Generations in Crisis: Unravelling Syrian Refugee Education in Lebanon

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With four distinct refugee groups and a crumbling economic system, Lebanon is under extreme pressure. As of 2019, 58% of refugee children in Lebanon were out of school, and 48% did not have access to learning opportunities. Despite the work of the Lebanese government, multilateral agencies, and NGOs to aid the crisis, obstacles that prevent refugee children from accessing educational opportunities persist daily. This paper utilises a systems analysis to understand Lebanon's refugee education crisis at the individual, non-state, and governmental levels in order to identify potential solutions. Its methodology includes an extensive literature review and eighteen engagements with academics, the UNHCR, NGO heads, and psychologists: all working across realms within the sphere of refugee education in Lebanon. Moving forward, three key levers of change are identified as potential solutions to avoid a 'lost generation' of children without any education: language development, the need for accreditation, and formally expanding employment opportunities. Although the focus is on Syrian refugees in Lebanon, refugee children's lack of access to education is a global reality. The points of intervention identified through this research will enable the international community to take steps, across contexts, in resolving an issue for all of humanity.

Keywords: Syrian refugees, education access, iceberg analysis, 5R framework, stakeholder map, tech-based education, theory of change.

1 Introduction

1.1 Displacement, Education & The Issue at Hand

Every day, children around the world face myriad obstacles that constrain their access to education. In Lebanon, the combined impediments of transportation, costs of school fees and books, discrimination from classmates and teachers, and pressure to financially provide for their families bar access to learning for approximately half of the 660,000 student-age Syrian refugees currently living there. Despite reform efforts, 58% of all refugee children in Lebanon are not attending school, and 48% do not have access to informal learning. Without urgent action, half a generation will move into the workforce undereducated, likely forcing them into a life of poverty and reliance on government aid (UNHCR, 2019b).

Missed school time in their home countries, challenges to school enrolment when displaced or resettled, and negative psychosocial impacts of trauma combine to create significant—and often persistent—academic, social, and emotional barriers which these children must surmount. Further exacerbating the education gap is the trauma of displacement, which can lead to adverse educational, physical, and mental health outcomes. Fleeing

war and violence, refugees often experience prolonged tensions, which can give rise to a toxic stress response in developing children that leads to a strong activation of their body's stress management system. This can interfere with their brain and other organ development and may cause lifelong cognitive impairment (Center on the Developing Child, 2016; Pritzker & Redford, 2016). To prevent such devastating outcomes, policymakers need to consider the role trauma and toxic stress play in educating refugees. In this context, access to quality learning opportunities has the power to prevent a generational learning gap and alleviate the stresses of displacement.

Given the deeper dynamics driving the systemic challenges, it is critical to accept that solution efforts will require long-term investment. However, this must be weighed against the psychosocial harm and lifelong opportunity constraints endured by each successive generation of children as a result of the current system. To identify intervention points and levers for change, this research focuses on these children and their urgent needs, seeking mechanisms to bring immediate change at the level of the child while recognising the potential long-term impact of improved education on the integration, stability, and security needed to address the root causes of the systemic challenges.

1.2 Conceptual Bases, Methodology & Analytical Frameworks

The value of systems thinking as a conceptual foundation to this research must be outlined. Systems thinking is a growing tool used by both researchers and practitioners across diverse disciplines (Hossain et al., 2020). This is also true for the authors of this paper, who come from a number of disciplines and focus their research on education—an interdisciplinary field in itself (Medeiros, 2015). This is further bolstered by the range of disciplines represented by the literature scoped in this research.

Across the literature, systems thinking is the 'primary conceptual framework as a school of thought, as a holistic approach to problem-solving and analysis'—a framework centred on studying patterns, interactions, and correlations, seeking to 'accommodate the management of complexity' in relation to a particular context (Junpho & Rosenkranz, 2018). In line with these goals, this paper has sought to further two pillars of systems thinking in its methodology. The first of these pillars is 'Recognising Interconnections', or 'the ability to identify key connections between parts of a system' (Arnold & Wade, 2015). The second pillar, 'Understanding System Structure', builds on the first in delineating greater structure around interconnections identified and, as will be elaborated across visual representations in this paper, requires a level of understanding of the feedback loops that exist as part of these interconnections—impacting systems behaviour as a whole (Arnold & Wade, 2015). Herein, these interconnections are seen to be, at a minimum, equally important to the components of the system itself (Monat & Gannon, 2015). Additionally, this is embedded in the belief that driving social change as part of systems thinking requires understanding and engaging stakeholders embedded into the dynamics of the system (Caulfield & Maj, 2001).

Throughout this research, several frameworks were leveraged to perform a robust analysis of the system in which our primary stakeholder is embedded. These models provide reference points when conducting an exhaustive investigation into the factors that influence educational outcomes for Syrian refugee children in Lebanon, directly and indirectly. These frameworks, as well as their utility and applicability to this research, are summarised in Table 1.1.

To further understand these interconnections, the authors spoke with both academics and practitioners, well-versed and active in the context studied, to understand their perceptions. This allowed us to consolidate, both within and external to the authors, the policy, practitioner, and research lenses applied to this work, especially given its vulnerable context. The recruitment of these individuals was through individual and institutional networks that eventually snowballed to further recruitment. These conversations were not recorded except in the form of notes during personal communication; all quotations in this text have been sought permission for and consented to. Although these individuals do not exhaustively represent all levels of the system, this was the best possible effort, given travel limitations of the pandemic and accessibility across networks. The intertwining of

Table 1.1: Summary of Analytical Frameworks.

Framework	Figure	Rationale	Application	Source
Stakeholder Map	Figure 2.1: Education ecosystem of the Syrian refugee child	Enables the identification of all stakeholders that have a direct or indirect impact on the primary stakeholder and establishes the nature and extent of the relationships between each. This ensures no strong or significant influence is left out while understanding the factors that perpetuate the crisis.	Stakeholders were identified under three categories: State actors (i.e. governmental institutions), Non-State Actors (i.e. private sector organisations), and the immediate ecosystem surrounding children, including parents, teachers and local communities.	Hester and Adams, 2013
Iceberg Analysis	Figure 4.1: Mapping the gaps within existing solution efforts	Enables an understanding of the problem beyond what is visible and easily perceived, as it pushes an engagement with underlying patterns, structures and mental models that cause, aggravate or exacerbate the problem at hand. Without such, solutions could merely address the symptoms without investigating root causes.	Analysing structures and mental models that could be causing the status quo to persist allowed the identification of deeply entrenched issues like lack of certainty around the return of refugees to their native land, the historical conflict between locals and refugees and the lack of political will to finance education for refugees given economic conditions in Lebanon.	The Iceberg Model by Goodman, 2002
Theory of Change	Figure 5.1: Proposed Theory of Change	Creates a better understanding of the mechanisms and resources involved for a proposed solution to have a real impact. This helps to ensure a feasible and sustainable intervention while challenging implicit assumptions.	This framework maps out the inputs, activities, outcomes, and impact of the proposed solutions. This helps show the impact of these three potential solutions and creates a preliminary implementation guide.	Valters, 2014
5R Framework	Figure 5.2: 5Rs framework for identifying and monitoring system interventions	Identifies the five dimensions of a given system: Results, Roles, Relationships, Rules and Resources. Assessing and monitoring the 5Rs provides a model for tracking interventions and strengthening them for improved effectiveness. Traditional monitoring systems may otherwise not account for tracking of relationships, rules and roles.	This framework helped identify stakeholder roles, relationships and rules in the system that would require monitoring. Shifts under the 5Rs would be necessary for the solutions proposed to work.	USAID, 2016

these inputs, along with an extensive literature review, concretises the reliability and rigour of the work presented below.

2 The Educational Challenge

2.1 Regional Crises and Lebanon's Burden

Lebanon has been 'the most generous country in [the] region' in its acceptance of refugees (A. Sultan-Khan, personal communication, 10 March 2020). However, because it is not a signatory to the 1951 UN Convention or 1967 Protocol relating to the Status of Refugees, refugees are not granted asylum, have no legal status, and face changing requirements to enter and stay in the country (O'Donnell & Newland, 2008). The contextual realities of the refugee experience are further complicated by the coexistence of the many religious and political affiliations that have sought asylum in the state and the Lebanese government's sectarian makeup.[1] With refugee inflows, the Lebanese government has established policies to protect Lebanese interests against refugee interests,—including greater securitisation and implementation of curfews—which acutely affect male refugees threatened by arrest and deportation. Refugees are also barred from most professions due to strict government policies, discussed in detail later in this text (O'Donnell & Newland, 2008).

Syrians are also required to either register as refugees with the UNHCR or pay for a work visa; the former forbids Syrians from working but allows benefit from international aid, while the latter is often cost prohibitive (Hamadeh, 2019).[2] The complexity of the situation 'coexists with politically polarised perceptions of the effects of the refugees on Lebanon', as is further reflected in instances of fighting and violence within the country (Chamas et al., 2020; Hamadeh, 2019). The ongoing uprising initially sparked in response to a proposed fuel tax represents the nation's response to the current political, social, and economic crises and illustrates the tensions herein. Activists are protesting corruption in government, lack of basic service provision, and the sectarianism that defines the Lebanese state (UNICEF, 2019). This policy environment has clear repercussions for refugees' capacity to integrate into Lebanese society economically and socially, and therefore, a significant impact on refugee children's access to educational opportunities. Drawing from her own experience working on the ground to support an intervention involving refugee education, Dr. Yasmine El Masri observes that current pressures have 'laid bare all the problems in the system'—a system that 'is collapsing' and one the Lebanese population is now revolting against (personal communication, 13 March 2020).

