporated into teacher training, school textbooks and training programmes” and that curricula be adapted as necessary (p. 86).

Refugee Context

International policies, edicts, declarations and commitments to promoting *Education for All* identify teacher training as the primary level of intervention not only to increase access but to facilitate the adoption and application of active and inclusive pedagogies. While such approaches are embraced on a level of principle, the substantive translation of concepts and values into practice is slow. It remains unclear from the literature reviewed, how these values and principles are either pedagogically expressed in the practices of teachers in the Dadaab camps and town or supported by the organizations to which they are employed. A further question that remains concerns how inclusive pedagogical practices operate within a teacher education program where the majority of students are themselves refugees. What specific pedagogical aids and approaches will best facilitate high-quality education for students of the BHER project?

A refugee subject trades citizen rights (employment, movement, property) for protection. It is in this context that education, at every level, must strive to be meaningful, and prepare people “with the tools to name and act upon their own circumstance” (Gichiru & Larkin, 2009, p. 226). Gichiru and Larkin’s (2009) review of best pedagogical practices for inclusive pedagogy identified the need for

teachers to have “a clear sense of their cultural and ethnic identity” (p. 232). They importantly argue that “teachers should be supported in their efforts to employ pedagogies that recognize and value the inherent worth of the cultures and languages the refugees bring with them from their home countries” (Gichiru & Larkin, 2009, p. 236). This is aligned with competence instead of deficit approaches to education. Competence approaches link cultural “funds of knowledge” to educational practices. Rather than framing the teacher and student in terms of vulnerability, as refugees often are, it is important to recognize cultural wealth most especially in times of hardship. Epstein (2010) argues against the logic of individual pathology that justifies external protection that runs through the dominant narratives of crisis education. The rhetoric of inclusivity becomes dangerous when it is coupled with a view that “refugee schooling is intended by its providers to rehabilitate children made vulnerable by displacement, and to subsequently democratize the state and enable a capitalist model of economic growth, all of which are considered preconditions for a lasting peace” (Epstein, 2010, p. 23). Inclusivity is certainly a value with cultural currency for Kenyans and Somalis both. In fact, Epstein identifies the pronounced emphasis on individual achievement through education as completely at odds with the motivations for communal peoples to seek education. In many cases, the individualism of education acted as a deterrent to enrollment (Epstein, 2010). Communal values are foundational to Kenyan and Somali culture. Plasterer (2011) observes of the WUSC scholars she interviewed: “rather than embrace the individualist orientation of Canadian society, SRS members appear to maintain a virtual adherence to the social and moral codes operating in Kakuma and Dadaab that demand selflessness” (p. 19). From the standpoint of SRS students who are now members of the Somali diaspora, the concept of inclusivity in education is relevant to multiple social and cultural contexts. In displacement they develop transnational identities while maintaining attachments and responsibilities to more than one community. It is within this cultural and transnational teaching and learning context that BHER is asked to position its pedagogy with respect to inclusivity.

Learning More with Less

Consistent with Dryden-Peterson's observation that the majority of educational reports on progress toward *Education for All* tend to be descriptive rather than evaluative, this review finds consistent acknowledgement of insufficient educational resources but very few suggestions as to how to learn within a context of material scarcity. Hujale (2011) recalls: "I was put in Standard Two after passing an entry test. I had no books or paper to use." Lack of resources is highlighted as a barrier to access and the achievement of *Education for All* in the recent *Joint Review and Assessment of Education in Dadaab*; they identified tremendous material needs all across the board (Umbima, Koelbel, & Hassan, 2010). They suggest that the required response is to mobilize and advocate for more donor funds to get the needed textbooks, laboratories, uniforms, desks, materials, lavatories etc. (Umbima, Koelbel, & Hassan, 2010, p. 40). However, meeting the resource needs through international donations seems unlikely as it is widely reported that education currently receives less than 2% of international contributions to support humanitarian aid (UNESCO, 2011). Universities that train teachers have focused primarily on class-management techniques to the near exclusion of pedagogical techniques in response to high teacher: student ratios. Barrett et al. (2008) conducted a literature review to support UNESCO's 2009 *Education for All Global Report* and "found very little literature on effective practice for teaching large classes" (p. 3). I suggest that group work methods deserve further examination. Not only are they more active, but they also give students the opportunity to use their mother tongue (Hardman et al., 2009). Moreover, in the context of resource scarcity there is tremendous potential to draw on the camp context and the community as learning resources. The next section examines the potential for technologically enhanced pedagogical approaches, for example e-books available on smartphones, to fill present resource gaps.