2.2 Refugee Children's Disrupted Education

Within this context, 'education has the power to make a real and lasting difference to young lives who have suffered through Syria's conflict' (UNHCR, 2016; UNICEF, 2013). Attempts to accommodate the influx of migrants have seen Lebanon open public schools to refugee children in 2012 and 2014, with registration fees covered through international donors' assistance. However, to enrol all school-aged refugees into the Lebanese system would require 'tripling existing capacity', the feasibility of which remains in question (Hamadeh, 2019).

This systemic shortfall necessitates a greater focus on understanding and improving non-formal learning environments (NFE), often provided by NGOs and multilateral organisations (Karam et al., 2017). Dr. Athar Sultan-Khan, political advisor to UNHCR, refers to this as 'burden sharing' amongst the international community (personal communication, 10 March 2020). However, the accreditation of non-formal programmes remains a key issue, often resulting in students without academic credentials even if they complete a programme (Ahmadzadeh et al., 2014).

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[1] Lebanon is no stranger to acting as a refuge for displaced peoples, as can be traced with Armenian settlement in the state from 1915, the arrival of Palestinian refugees between 1948 and 1967, and Iraqi refugees thereafter.

[2] Moreover, failing to register with the government could risk detainment or prison time.
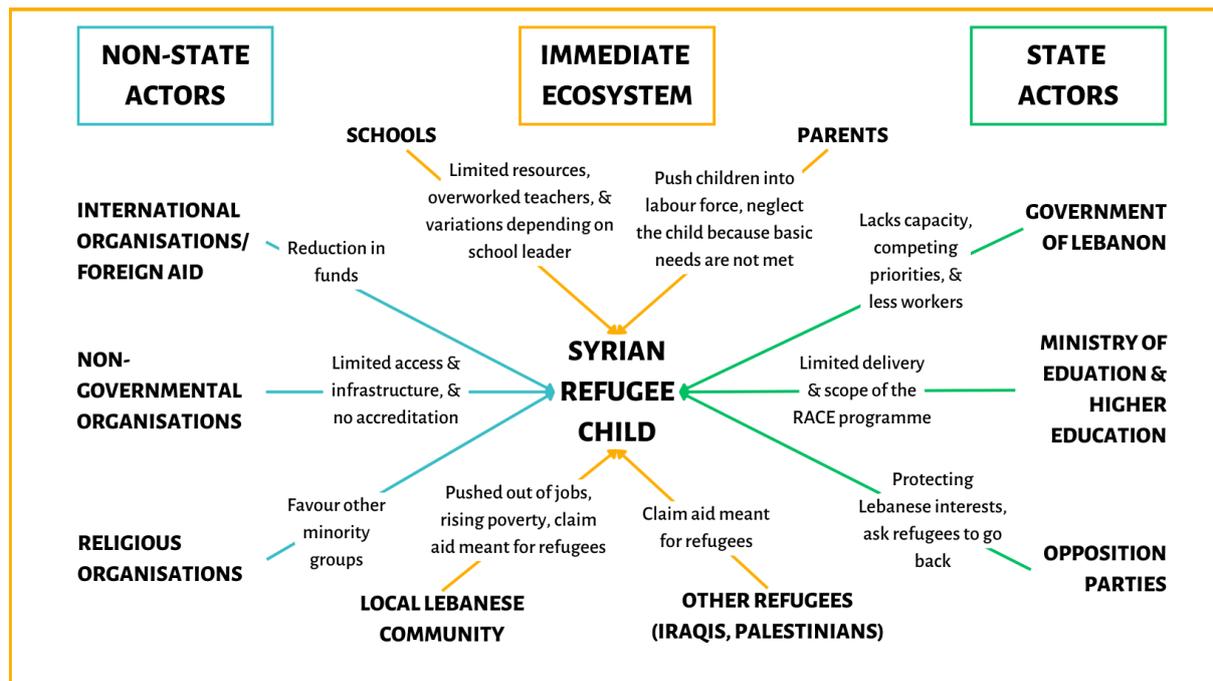
Figure 2.1: Education ecosystem of the Syrian refugee child.

The stakeholder map below places the Syrian refugee child at the centre of these multiple interconnected systems. An examination of the values, motivations, and needs of pertinent actors captures the nuanced impacts of state and non-state ecosystems on education, revealing competing expectations between refugee groups and Lebanese nationals, trade-offs between economic and political decisions taken by the government, and a severely resource-constrained environment in which front-line providers like teachers operate. Hence, it is useful to examine the various problems that sustain the current status quo through a systemic, rather than one-dimensional, lens.

2.3 COVID-19 Related School Closures Further Exacerbate Learning Losses

The impact of coronavirus has been near universal in the shutting down of educational institutions across the world. In the first year of the pandemic, 190+ countries implemented country-wide school closures, which affected more than 70% of the world's student population (UNESCO, 2020b). Even though the exact impact of these school closures is unknown, prolonged school shutdowns have kept children from disadvantaged families away from remote learning altogether. Additionally, unmet nutritional needs and an increase in child abuse have adversely affected children globally. As a result, governments around the world are rolling-out education response plans to mitigate the negative consequences of school closures (UNESCO, 2020b).

As part of the government's response, 1.2 million children in Lebanon have been out of school since the beginning of COVID-19, when all educational institutions shut down. Since the beginning of the pandemic until April 2021, the children in school have received a maximum of 11 weeks of education, with an even lower number for Syrian children (Save the Children, 2021). The impact of COVID-19-related school closures and other interruptions in other vital services have been disproportionately high on refugee children. For instance, the Lebanese Ministry of Education and Higher Education (MEHE) launched a distance learning program that relies on three transmission models: media, online platforms, and non-ICT methods (UNICEF, 2020).

However, refugee families have limited resources to support the infrastructure needs of online learning. Hence, lack of internet access, high cost of data, and in some cases, lack of devices limit Syrian children's online access to learning.

Additionally, the shutting down of nine unlicensed private schools by the Education Ministry during the summer of 2020 has left a further 5,000 Syrian students out of school (Human Rights Watch, 2021a). This is compounded by the disastrous August 4th explosion in Beirut in 2020, which has destroyed at least 163 public and private schools—disrupting learning for a minimum of 85,000 learners (UNESCO, 2020a)—comprising of Lebanese and refugee learners, the latter of whom remain most disenfranchised from the education system and physical access to school.

The international funding and response to combat such losses have been limited, with only 8.4% funded of the total USD $342 million required for the education sector, as per the COVID-19 Global Humanitarian Response Plan (UN OCHA FTS, 2020). Against the backdrop of such funding deficits, private foundations and non-state actors are developing programs to bring remote learning to refugee children in Lebanon. The Abdul Aziz Al Ghurair Refugee Education Fund, for instance, has partnered with Discovery Education to collaborate with local organisations in Lebanon to ensure that high-quality digital learning resources reach students in Grades 8 to 12 (Discovery Education, 2020).

2.4 Contextual Factors: Lebanon's Political Architecture, Crumbling Economy and Donor Funding

Obstacles to educating Syrian refugee children in Lebanon are rooted in complex political, social, cultural, and historical dynamics, extending beyond mere resource shortfalls. Systemically, the Lebanese government divides its political power amongst stakeholders from the predominant religious groups (Barnett, 2020).[3] Drawing from her extensive ethnographic work in the region, Dr. Dawn Chatty sums this up by enunciating that Lebanon 'is about its multiple ethno-religious communities and solidarity at the local level'—a system drawn from the French example of sectarianism during their imperial rule in Lebanon (personal communication, 15 March 2020).

It is globally acknowledged that countries hosting Syrian refugee children cannot provide for their education without significant external support. Lebanon has seen a disproportionate rise in the number of Syrian refugees enrolling in Lebanese schools, further stretching an already strained public education system. Between 2011-12 and 2017-18, there was a 7,000% increase in the number of non-Lebanese students enrolled in public schools. In 2017, more non-Lebanese students (213,358) were enrolled in Lebanese public schools than Lebanese students (209,409).

At the 'Supporting Syria and the Region Conference' in 2016, participants showed unanimous commitment to reducing the pressure on countries hosting Syrian refugees, especially focusing on access to education. Funding of at least USD $1.4 billion a year was promised to prevent a 'lost generation' of children (Supporting Syria and the Region Conference, 2016). At the subsequent conference in Brussels in 2017, the international community reaffirmed their commitment to support both the first- and second-shift enrolment costs as part of its new education plan—'Reaching All Children with Education (RACE) II'—at an estimated cost of €350 million (USD $410 million) per year (Council of the European Union, 2017). The Government of Lebanon, in its partnership paper at the 2018 conference, promised to work towards strengthening the existing governance system on the basis of sound performance measurement, cost efficiency, and transparency of financial and delivery data (Council of the European Union, 2018).

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[3]Through unofficial convention, the prime minister is always a Sunni Muslim, the president is a Maronite Christian, and the speaker of parliament is a Shia Muslim. The Lebanese parliament contains 68 seats for the government and 60 for the opposition. Hezbollah is a Shiite Muslim political party and militant group founded during the Lebanese Civil War. Although deemed a terrorist organisation by the US and EU, the party holds thirteen seats in Lebanon's parliament.