- ***Research and program recommendation-*** *conduct a further review of pedagogical approaches to teaching and learning in contexts with large numbers of students per teacher and limited material resources (books, paper, pencils).*

VI. Technological Innovation

Overview

African nations have utilized distance education strategies to train teachers since independence. Public education was not a priority for colonial administrations; the effort to develop professional (formal) educators began in earnest, post-independence. Initially, primary school graduates, untrained as teachers, were hired to teach primary school. These teachers took in-service correspondence classes to gain certification. Technologies employed included cassette tapes, printed materials, and radio (Odumbe, 2009). Kenyan universities, in particular, are highly accomplished at adapting teacher education curriculum for distance learning and delivery. Recently ICT has been embraced as a means to further develop teaching capacity. Kenya is not alone in its consideration of ICT as a key strategy for achieving primary *Education for All* and the *Millennium Development Goals*. Arguably, African nations are leaders in the field of ICT education. There are numerous institutions, networks, and programs spanning the continent. BHER's partner the African Virtual University is recognized as a leader in this emerging, and rapidly changing field (Farrell, Isaacs & Trucano, 2007; Thomas, 1998).

ICT use in teacher education is commonly embraced at a policy level but implementation faces many obstacles. These include: inadequate infrastructure, funding (reliance on external support), a dearth of relevant content, and a lack of skilled personnel (Farrell, Isaacs & Trucano, 2007). The literature reviewed is unanimous in its contention that ICT holds tremendous potential though challenges exist. It is essential to remember that the ICT field is constantly changing: becoming more cost effective, more powerful, and more accessible etc.; the most recent studies reviewed are already out of date. The intention of this section, therefore, is to provide background information, broadly review current practices and potential pedagogies in relation to ICT, and to offer suggestions for the BHER project's consideration.

In relation to education, experts agree that online and distance education is usefully applied to ongoing teacher upgrading and professional development, but not as useful in a primary school context (though this may be changing). A recent Ontario study which conducted interviews with Canadian and international ICT and education experts argues that there is a need to focus less on particular technologies and more on pedagogies that facilitate positive teaching and learning outcomes (Jean-Louis, M., 2011). Muhirwa's (2009) empirical study of a Canadian-Burkina Faso distance education program similarly emphasized that "the tool must not take priority over purpose" (p. 24). For ICT interventions to be effective careful thought and planning is required. Not only do students need preparation and support for learning in an ITC enhanced environment, but teachers too require assistance adapting their instruction to the ITC enhanced environment. Muhirwa identifies the importance of teacher-student and student-student interaction for positive learning outcomes. She found the following barriers to quality interaction in her study of transnational online distance education: frequent internet disconnections, lack of instructor presence, ill-prepared local tutors, student unfamiliarity with typing and computer technology, and ineffective technical support. These factors combined led to student withdrawal and resignation. She found that the reasons given by students for dropping out from online learning programs in Burkina Faso were similar to reasons given in developed countries: lack of time, lack of student support, lack of management oversight, poorly designed courses, substandard/inexperienced instructors, and individual learning preferences. She further cautions that though ICT can bridge a geographic divides, its ability to bridge "hidden socio-cultural, historical, political, religious, linguistic, and philosophical distances and assumptions" (Muhirwa, p. 2) is less straightforward.