Through RACE II, MEHE's goal was to enrol 250,000 Syrian children in 2018-2019—an increase of almost 40,000 students. However, in 2018-19 the number of non-Lebanese students instead dropped to 206,061. Disaggregated data reveals that, of these students, 153,286 were enrolled in exclusive second-shifts as part of RACE, while the remaining 52,775 were enrolled in first-shifts, against regulation (Lebanese Ministry of Education and Higher Education, 2019). The funds required to meet enrolment goals were estimated at €149 million (USD $174 million; European Union, 2018).[4] As of November, MEHE reported receiving only €100 million (USD $117 million) in donor funding, with the present funding gap estimated at USD $30,055,613 (Human Rights Watch, 2018).

Compounding these shortfalls, Lebanon's economy is in the midst of total collapse. Financial policy over-reliant on debt (supplied by central bank investments, 'which analysts have likened to a state-sponsored Ponzi scheme'), and a currency pegged to the US dollar, have made Lebanon 'the third most indebted state in the world' (Hubbard, 2020). The underlying troubles surfaced in late 2019 as protests erupted 'against decades of corruption and mismanagement by political elites who bled state coffers dry' (Noueihed & Khraiche, 2020). Since then, protests have intensified as the currency devalued by 60% and, for the first time, Lebanon defaulted on its foreign debt in March 2020. The combined impact of economic collapse, 'currency chaos', and the COVID-19 'pandemic lockdown [which] shuttered businesses and produced mass layoffs' has been calamitous for Lebanon's middle class, exacerbating tensions between Lebanese citizens and refugee groups in a context when almost all are in need of increased government support and international aid (Vohra, 2020). The above context contains and has a significant part in creating lived experiences of refugee children, distinct across refugee groups (i.e., Palestinian, Kurdish,[5] Iraqi,[6] Armenian,[7] etc.) living in Lebanon. With varied realities of inclusion and access to resources in education, further research necessarily needs to detail and delineate the distinct and nuanced layers of disenfranchisement that exist for these groups in Lebanon. For Syrian and Iraqi refugee students, scattered living arrangements undermine education access as transport, which most refugee families are unable to afford, is often required to reach schools (O'Donnell & Newland, 2008). Many refugees, particularly in women-headed households, are in severe poverty, earning less than $1 per day, a reality likely to drive child involvement in illegal labour (CARE International, 2018). For registered Syrian and Iraqi refugees, who, unlike Palestinians, are not recognised as refugees by Lebanon, it can take up to two years to register with UNHCR and start receiving aid. In addition, these displaced persons face discrimination and are subject to manipulation and abuse from employers. Dr. Chatty highlights a general sentiment that Syrians have 'outstayed their welcome' (personal communication, 15 March 2020).

2.5 Conceptualising Purpose: Inclusion, Assimilation, Integration, and Return

Current realities in Lebanon have clear repercussions for refugees' capacity to integrate into Lebanese society economically and socially. This complexity boils down to educating the vast numbers of refugee children in Lebanon—not only to enable national integration but also in the hope of working against the promulgation of a

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[4] The requirement for funds is calculated on the previously agreed 'unit costs' of USD $600 per Syrian child enrolled in second shift classes, and USD $363 per Syrian child enrolled in first shift classes.

[5] Some Kurds were granted under-study identification cards which eased travel restrictions and allowed them to enrol in public schools, but they could not vote or be employed in the public sector, contributing to citizens' perceptions of their community.

[6] To work in Lebanon, Iraqi refugees must pay USD $2,000/year for an employment visa and have a Lebanese sponsor who takes legal responsibility for them. If arrested, they can face jail sentences of one to three months unless they choose to move back to Iraq; even when they have served their time, many are forcibly deported (Karam et al., 2017). These instances of refugee securitization are particularly high in impoverished areas and exacerbate poverty within refugee groups (D. Chatty, personal communication, 15 March 2020).

[7] Starting in 1930, Armenians set up their own private schools in Lebanon, which teach in Armenian and by 1948, Lebanon was home to over 50 Armenian schools. They can also attend colleges in Lebanon, and the top two universities both have a chair of Armenian studies and an Armenology major (Hamadeh, 2019).

'lost generation'—now applicable to the 'millions of Syrian children currently fighting for the basic human right of education' (Dryden-Peterson et al., 2019). This is in line with UNHCR's mandate that sees the provision of education to refugees as central to its mission and is echoed by several international organisations who believe 'education has the power to make a real and lasting difference to young lives who have suffered through Syria's conflict' (Dryden-Peterson et al., 2019).

Global pragmatism suggests that a 'future most relevant for refugees would be integration into a country of exile', with quality education presumed to flow from inclusion (Dryden-Peterson et al., 2019). Meanwhile, national models tend to centre between those that work towards no inclusion whatsoever, those that see inclusion as a pragmatic and temporary response to the situation at hand, and those that see inclusion as 'creating futures' for 'refugees in long-term exile' (Dryden-Peterson et al., 2019). As can be inferred by labour market policies that limit refugee employment and hence, do not seek to fully integrate Syrian refugees into the Lebanese workforce, the Lebanese context works on the basis of inclusion as a pragmatic response to the influx of Syrian refugees.[8]

2.6 Toxic Stress and Psycho-Emotional Well-Being

According to the Adverse Childhood Experiences study, there are ten major adverse childhood experiences (ACEs); the higher the number of ACEs experienced, the higher the likelihood of developing adverse health outcomes; a score of four or more correlates to a thirty-two-fold increase in behavioural problems, and a score of six or more is associated with a twenty-year decrease in life expectancy (Pritzker & Redford, 2016). All refugees are affected by the trauma of displacement, which gives them an ACE score of one. Forced displacement likely leads to economic hardship, poor mental health outcomes, and parental psychological distress, all reinforcing negative parenting techniques such as physical punishment (Cluver et al., 2018). These traumas are also associated with toxic stress, which affects the structure and function of the brain and can negatively impact students' academic performance (Hamadeh, 2019). This is exacerbated by the constant existential threat of deportation. Although 'resignation syndrome' has been found only amongst refugees in Sweden, the psychological impact of potential deportation remains detrimental, both physically and psychologically (Aviv, 2017).

Dr. Solfrid Raknes, who develops and implements psychosocial programmes across Lebanon, also notes the acute impact of the 'trauma of poverty', wherein many children live below the poverty line and are likely to have lost family members and, therefore, a support structure (S. Raknes, personal communication, 12 June 2020). The increasing levels of trauma these children face daily 'really impact their health and development'. Amidst the COVID-19 lockdown, this is exacerbated as families now feel 'imprisoned in their tents' (M. MacDonald, personal communication, 11 June 2020). Consequently, refugee children are unlikely to be learning in the way stakeholders assume. To make matters worse, there is a dearth of understanding of how this plays out for refugee populations in Lebanon. Dr. Ellie Ott, in her review of mental health and psychosocial interventions for refugee and asylum-seeking populations, found an insufficient understanding of how to support these children on a global scale, let alone in national contexts. Dr. Ott suggests this academic gap is a particular loss, given that her experience in the field has shown the incredible 'educational resilience' these children desire to persist with (E. Ott, personal communication, 11 March 2020); this sentiment is echoed at Jusoor Lebanon (M. MacDonald, personal communication, 11 June 2020).

Schools and educational environments are key to providing refugee children 'opportunities for connection' and hope. Dr. Chatty asserts that schools do 'more than providing education', particularly so for refugee children (personal communication, 15 March 2020; Ahmadzadeh et al., 2014). Skilling and education afford refugees a sense of belief 'in themselves, and this gives them stewardship', empowering them to continue to carve their own learning path. Furthermore, the structure of a school-like day provides security to children in an already uncertain

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[8]For example, in 2014, the Ministry of Labour published a list of protected jobs for Lebanese citizens that could not be given to an individual of other nationalities unless no qualified Lebanese worker was available.

environment. The importance of 'creating a positive school culture' is also underlined in practice. Jusoor was the first organisation in Lebanon to hire a counsellor, Ms. MacDonald, whose strategy in building psychosocial well-being has centred on empowering teachers. Teacher training can 'help the teachers to help themselves' and so reduces dependence on external and potentially inconsistent modes of assistance (M. MacDonald, personal communication, 11 June 2020).[9] Empowering teachers with psychosocial knowledge is also prominent in Dr. Raknes's work, a lever she believes is key for 'systems changes' to enable impact on children's lives at scale.[10]

3 Understanding Existing Solutions

Within the complex education and policy system described above, solution efforts span both state and non-state actors. Although the literature suggests the latter is likely to provide quality learning to refugee students, most fail to formally enrol children in public schools, leaving students without qualifications to account for it (Ahmadzadeh et al., 2014).