Government of KENYA National ICT Strategy for Education and Training

The Government of Kenya's National ICT Strategy for Education and Training (2005 – 2015) forwards a vision of "ICT as a universal tool in education and training" (KESSP). The mission of the strategy is "to integrate ICT in education and training for improved access, learning and administration." ICT is seen as essential to decreasing pupil-teacher ratios and improving access to teaching and learning materials which are currently scarce especially in rural areas. The strategy identifies the following challenges: limited internet access, unavailability of ICT teachers, relatively high costs of ICT components and limited access to electricity. For example, a recent survey found that a majority of schools in rural areas lack sufficient, if any, electrical power, let alone internet access (KESSP). The Kenyan government is particularly interested in the role ICTs could play in decreasing the student-textbook ratio in rural areas –through, for example, online books –and in improving student performance in math and science. Math and science competency is understood as critical to the creation of an ICT literate workforce that can compete in the global economy. One goal of the strategy is to ensure that every school has at least one teacher trained in ICT to support ITC literacy and to maintain the equipment. The strategy proposes the implementation of an "Education Management Information System (EMIS)" which will "be used to collect and process data required for improvement of education policy, planning, and implementation and monitoring." It also encompasses "provision of online examinations, processing admissions for primary and secondary schools and online dissemination of school and other educational curricula" (KESSP, p. 12). Traxler (cited in Barrett, et al. 2008) advocates that text messages be used to upload statistics, grades, attendance to the EMIS. Additionally, the Kenyan ICT education strategy looks to the nation's colleges and universities to train teachers at the certificate, diploma and degree level in ICT technologies. The major challenge identified with respect to this goal is lack of infrastructure: though a school may have digital equipment, purchased through a grant or community investment, the ability to utilize the technology is hampered by underfunding, and lack of maintenance and technical support (see

also Strecker, 2010). Farrell's (2007) assessment of ICT readiness in Kenya finds that the Education Strategy and implementation plan is comprehensive and sophisticated. There is strong commitment to increasing and improving the integration of ICT to achieve the nation's education goals. However, this achievement depends on collaboration with private and international partners. Farrell recognizes "collaborating mechanisms" as one of Kenya's strengths. For example, he identifies the Kenya ICT trust fund as a model for replication. In addition to the challenges mentioned above, Kenya needs ICT training programs to develop sufficient human resource capacities and appropriate content for school curricula (not imported from Europe or North America and transposed verbatim— for a Kenyan curriculum development initiative see the African Virtual Open Initiative and Resources(AVOIR) project) .

School-Based Teacher Development and Distance Learning in Kenya

Kenya is pursuing in-service online teacher education programs as part of its strategy to achieve *Education for All* by 2015.¹⁰ Two initiatives are presented. First, Egerton University in Kenya, originally a technical agricultural school which has expanded its program offerings to include education, is a member of the Teacher Education in Sub-Saharan Africa (TESSA)¹¹ consortium which "works within institutional and national policy systems to support school-based teacher professional development. The TESSA consortium (13 African institutions and 5 international organizations delivering teacher education across 9 countries) has designed and produced an online repository of open educational resources (OERs) which teachers can access and utilize in their classrooms (Thakrar, Wolfenden & Zinn, 2009). TESSA also facilitates ongoing teacher education courses. The courses combine distance study with relatively lengthy and intense face-to-face sessions (typically during the school holidays). Thakrar, Wolfenden and Zinn report the following "critical success factors" for TESSA participants: 1) consistent and sufficient internet access (appropriate bandwidth to facilitate large downloads and no delay in

¹⁰ Kenya is expected to meet its goal of primary level education for all by 2015.

¹¹ See <http://tessaafrica.net>

online exchange) 2) support for integration of OER's into the classroom 3) regular monitoring, supervision, and reflective activities for teachers in the program 4) support for student autonomy 5) affordability.

Second, the School-based Teacher Development (SbTD) programme, facilitated by the University of Nairobi, combines self-study using distance learning modules with regular in-person "cluster" meetings. Following formal introduction to course materials and program orientation, in-service teachers undertake a 5-6month self-study period. Tutors meet with students on a two-week rotation to observe lessons and answer questions. In service student-teachers organize study groups that meet every other two weeks (Hardman, et al. 2009, p. 68). The in-service student-teachers are also required to write three critically reflective essays. However, though the students reported satisfaction with the materials and model, an evaluation of the success of the SbTD program found that the program had not changed the classroom pedagogical practices of the teachers. Hardman reports that teacher-student interaction primarily remained a pattern of "choral responses [to questions], few teacher probes, comments, or follow-up, pupils were rarely encouraged to contribute and extend their contributions in whole-class lessons by answering questions, contributing points to discussion, and explaining and demonstrating their thinking to the class" (p. 82). Findings suggest that the 'cascade' model of school-based training, where tutors support local teachers had less impact than was hoped. Challenges cited include a heavy workload for all involved which made it difficult for in-service teacher-students to fully engage the program and for tutors to provide critical feedback and support. Hardman proposes that the model might work if more training days were set aside throughout the school year. He concludes with the caution that while there is ample literature about distance learning and education in developing nations, most studies describe processes rather than analyze and evaluate outcomes. As a result, Hardman argues that an over-reliance on current distance education models should be avoided and that

further outcomes-focused research is required (p. 66). Moreover, the effectiveness of each component of an “ensemble approach” should be evaluated with respect to outcomes.

ICT in Dadaab

While Kenya is unambiguously committed to employing ICT to achieve educational goals, Dadaab’s “readiness indicators” are not clear from the literature reviewed. The town of Dadaab is in an underserved area. In all likelihood, it shares features of other rural areas of Kenya in terms of ICT possibilities and challenges.¹² Given that the refugee camps are administered by UNHCR it is unlikely that the Kenyan National ICT Strategy for Education and Training applies to the camps. However, the BHER project will work in both camp and town ICT infrastructure and administrative contexts.

A recent survey of communication technologies commonly utilized by residents of the Dadaab camps found that a mere 17.6% of respondents own and use ICTs including mobile phones and that a minority of the population has internet access on their mobile phone (13% of men, 4% women)¹³ (Abdul, 2011). This study surveyed 613 camp residents. The survey was conducted by graduates of the Norwegian Refugee Council’s Youth Education Pack program. Community youth researchers used smartphone technology to collect data. The data was uploaded and analyzed in real time. The study found that 76% of respondents own and rely on radio for information. Wright (2010) reports that “internet [in the camps] is costly and unreliable” (p. 88). Moreover, a study of pay-as-you-go mobile networks found that they are used by 70% of Kenya’s population but the majority of users are in cities as rural users experience unreliable connections (Traxler, as cited in Barrett, et. al, 2008).

In contrast, the iNGO African Voices, observed on an August 2011 visit to Dadaab: “everyone was using cellphones and Facebook.” Plasterer’s (2011) recent case study of SRS’s student-to- student philanthropy found that members relied heavily on ICTs. The group meets via SKYPE and members

¹² However the large concentration of international humanitarian aid organizations may mean that the ICT infrastructure is better than comparable rural areas.

¹³ Some suggest that the “digital divide” parallels a “gender divide”

provide mentorship to camp youth via online platforms (Plasterer, p. 25). Youth are often cited as early adopters of new technologies (Farrell, 2007). Somali youth are no exception in this regard. Plasterer also references a “Somali Students” Facebook group that with more than 4000 members (p. 31). A review of DAFI scholarships reported that they had experimented with online education scholarship but discontinued the program due to insufficient support for students. However, they are revisiting the idea. Other online initiatives are ongoing in the camps. Mohamud (2010) reports that distance learning courses in community development are offered by KISWCD College and also AVSI in a partnership with Mount Kenyan University provided mobile P1 training to incentive teachers (p. 35).