3.1 Second Shift Schools

The recent implementation of the Reaching All Children with Education in Lebanon (RACE) strategy, an initiative from the Lebanese government stemming from UNICEF's Regional Response Plans (RRP), was aimed at benefiting an average of 413,000 vulnerable children in Lebanon. To work towards this goal, there has been an introduction of the second shift in Lebanese public schools dedicated to refugee children, lowering barriers to access but providing a separationist solution (N. Weaver, personal communication, 9 April 2020). Tensions remain as global actors continue to fund education reforms, and teachers on the ground continue to experience many challenges with implementation, with questions surrounding the contextualisation of curricula, for example. Another government-backed solution to this education crisis is introducing night-shift classes. These could benefit students in places where public schools do not have enough room to enrol refugees and enable children to work during the day while attending classes at night. However, this option must be sensitive to the psychosomatic needs of children to ensure their well-being, as the reality of their context often means having to simultaneously balance the needs of work, learning, self, and family.

   Despite these well-intentioned reforms, Lebanon spends only 2% of their GDP on education, about a quarter of the OECD nations' average (Loo, 2017). It is worth noting that this has been part of creating a reality where over 60% of Lebanese children used to attend private schools, and since 2019, up to 120,000 of these children can no longer afford such schooling—putting added strain on a system already severely under-resourced (Human Rights Watch, 2021b). The consequent reality has been that schools are overcrowded, and teachers often do not show up; additionally, there are safety concerns as children must walk to and from school at night, often through dangerous areas, since their families cannot cover the cost of taking the bus. Furthermore, no policies account for refugee children beyond grade nine, which is particularly concerning given that only 2% of Syrian refugee children aged 14-18 are enrolled in school. According to Dr. al Zoubi, an Oxford Senior Departmental Lecturer who researches refugee livelihoods, this is worsened by the Education Ministry's policy requiring Syrians to register for national exams when most refugees cannot afford the financial burden nor brave the dangerous conditions necessary to return to Syria to obtain their school documents (S. Al Zoubi, personal communication, 20 March 2020). This is exacerbated by the policy requirement for rights to residency when

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[9]Through regular class observations, a constant feedback loop is enabled to consistently adapt and cater to children's needs, with additional personalised support possible should need require it. Furthermore, activities to support psychosocial well-being are inculcated as integral to academic activity at Jusoor's three centres.

[10]In working to support refugees digitally, especially critical amidst the current pandemic, Dr. Raknes has also recently launched 'The Happy Helping Hand App'; the content of which is available in Arabic and amidst utilisation in class, its capacity to enable engagement with psychosocial realms has already been noted.

fewer than 16% of Syrian refugees have residency rights in Lebanon (Human Rights Watch, 2021c). Brian Lally, an Education Specialist with MultiAid Programs (MAPS) Lebanon, notes that in his experience, it has been 'difficult to move the conversation' as there isn't 'one aspect of this issue that is not (...) heavily politicised' (B. Lally, personal communication, 17 April 2020). This leaves NGOs who work in this space to buffer learning significantly in the dark with respect to the levels of meaningful learning occurring for refugee children in public school classrooms. Therefore, reform to the national education system is crucial to ensure all students can access accredited educational opportunities.

3.2 Instructional Language: A Fundamental Barrier

Because of a language's connection to culture, it is 'an essential component in enhancing the resilience of individuals, communities, and institutions' (British Council, 2016). Students educated in their home language are better equipped for academic success at all levels, and proficiency in specialised language is a prerequisite for entering middle- and upper-class professions such as medicine or business. Given the ongoing years of displacement, the question of language's role in refugee integration should also be of note. Facilitating a multilingual educational environment benefits both Syrian refugee and Lebanese students as being bilingual is associated with a better understanding of complex maths concepts, stronger cognitive thinking skills, use of logic, superior memory and decision-making skills (US Department of Education, n.d.).

The relationship between Syrian refugees and the Lebanese system presents an interesting challenge for accommodating instructional languages. Many Syrians see Lebanon as a temporary home and plan to go back to Syria when its political turmoil has settled (Chulov, 2018). Therefore, many students may not understand why they need to learn in English and French, the languages of instruction in Lebanon, and not in Arabic, the language used in Syrian schools (Loo, 2017). Although elementary schools in Lebanon teach in Arabic, several fundamental subjects—including maths, physics, and chemistry—must be taught in either English or French (Loo, 2017).[11] While speaking either language may help students access higher education internationally and is therefore important for social mobility, almost 60 per cent of school-age Syrian refugees are not even enrolled in school. Therefore, for impact at scale, it is arguably important to first prioritise refugee access to primary and secondary school education over the linguistic ability of the few able to study at the post-secondary level (Human Rights Watch, 2021c). Teaching only in English and French excludes Syrian students, affecting their ability to learn and create relationships with their fellow students. Furthermore, teaching in two languages adds more stress to already overworked teachers (US Department of Education, n.d.). The complexity that then exists herein and that the public education system needs to accommodate for is that English fluency, in particular, is often key for access to higher education globally.

Coordination among Non-Formal learning Environments (NFE) is essential to ensure students can access educational resources and teaching in their own language, as well as further opportunities for English-language acquisition. A key complexity remains in the decentralised decision-making structure in this sphere; issues like the language of instruction in NFEs are made by individual NGOs, which makes it more difficult to transition students from NFEs to public schools, continuing to leave students with no educational credentials (Karam et al., 2017).

3.3 Civil Society and Non-Formal Learning

The importance of the NGO network in providing learning opportunities to refugee children has been key; there has been an 'amazing response of solidarity at the civil society level' (D. Chatty, personal communication, 15 March 2020). For example, several NGOs work with the aim of creating full curriculums or acting as 'mobile

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[11]Syria and Lebanon both use the Levantine dialect of Arabic. However, there are some regional differences in accent, vocabulary, and usage (Nassra, n.d.).

educators', moving through a number of targeted areas in an attempt to cover any 'educational gaps' for students (Hamadeh, 2019). As is true for a number of refugee populations globally, the UNHCR also provides 'access to basic education (...) by funding implementing partners (INGOs and NGOs)' (Karam et al., 2017). Projects carried out by international agencies include those by the International Rescue Committee, which 'teaches life skills, literacy, language courses, and business skills development' (Ahmadzadeh et al., 2014).

Multi-Aid Programs (MAPS) is one of the few actors within this space that was originally set up by a community of Syrian refugees. MAPS' educational arm includes nine educational centres as well as a vocational training program located in parts of the Bekaa Valley in Lebanon. The aforementioned confusions around curriculum are seen by MAPS to be key opportunities—since the centres are 'not shackled by the curriculum for certification', teachers are far freer to pursue elements of the 21st-century curriculum, providing both students and service providers herein the space to innovate in developing creativity and problem-solving skills across learning, albeit within a context of limited resources (B. Lally, personal communication, 17 April 2020).

Significantly, technology is an increasingly utilised tool for expanding and attempting to equalise access: innovative organisations deliver offline content, adapt multilingual digital curricula, and provide critical digital skilling.[12] Dr. Nayla Fahed, founder of Lebanese Alternative Learning, having noted that a key obstacle is 'getting the refugee into the formal system', has sought to create digital and multilingual versions of Lebanese curricula that are accessible to thousands of refugees across partners in the NGO network for free (N. Fahed, personal communication, 16 March 2020). Edutek, founded by Mariam Haidar, and DOT Lebanon, whose programs are managed by Walid Abu Saifan, are examples of organisations that have sought to curate unique solutions to accredit their programs, particularly in digital skilling, enabled by their work with organisations like Microsoft and Cisco. Nevertheless, resource and temporal constraints remain an obstacle to scaling this further into the system (W. A. Saifan, personal communication, 31 March 2020; M. Haidar, personal communication, 1 April 2020). As enunciated, the sector is really 'struggling trying to find a way with the resources we have available' (M. Haidar, personal communication, 1 April 2020).

Furthermore, given that most non-state efforts focus on primary education, a 'secondary school bottleneck' persists—a gap true for refugees globally (N. Weaver, personal communication, 9 April 2020). The World Bank notes that only 10% of Syrian refugees in Lebanon are in secondary school, while UNHCR reports that it is 5% (Karasapan & Shah, 2018)—evidently, actual numbers are uncertain and worryingly low. This limits not only refugee access to education, but also universities' ability to provide opportunities for higher education globally, as has been noted by Nina Weaver, who is the Director of Research & Partnerships for the University of Southern New Hampshire's refugee higher education programs. Amala Education, co-founded by Polly Akhurst, is working to bridge this with a competency-based high school curriculum, made available through a blended learning model launched in Jordan, as a step in expanding across the region and continuing work in Lebanon (P. Akhurst, personal communication, 21 April 2020). Their amalgamation of synchronous and asynchronous learning models developed has also meant smooth adaptation to a COVID learning environment, wherein remote learning is possible. Several NGOs interviewed noted that COVID has accelerated developments for their future visions—be it in the presentation, delivery or usability of content and digital programs offered to students.

In tandem with accessing secondary and high school learning, Mosaik works with students who want to access higher education by working with facilitators on the ground in Lebanon to train and develop students' digital literacy and English language capacity, which is key to enabling access to universities. Ben Webster, the founder of Mosaik, notes the recent goal announced by UNHCR to have 15% of refugees entering higher education by 2030 is a greater than five-fold increase from the current rate. The potential for efficacy here is increased by utilising open-source resources and involving refugees in the design of their programs (B. Webster, personal

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[12]Other NGOs in this space include DOT Lebanon, the Lebanese arm of Canadian-based Digital Opportunity Trust, Edutek and Salam, which has been funded by Syrian expatriates since 2013 (Karam et al., 2017).

communication, 19 May 2020; UNHCR, 2019a).