As reviewed above, reliable and affordable infrastructure as well as ongoing maintenance and support is required for the success of an ICT intervention. With those in place, it would be possible to consider furthering SRS’s work of online mentorships and exchanges. As well, BHER could pursue a partnership with either Google or Microsoft (the University of Nairobi has a partnership with Google) to provide software and support. The Kenyan Ministry of Education recently announced a partnership with Microsoft to provide all teachers with an email address and online information sharing platform (like Sharepoint and with the capability of hosting online educational resources like TESSA). Additionally, taking environmental and livelihood context into account, ICTs have great potential for supporting the education of children from pastoralist families. Richards and Bekele (2011) contend that “the issues facing pastoralists lend themselves to distance education approaches, mobile schools and kits, and innovative ways of broadcasting lessons, such as use of radio” (p. 49).

The need for additional schools and teachers in Dadaab is clear. One of the barriers to school attendance, particularly for girls, is the distance they have to walk to get there. Dryden-Peterson (2010, p. 16) cites a study that found “test scores fall by 0.19 standard deviations for every mile the child must travel to school and having to travel less than one mile to school has an effect on test scores similar to that of many successful classroom-based interventions.” The INEE (2010) Minimum Standards

recommends that “where distance is a barrier to access satellite or feeder schools should be established” (p. 64). In the absence of physical infrastructure the possibilities of ICTs to “localize” school and improve safety deserve further consideration.

ICT Recommendations

1. This area with respect to BHER requires further study. The literature is extensive and has not been fully examined. BHER should become more familiar with similar initiatives that exist in Kenya and SSA. Furthermore, the possibilities that can be derived from using ICTs in primary and secondary education require examination.
2. Interview refugee students who have studied with AVSI/Mount Kenyan and KISWCD.
3. Interview teachers certified through distance teacher education programs in Somalia prior to migrating to Dadaab (SOLU or SOMOLU; see Thomas; Retamal and Devadoss, 1998).
4. Both Dryden-Peterson and CARE/UNHCR report that parents want greater communication with teachers. One reason for sending students to informal community schools is greater accountability, security, and discipline. Explore the possibility of using SMS to communicate attendance and progress updates to parents and/or community leaders. SMS could also help agency schools to maintain better records (this is identified as a challenge in the CARE/UNHCR report).
5. ICT presents employment opportunities. Therefore, BHER should explore the possibility of partnering with NRC’s YEP to upgrade and credential students in computer sciences.
6. Given the lack of job opportunities in the camps for trained teachers, is there potential for refugee incentive teachers trained in Dadaab to offer online classes for students in Somalia?

Mobile technologies allow the student to be on the move. However, ICT users in Dadaab encounter the “paradox of encampment.” Epstein (2010) reflects that “refugees are simultaneously cosmopolitan and global in their perspectives but limited in movement by international encampment and repatriation policy; they are in many ways cognitively mobile yet spatially incarcerated” (p. 22). A question worth pursuing then is how education coupled with ICTs can facilitate both physical and intellectual freedom.

VII. Conclusion

Improved access to quality education has the potential to improve the present and future quality of life of both refugee and Dadaab town residents. Tremendous educational needs exist in Dadaab that cut across all levels of schooling. BHER's strategic investment in teacher education as an integral component of the overall project design will have impacts beyond the individual in-service teacher students. In the short-term, it will improve access to quality primary and secondary education in Dadaab. In the medium to long-term, it has the potential to improve the overall quality of life in the camps by providing students with the knowledge and skills to actively participate in camp governance, maintenance, and service provision and improve their readiness to pursue post-secondary education. Higher level educational certification may mitigate the livelihood challenges associated with repatriation, resettlement, or local integration. Increased levels of quality education contribute significantly to a future durable solution be it in the form of governance and service provision upon repatriation, recognizability of qualifications in resettlement contexts, or recognition of the valuable contributions refugees are capable of providing to host nations.

Refugees consider education as hope, a "key to their future." By unpacking the hope invested in education, three priorities emerge each related to notions of sustainability understood as encompassing the three interrelated spheres of environment, culture, and economy: livelihood (traditional and transnational), self-advocacy or sovereignty (rights and culture), and peace (tribal/ethnic and gender equity). The challenge of the BHER project and therefore a challenge faced within this review concerns the application of the findings to the triple (or more) levels of pedagogical concern within the initiative: primary, secondary, and tertiary (including bridging, primary and secondary education and Bachelor level diplomas). Thus noted, the review found an overwhelming need for improved access to quality education at all levels. Effective teaching is essential for student learning outcomes. The majority of refugee incentive teachers in the Dadaab camps are un – or under– trained. Due to difficult working

conditions and low pay, the teacher turnover rate is very high. BHER's teacher education program has the potential to decrease the turnover rate as teachers adopt pedagogical strategies that ameliorate aspects of the difficult teaching circumstances. The possibility of achieving a Bachelor's degree through the program may also serve as an incentive to continue in the profession. Improved teaching will also positively impact learning outcomes which in turn has the potential to increase enrollments (as poor teaching is a barrier to access).

A broad theme that emerged from the review is the importance of livelihoods. Refugees want an education that will increase their chances of procuring gainful employment. Education that fails to support this outcome has the potential of acting as a disincentive to younger students. DAFI's recent review of the impact of the scholarships on employment outcomes found that African scholarship recipients with degrees in education, engineering, agriculture, and computer science are highly likely to be employed in their field. The largest group of unemployed DAFI scholars were those who were "in-between," confined to a camp (40%). Employment opportunities for refugees in Dadaab are currently scarce. There is an opportunity for BHER to advocate that its future graduates take over management and service provision of the camp – rather than the camps' current unsustainable reliance on the relatively expensive labour of international aid workers. Specific educational needs identified include English language specialists, math and Kiswahili tutors, female teachers, and special needs educators. Additionally, there are many organizations currently collaborating to provide education in the Dadaab camps. Coordinating with them is essential. The Norwegian Refugee Council provides computer training to P1 graduates and ICT instructors and technicians will be required to support BHER's online modules. This is one example of where and how BHER could integrate its project with existing initiatives.

The question of educational needs in the camps and the town inevitably concern infrastructure deficiencies (buildings, latrines, electricity, internet, black boards, desks, etc.) and lack of instructional resources (trained teachers, relevant curricula, books, pencils, etc.). It is unclear how the BHER project

can address the broader context of infrastructure insufficiency at the primary and secondary levels of education, but at the tertiary level, in recognition of scarce employment opportunities, it can ensure that local workers are hired to construct and maintain the buildings and ICT infrastructure. The project can address the lack of instructional resources by providing teachers with skills and strategies to manage the challenging context. Suggestions include drawing on the community (people and place) as curriculum, promoting greater interaction between students in the form of group learning, and exploring the potential of e-books and online resources.

Education in the Dadaab camps currently follows the Kenyan curriculum guidelines. The Pedagogical Research Area needs to carefully examine how refugee students and incentive teachers interact with this curriculum particularly with regard to language and content, both of which have the capacity to alienate students from education. The curriculum should endeavor to build a bridge between local and transnational cultural and livelihood contexts. Likewise, the language of instruction should enable multiple durable solutions. Language of instruction should be the mother-tongue in the early years as this increases the uptake of a second language. Teachers should be fluently bilingual and adept at using code-switching as a pedagogical strategy.

BHER should take a competence as opposed to a deficit approach to education. The culture, peoples, and environment offer a learning context rich with funds of knowledge. Young people, particularly university scholarship recipients, recognize the value of equity and inclusion. The BHER Pedagogical Research Area should look to these young people's expertise and insider knowledge for advice on how to work with and sometimes against traditional knowledge. Education as and for freedom must perform and enable inclusive public debate. Quality teaching, relevant curricula, and a competence approach to education will support BHER students to participate in multiple present and future publics.

For refugee students and teachers who are “limited in movement” by encampment policies, ICTs applied to education offer increased cognitive – and hopefully spatial—mobility. ICTs hold tremendous potential for increasing access and improving the provision of quality education in Dadaab. Technological progress is a reliable constant and despite the uncertainty of enforced refugee temporariness it has the potential to re-imagine global citizenship. A refugee trained in ICT could be employed by an international company to provide technological support to customers, for example, in Canada. For refugee novelists, political theorists, musicians, and entrepreneurs (for example) ICT’s can facilitate dissemination of their work. Moreover, in the absence of immediate durable solutions, technology can mediate/enable improved access not only to education but to additional human and citizen rights.