Opportunities accessible to refugees are significantly impacted by intra-national contexts. Malaak works with Syrian refugees in a further deprived part of Lebanon on the Northern border with Syria where, during the school year, informal classes centre on supporting children through their lack of understanding of the national curriculum in schools. Most recently, six children of the total 500 classes that attend the Malaak centre passed the national secondary school exams and, therefore, are now fully integrated into the public school system (A. Rasamny, personal communication, 7 May 2020). Although such efforts are extremely commendable within this context, far more needs to be done to support the integration of a greater proportion of refugee children into the Lebanese school system.

3.4 Accreditation Amiss: The Missing Piece

Currently, tensions have resulted in many non-formal learning opportunities unable to ascertain nationally accredited opportunities for qualification. The state-sanctioned school curriculum should work to give refugee children qualifications for future careers. As Dr. Chatty states, the 'Lebanese school system should be extended (…) instead of providing a shortcut education.' Currently, the modified Lebanese diploma for refugee children does not translate into substantial returns in Lebanon or Syria. An alternative solution to a Lebanese diploma could be to offer the Arab League's alternative form of the Baccalaureate; this would enable a far greater proportion of refugee children (compared to the current 2%) to earn a high school degree and later pursue educational and professional opportunities across the Arab League (D. Chatty, personal communication, 15 March 2020). In the future, Amala hopes to acquire formal accreditation for their programs and, if achieved, would likely be an enabler for flexible and long-term refugee education globally. Nevertheless, the current reality remains wherein 'very few are able to make a transition to higher education, or even to attain a final certificate' (B. Lally, personal communication, 17 April 2020).

In addition to reforming the formal learning space, there needs to be accreditation of quality NFE programs, which can enable refugees to gain relevant job skills, enhance their psychosocial well-being, and give them the opportunity to contribute to the Lebanese economy now and the Syrian economy in the future. These programs should be prioritised in areas such as Bekaa Valley, which hosts the highest number of Syrian refugees and have poor education for all students, even Lebanese citizens (S. Al Zoubi, personal communication, 20 March 2020). Furthermore, it is noted that living conditions in Northern Lebanon, which borders Syria, are relatively deprived. Overpopulation and starvation are rampant there, with open sewages and plastic pollution openly evident (UNICEF, 2019). However, education provides great hope; as Asma Rasamny, the founder of Malaak NGO notes, 'if there is a classroom in every informal settlement, there is hope' (A. Rasamny, personal communication, 7 May 2020).

Incorporating technology can further assist in scaling up the reach and empowerment enabled by these programs. Rudayna Abdo, the founder of Thaki, emphasises the benefits of technology-enabling educational resources her organisation puts together to reach rural areas and also the teaching of digital literacy to allow students to become lifelong learners within the international economy (R. Abdo, personal communication, 18 March 2020). Post-secondary vocational courses run by the likes of DOT Lebanon and Edutek, which centre on digital skilling (e.g., robotics and coding), also reflect the potential for online and international means of accreditation.

In practice, leaders in organisations focused on refugee education—like Suha Tutunji, Director of Refugee Education in Jusoor Lebanon—remain concerned over the reality that Lebanon is globally ranked the fourth worst country in terms of internet infrastructure (Johnson, 2011). Simply put, internet access for citizens in Lebanon, let alone refugees, remains expensive (S. Tutunji, personal communication, 22 April 2020). Therefore, attention must also be directed to developing infrastructure so that technology can be incorporated into classrooms throughout the country more seamlessly (W. A. Saifan, personal communication, 31 March 2020).
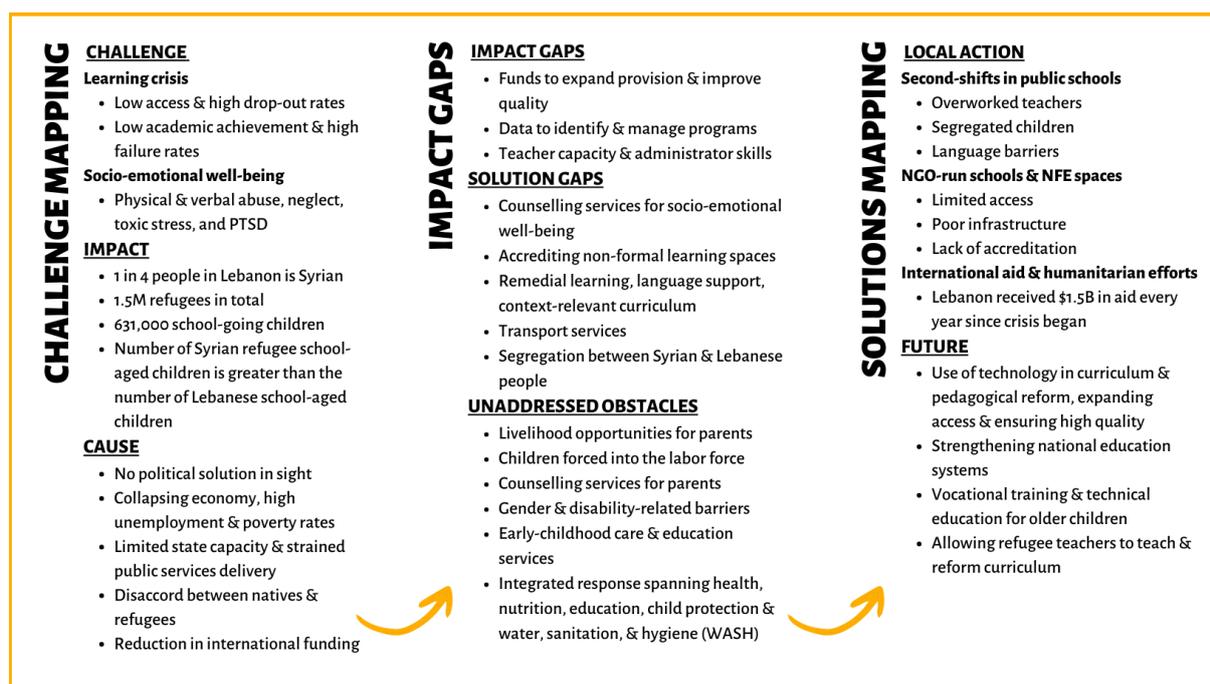
CHALLENGE MAPPING

CHALLENGE

Learning crisis
- Low access & high drop-out rates
- Low academic achievement & high failure rates

Socio-emotional well-being
- Physical & verbal abuse, neglect, toxic stress, and PTSD

IMPACT
- 1 in 4 people in Lebanon is Syrian
- 1.5M refugees in total
- 631,000 school-going children
- Number of Syrian refugee school-aged children is greater than the number of Lebanese school-aged children

CAUSE
- No political solution in sight
- Collapsing economy, high unemployment & poverty rates
- Limited state capacity & strained public services delivery
- Disaccord between natives & refugees
- Reduction in international funding

IMPACT GAPS

IMPACT GAPS
- Funds to expand provision & improve quality
- Data to identify & manage programs
- Teacher capacity & administrator skills

SOLUTION GAPS
- Counselling services for socio-emotional well-being
- Accrediting non-formal learning spaces
- Remedial learning, language support, context-relevant curriculum
- Transport services
- Segregation between Syrian & Lebanese people

UNADDRESSED OBSTACLES
- Livelihood opportunities for parents
- Children forced into the labor force
- Counselling services for parents
- Gender & disability-related barriers
- Early-childhood care & education services
- Integrated response spanning health, nutrition, education, child protection & water, sanitation, & hygiene (WASH)

SOLUTIONS MAPPING

LOCAL ACTION

Second-shifts in public schools
- Overworked teachers
- Segregated children
- Language barriers

NGO-run schools & NFE spaces
- Limited access
- Poor infrastructure
- Lack of accreditation

International aid & humanitarian efforts
- Lebanon received $1.5B in aid every year since crisis began

FUTURE
- Use of technology in curriculum & pedagogical reform, expanding access & ensuring high quality
- Strengthening national education systems
- Vocational training & technical education for older children
- Allowing refugee teachers to teach & reform curriculum

Figure 4.1: Mapping the gaps within existing solution efforts.

4 Isolating Levers of Systemic Change

As elaborated below, *language development*, *the need for accreditation*, and *formally expanding employment opportunities* are key levers of opportunity where the lives of Syrian refugee children may be enriched through targeted intervention efforts. These three intervention areas share commonalities in their need to incorporate considerations of language support, social integration, and support services, as well as the crucial need for government buy-in for policy shifts to enable coordinated implementation at scale. Moreover, it is fundamentally important that they are integrated across the entire system and can work as complements of one another (A. Sultan-Khan, personal communication, 10 March 2020). The impact gaps canvas below illustrates how the analysis thus far helps to visualise potential intervention points.

Going beyond surface-level system mapping, the iceberg analysis[13] reveals the deeply entrenched mental models that sustain the status-quo of the Lebanese educational ecosystem. From the insurmountable uncertainty around the end of the Syrian civil war and the duration of this crisis to the political, religious and cultural divide between the Lebanese citizens and the stigma attached to Syrian refugees, there are many complexities that have contributed to forming the current system.

Several potential intervention points have been identified below. Although this will be a promising start, this is not an exhaustive list. Rather, this ever-evolving field must react to changes over time. Therefore, these recommendations should be the start of a conversation that continues to grow. Fundamentally, policymakers and practitioners must work towards implementing these intervention points together, as it is key that they are integrated across the system (A. Sultan-Khan, personal communication, 10 March 2020).

The levers of intervention identified seek to balance the need for both long-term and short-term strategies to tackle this education crisis in a holistic manner while acknowledging and appreciating the diversity in potential

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[13]The iceberg model uses an iceberg as an analogy to represent the underlying structures generating perceived events and issues (Rogers, n.d.).
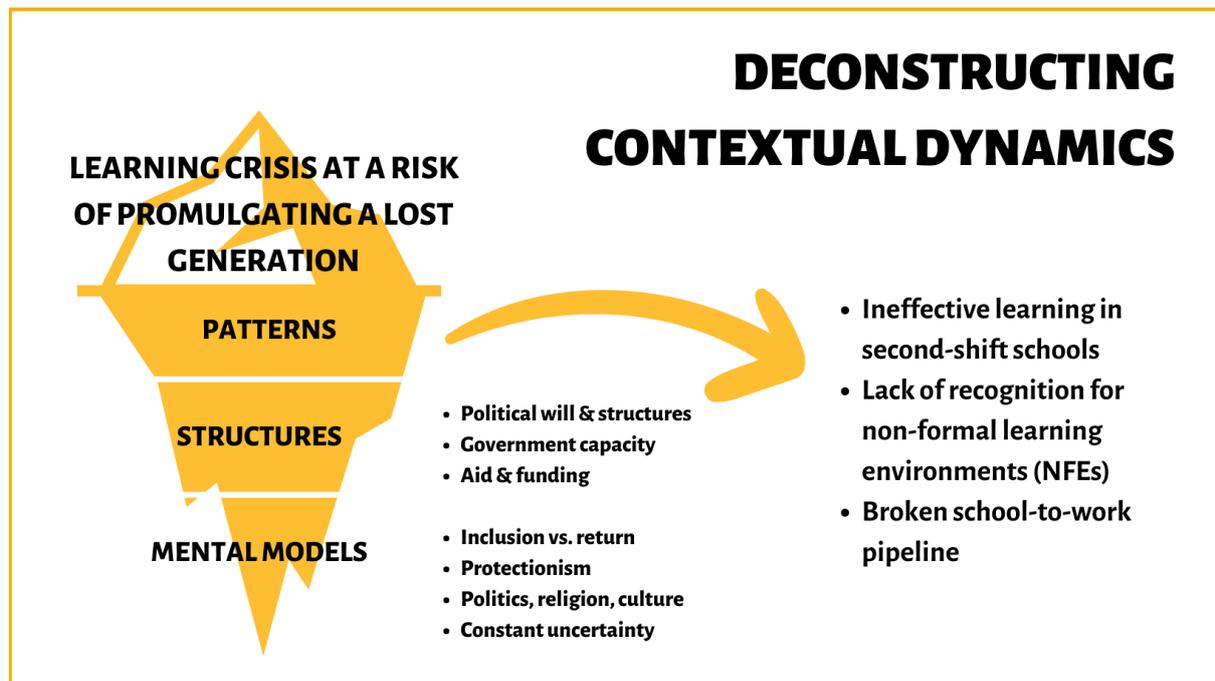
DECONSTRUCTING CONTEXTUAL DYNAMICS

LEARNING CRISIS AT A RISK OF PROMULGATING A LOST GENERATION

PATTERNS

STRUCTURES

- Political will & structures
- Government capacity
- Aid & funding

MENTAL MODELS

- Inclusion vs. return
- Protectionism
- Politics, religion, culture
- Constant uncertainty

- **Ineffective learning in second-shift schools**
- **Lack of recognition for non-formal learning environments (NFEs)**
- **Broken school-to-work pipeline**

Figure 4.2: Visualising the iceberg analysis.

solutions to bridge the gaps identified above. The authors' goal is to identify gaps that will be the most feasible to fill right now and, at the same time, identify those that are the most impactful for the stakeholder at the centre: the Syrian refugee child.

4.1 Critical Levers of Change

The three points of intervention can be summed up as language development, the need for accreditation, and formally expanding employment opportunities. These together are aimed at reforming the education sector in Lebanon and bringing back the focus on the most important stakeholder—the child. Hence, the approach is to ensure that the children have a meaningful learning experience at school and are ready to join the workforce with the skills and qualifications they need. Collectively, these will transform the system so that it recognises and prioritises the needs of the child.

Language development is particularly key to empowering refugees to manoeuvre Lebanon's linguistic context; with Arabic spoken colloquially and both English and French forming the language of instruction in schools, students in the public school system are expected to be, at the very least, bilingual. Although most civil society organisations describe English language curricula as one of their key programs, English fluency remains a key obstacle to refugee education in Lebanon. To overcome this, more comprehensive efforts must be made to build English language capacity for refugee students. Focus on English is suggested so that a greater range of higher education institutions are likely made available to a growing refugee child as they upskill and work to contribute to the international economy.

The insufficient capacity of the Lebanese public school system and the prevention of formal accreditation in non-formal learning environments for refugees leaves refugees disenfranchised from an educational system. This is greatly exacerbated by an outcome wherein a lack of opportunity for certification means reduced opportunity for refugees to acquire meaningful employment thereafter. In bridging this gap, formalised efforts need to be
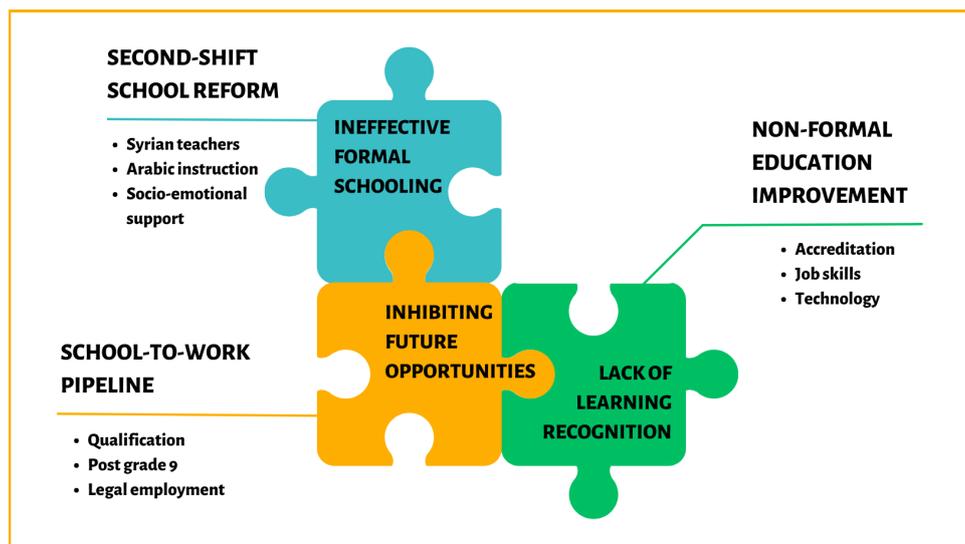
Figure 4.3: Critical levers of change.

made to ascertain accreditation across learning environments. In cognisance of the protracted nature of the crisis, future versions of RACE must also better account for refugee children's education beyond Grade 9. In addition, ensuring all student-age children are within a reasonable distance of a school will alleviate high transport costs and dangerous walking conditions that currently act as barriers to parents enrolling their students. Parents reported their children getting injured by vehicles along busy roads, experiencing harassment and bullying, and being targets of kidnapping attempts on their walk home from school (Human Rights Watch, 2016).

Finally, legal blockades in Lebanon prevent refugees from acquiring meaningful employment beyond limited blue-collar occupations, even if their skills and qualifications could enable far more. In overcoming this, organisations like Human Rights Watch must continue to advocate for policy change; this would be accompanied by appeals to the Lebanese government to enable greater scope of employment for refugees. This will be far more conducive to rebuilding what continues to be a crumbling economy in the state of Lebanon. However, building the political will to enable such is a long-term vision. Therefore, efforts to increase the capacity for digital skilling of refugees in the non-formal learning space will be crucial. In doing so, the potential for online employment, not constrained by state boundaries, opens far greater scope for refugees to nurture financial independence in the short term. This will ensure the empowerment of refugee families to better lift themselves out of their own poverty and feed into Lebanon's deteriorating economy.