The Government of Kenya is committed to employing ICTs to increase access to education at all levels. Our partner institutions have extensive experience adapting and delivering curricular content in online formats. ICT holds tremendous potential and utility to the realization of BHER’s overall goals. However, it is important to remember that “the tool must not take priority over purpose” (Muhirwa, 2009, p. 24). While there is extensive literature describing distance learning and education projects, the outcomes are not clear. The effectiveness of ICT interventions, in terms of learning outcomes, should be monitored and evaluated on an ongoing basis for each component of the BHER project.

It is clear that the time for a project like BHER has come. In this review, I have outlined a broad range of concerns and identified areas where further research is required in relation to the four questions of interest to the Pedagogical Research Area. A summary of recommendations follows.

VIII. Summary of Recommendations

1. Potential programs and educational needs

- **Program and research recommendation** –conduct a situational conflict assessment of programs and curricula that are offered.
- **Program recommendation** – there is a need for programs that increase employment opportunities. Specific needs identified include English language teachers, teachers who specialize in disability education, and female teachers.
- **Program recommendation** – tertiary education programs, specifically, teacher education, community development, engineering, agriculture, computer science.
- **Program recommendation** – ensure that BHER coordinates its activities with the other organizations contributing to the operation of Dadaab’s education sector under the UNHCR’s education strategy.
- **Program recommendation**– provide leadership education for all teachers, equip them to provide peer-to-peer critical feedback based on classroom observations.
- **Program recommendation**– train teachers in ongoing formative assessment methods (this will take the emphasis off preparing for the major end of level examinations).
- **Program recommendation** – support the creation of additional secondary schools.
- **Program recommendation** –make female teacher training a priority.

2. Curriculum content

- **Program and research recommendation** – examine the extent to which peace education is integrated into the curriculum, how teachers are trained in peace-promoting pedagogies, and explore options for refugee-host cultural exchanges.

- **Program and research recommendation** – examine the extent to which refugee teachers incorporate cultural values into the Kenyan curriculum and explore opportunities for increasing this possibility.
- **Program and research recommendation** – explore the possibility of drawing on the camp context and community elders as curriculum resources.
- **Program recommendation**– develop curriculum that will support refugees to contribute to social development – perhaps the establishment of their own NGO's.
- **Program recommendation**– Include code-switching/mother tongue instruction methods in BHER's Teacher Education program.
- **Program recommendation**– consider opening BHER opportunities to teachers at informal schools.
- **Research Recommendation**–interview Somali students and supportive community elders for ideas about how to achieve gender and clan equity through the curriculum.

3. Pedagogical Methods

- **Research recommendation** – explore how and if inclusive and active pedagogical approaches are currently practiced by incentive teachers.
- **Research recommendation** – how does -and should- the education community in Dadaab respond to the particular psychosocial needs of refugee children who are likely to have experienced trauma as a result of displacement (either directly or indirectly), who may not be living with parents or family, and are impacted by additional effects of living in a conflict-affected area.
- **Research and program recommendation**- conduct a further review of pedagogical approaches to teaching and learning in contexts with large numbers of students per teacher in conditions of limited material resources (books, paper, pencils).

- **Research and program recommendation**—how will inclusive and active practices operate in the teacher education program? What specific pedagogical aids and approaches will best facilitate high-quality education for students of the BHER project?

4. Technological Innovation

- **Research recommendation** – This area with respect to BHER requires further study. The literature is extensive and has not been fully examined. BHER should become more familiar with similar initiatives that exist in Kenya and SSA. Furthermore, the possibilities that can be derived from using ICTs in primary and secondary education require examination.
- **Research recommendation** – Interview refugee students who have studied with AVSI/Mount Kenyan and KISWCD.
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- **Research recommendation** – Given the lack of job opportunities in the camps for trained teachers, is there potential for refugee incentive teachers trained in Dadaab to offer online classes for students in Somalia?

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