It is necessary to create a conducive educational ecosystem for the successful implementation of the aforementioned levers. Reform efforts at the state level, i.e. for second-shift schools, must include Syrian teachers, improve geographical proximity, and increase funding for NGOs. With Lebanese teachers overworked, hiring Syrian teachers not only ensures sufficient capacity and quality but also helps fill the language gap refugee children face in school (Y. El Masri, personal communication, 13 March 2020). Their participation will enable greater power and agency to change the status quo, acting as a key lever to ensure refugee voices are heard and responded to while their skills are tapped into to empower their own community and uplift a crumbling Lebanese economy. This enables a key stakeholder, previously a passive agent, to become an instrumental and transformative participant in the change-making process.
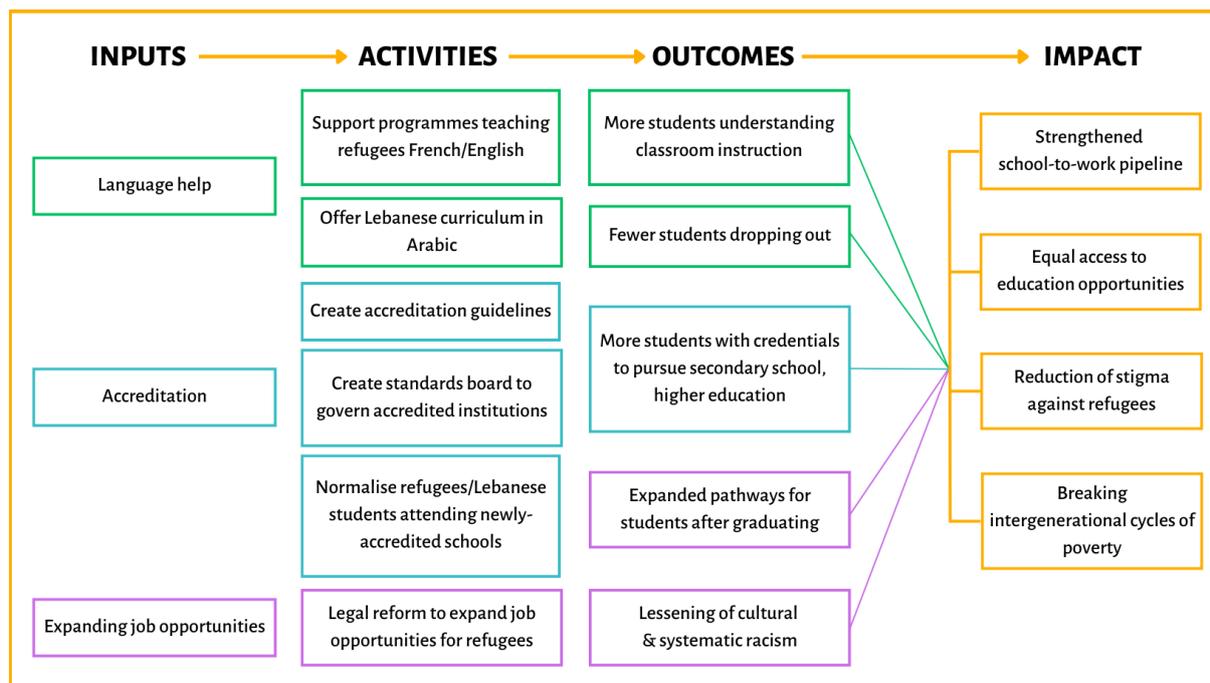
Figure 5.1: Proposed Theory of Change.

5 Effecting Systemic Change

5.1 Logic Model: Visualising Proposed Solutions, Challenges, and Assumptions

Taking into account the existing system and its stakeholders, this theory of change (see Figure 5.1) lays out how three proposed solutions—language help, accreditation opportunities, and expanding job opportunities—combine to strengthen the school-to-work pipeline for refugees, while also ensuring equal access to educational opportunities for all students in Lebanon and providing opportunities to the most disadvantaged groups living in Lebanon to boost their contributions to the economy, reducing stigma and breaking intergenerational cycles of poverty.

5.2 Implementation: Leveraging Reality for Future Efficacy

Implementation refers to how a planned intervention works on the ground, relying on measures of acceptability, fidelity, cost, population reach, and sustainability to ensure the intervention is effective at a large scale (Gardner, 2019). Effectively implementing the proposed solutions must rely on five major steps: engaging stakeholders, refining the strategy, engaging local partners, pilot testing, and scaling. To begin, further stakeholder research must involve a broader range of expert voices—particularly teachers and government education officials—as well as engaging students, parents, and the rest of the education community to better understand the context and determine the best solutions going forward. These conversations will inform the strategy, refining these proposed solutions so they can effect sustainable, positive change.

Partnering with local governments, NGOs, and international donors already entrenched in the local community will increase resources, boost credibility, and maximise sustainability. Local counterpart cooperation will be indispensable in promoting language courses, creating accreditation guidelines, and lobbying the Lebanese government to expand job options for refugees. Pilot testing must take place in close collaboration with local
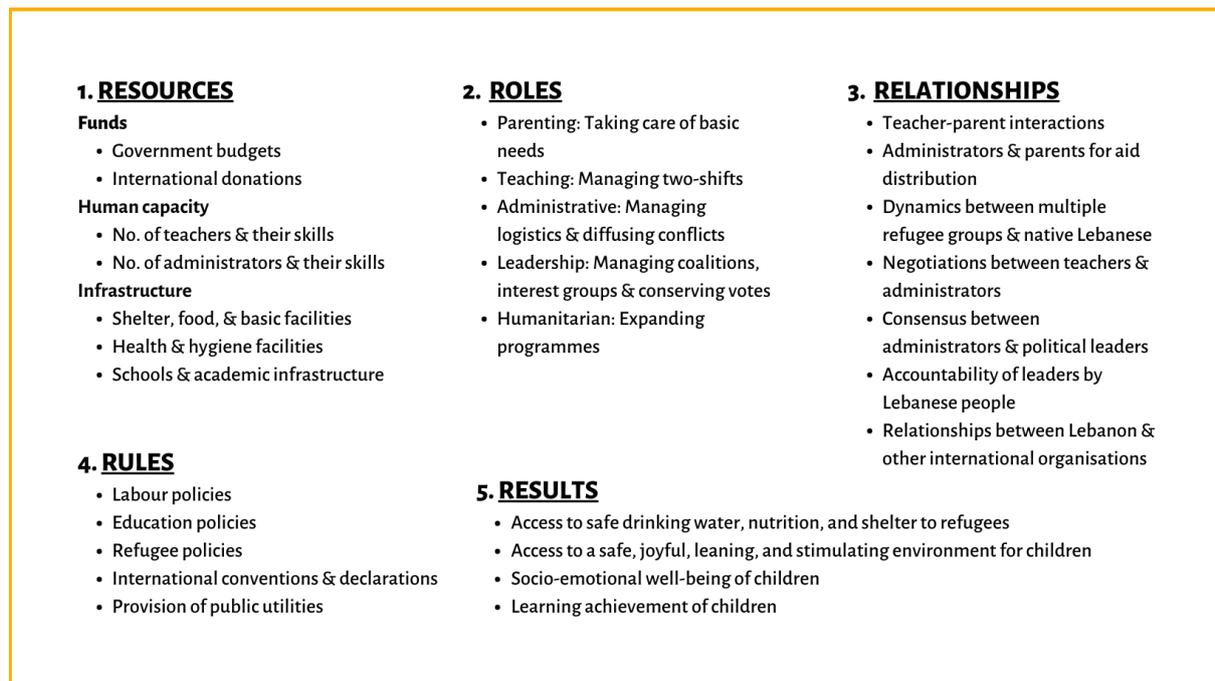
Figure 5.2: 5Rs framework for identifying and monitoring system interventions.

stakeholders—and in compliance with government regulations and ethics requirements. Evaluation strategies must include both an outcome and process evaluation to understand which mechanisms lead to intended outcomes and see whether there are any potential harms.

5.3 Evaluation: Ensuring Ongoing Understanding and Impact

For each of these proposed solutions, communication, transparency, ongoing monitoring, and evaluation will be crucial to success, such that all students, regardless of background, can attain quality education that will prepare them for future careers. Figure 5.2 illustrates a potential framework for achieving and measuring systemic change in education access for Syrian refugees, adapted from USAID's 5Rs Framework (USAID, 2016). By building on the existing structures and stakeholders identified through the systems analysis, this framework presents a pathway for sustainable change.

Partnerships with stakeholders will allow for comprehensive data collection in measuring the impact of interventions. This data collection strategy must ensure evaluation of overall outcomes, such as student achievement, percentage of students going to higher education and a process evaluation to look at which mechanisms are most effective in boosting overall outcomes, with a subgroup analysis to see which groups benefited most.

6 Lessons for the Future

6.1 Learning from this Challenge: Context-Bound Change

The research presented here scopes a significant breadth and depth of research while undertaking several layers of robust analysis to answer directly to its research objectives. In doing so, it reveals just how many stakeholder groups are involved with refugee education in Lebanon and the complexity therefore embedded in the system. Getting children into school does not necessarily solve the problem, as there remain issues around the language

of instruction, curriculum content, the impact of toxic stress and trauma, and bullying from classmates. Given the lack of progress made with government interventions, it is apparent that the reality of education is largely supported by non-formal educational provisions. The available literature reviewed for this report suggests that organisations attempting to tackle aspects of this education crisis are not employing a similar depth of thinking and understanding of the stakeholders at play across multiple layers in context. Therefore, our systems thinking framework presents a novel approach to addressing this challenge.

6.2 Informing Impact Across Global Systems

The importance of prioritising refugee education is a growing and pressing issue of global concern. This research uncovers this in relation to displacement caused by political conflict; while this is ongoing, it is also estimated that up to 140 million people could be climate refugees by the year 2050 (World Bank, 2018). Many of these people, including children and adults, will need to access education so that we can avoid lost generations of children who are never educated. If, as suggested, Lebanon can reform their education system to include the millions of refugees already in Lebanon, the country can be an example of how other countries with increasing numbers of refugees can handle the issue and potentially thrive despite additional pressures on their education systems.

These proposed solutions are adaptable to different contexts regarding educating refugees. The power in the levers of change presented here lies not only in a national context but also has significant repercussions for advances that global systems need and should make in the context of greater uncertainty and scale of global displacement. The proposal of accreditation of non-formal learning environments, for example, should come with a call for greater innovation in accreditation systems globally—not just in regard to the types of qualifications required but considerations where digital skilling and technology are far better accounted for. This is true not only for refugee education but for all children—especially given technological shifts in learning with COVID-19. Moving forward within a pandemic-induced financial recession requires the international community to support empowerment from the ground up, bleeding change across levels for all stakeholders.

Acknowledgements

References

Ahmadzadeh, H., Çorabatır, M., Al Husseini, J., Wahby, S., & Hashem, L. (2014). Ensuring quality education for young refugees from Syria Mapping exercise on quality education for young refugees from Syria (12-25 years). Retrieved March 14, 2020, from https://www.unhcr.org/584698257.pdf

Arnold, R. D., & Wade, J. P. (2015). A Definition of Systems Thinking: A Systems Approach. *Procedia computer science*, *44*, 669–678. https://doi.org/10.1016/j.procs.2015.03.050

Aviv, R. (2017). The Trauma of Facing Deportation. *The New Yorker*. https://www.newyorker.com/magazine/2017/04/03/the-trauma-of-facing-deportation

Barnett, R. (2020). Lebanon - Government and Society. In *Encyclopedia Britannica*. https://www.britannica.com/place/Lebanon/Government-and-society

British Council. (2016). Language for Resilience: The role of language in enhancing the resilience of Syrian refugees and host communities. Retrieved June 15, 2020, from https://web.archive.org/web/20171106144550/https://www.britishcouncil.org/sites/default/files/language-for-resilience-report-en.pdf

CARE International. (2018). Syrian Refugees in Lebanon eight years on: What works and why that matters for the future. Retrieved February 29, 2020, from https://reliefweb.int/report/lebanon/syrian-refugees-lebanon-eight-years-what-works-and-why-matters-future

Caulfield, C. W., & Maj, S. P. (2001). A case for systems thinking and system dynamics. *2001 IEEE International Conference on Systems, Man and Cybernetics. e-Systems and e-Man for Cybernetics in Cyberspace (Cat.No.01CH37236)*, *5*, 2793–2798 vol.5. https://doi.org/10.1109/ICSMC.2001.971932

Center on the Developing Child. (2016). Toxic Stress. Retrieved March 17, 2020, from https://developingchild.harvard.edu/science/key-concepts/toxic-stress

Chamas, S., Safieddine, H., & Talhouk, J. (2020). Lebanese Uprising - Crises and Future [Panel Discussion at St Antony's College, University of Oxford].

Chulov, M. (2018). 'We can't go back': Syria's refugees fear for their future after war. *The Guardian*. Retrieved February 17, 2020, from https://www.theguardian.com/world/2018/aug/30/we-cant-go-back-syrias-refugees-fear-for-their-future-after-war

Cluver, L. D., Meinck, F., Steinert, J. I., Shenderovich, Y., Doubt, J., Herrero Romero, R., Lombard, C. J., Redfern, A., Ward, C. L., Tsoanyane, S., Nzima, D., Sibanda, N., Wittesaele, C., De Stone, S., Boyes, M. E., Catanho, R., Lachman, J. M., Salah, N., Nocuza, M., & Gardner, F. (2018). Parenting for Lifelong Health: a pragmatic cluster randomised controlled trial of a non-commercialised parenting programme for adolescents and their families in South Africa. *BMJ global health*, *3*(1), e000539–e000539. https://doi.org/10.1136/bmjgh-2017-000539

Council of the European Union. (2017). Brussels conference annex: Supporting resilience and development effort of host countries and refugees in the context of the Syrian crisis. Retrieved February 17, 2020, from https://www.consilium.europa.eu/media/24070/annex-lebanon.pdf

Council of the European Union. (2018). Brussels II conference annex: Lebanon partnership paper. Retrieved February 17, 2020, from https://www.consilium.europa.eu/media/34145/lebanon-partnership-paper.pdf

Discovery Education. (2020). Abdul Aziz Al Ghurair Refugee Education Fund Partners with Discovery Education to Deliver High-Quality Online Learning to Thousands of Refugees and Vulnerable Youth in Lebanon. Retrieved August 8, 2020, from https://www.discoveryeducation.com/details/abdul-aziz-al-ghurair-refugee-education-fund-partners-with-discovery-education-to-deliver-high-quality-online-learning-to-thousands-of-refugees-and-vulnerable-youth-in-lebanon/

Dryden-Peterson, S., Adelman, E., Bellino, M. J., & Chopra, V. (2019). The Purposes of Refugee Education: Policy and Practice of Including Refugees in National Education Systems. *Sociology of education*, *92*(4), 346–366. https://doi.org/10.1177/0038040719863054

European Union. (2018). Action Document for EU Trust Fund to be used for the decisions of the Operational Board. Retrieved February 17, 2020, from https://ec.europa.eu/neighbourhood-enlargement/sites/near/files/eutf_final_ad_education_lebanon_revised_after_the_june_board_2018.pdf

Gardner, F. (2019). Social Interventions Week 4 Lecture: Implementation Fidelity [Class Lecture].

Goodman, M. (2002). The Iceberg Model. In *Innovation associates organizational learning*. http://www.ascd.org/ASCD/pdf/journals/ed_lead/el200910_kohm_iceberg.pdf

Hamadeh, S. (2019). A critical analysis of the Syrian refugee education policies in Lebanon using a policy analysis framework. *Journal of education policy*, *34*(3), 374–393. https://doi.org/10.1080/02680939.2018.1516800

Hester, P. T., & Adams, K. M. (2013). Determining Stakeholder Influence Using Input-output Modeling. *Procedia computer science*, *20*, 337–341. https://doi.org/10.1016/j.procs.2013.09.282

Hossain, N. U. I., Dayarathna, V. L., Nagahi, M., & Jaradat, R. (2020). Systems Thinking: A Review and Bibliometric Analysis. *Systems*, *8*(3), 23. https://doi.org/10.3390/systems8030023

Hubbard, B. (2020). Lebanon's Economic Crisis Explodes, Threatening Decades of Prosperity. *New York Times*. Retrieved May 12, 2021, from https://www.nytimes.com/2020/05/10/world/middleeast/lebanon-economic-crisis.html

Human Rights Watch. (2018). Lebanon: Stalled Effort to Get Syrian Children in School. Retrieved February 28, 2020, from https://www.hrw.org/news/2018/12/13/lebanon-stalled-effort-get-syrian-children-school

Human Rights Watch. (2021a). Lebanon: Action Needed on Syrian Refugee Education Crisis. Retrieved August 8, 2021, from https://www.hrw.org/news/2021/03/26/lebanon-action-needed-syrian-refugee-education-crisis.

Human Rights Watch. (2021b). Lebanon: Planning Lapses Endanger School Year. Retrieved December 14, 2021, from https://www.hrw.org/news/2021/10/11/lebanon-planning-lapses-endanger-school-year

Human Rights Watch. (2021c). Lebanon: Syrian Refugee Children Blocked from School. Retrieved December 14, 2021, from https://www.hrw.org/news/2021/12/03/lebanon-syrian-refugee-children-blocked-school

Johnson, H. (2011). Lebanon web suffers from 'world's slowest connection.' *BBC News*. Retrieved May 26, 2020, from https://www.bbc.co.uk/news/business-15273510

Junpho, M., & Rosenkranz, K. (2018). A study of systems thinking process: A review of the literature. *Proceedings of International Conference on Technology and Social Science 2018 (ICTSS 2018)*. Retrieved August 8, 2020, from https://conf.e-jikei.org/ICTSS2018/proceedings/materials/proc_files/A047/CameraReadyManuscript_ICTSS2018_A047.pdf

Karam, F. J., Monaghan, C., & Yoder, P. J. (2017). 'The students do not know why they are here': education decision-making for Syrian refugees. *Globalisation, societies and education*, *15*(4), 448–463. https://doi.org/10.1080/14767724.2016.1222895

Karasapan, O., & Shah, S. (2018). Syrian refugees and the schooling challenge. *The Brookings Institution*. Retrieved December 14, 2021, from https://www.brookings.edu/blog/future-development/2018/10/23/syrian-refugees-and-the-schooling-challenge/

Lebanese Ministry of Education and Higher Education. (2019). RACE II Fact Sheet. Retrieved February 17, 2020, from http://web.archive.org/web/20200717165309/http://racepmulebanon.com/images/fact-sheet-march-2019.pdf

Loo, B. (2017). Education in Lebanon. *World Education News and Reviews*. Retrieved June 15, 2020, from https://wenr.wes.org/2017/05/education-in-lebanon

Medeiros, E. O. (2015). Education as an Interdisciplinary Knowledge: Production, Theory and Practice – in search of an essay. *European Scientific Journal*. https://eujournal.org/index.php/esj/article/view/6286

Monat, J. P., & Gannon, T. F. (2015). What is systems thinking? a review of selected literature plus recommendations. *American Journal of Systems Science*, *4*(1), 11–26. http://article.sapub.org/10.5923.j.ajss.20150401.02.html

Nassra, O. (n.d.). Similarities and Differences Between the Three Main Arab Dialects. Retrieved December 16, 2021, from https://www.londonarabictuition.com/blog/arabic-courses/similarities-and-differences-between-the-three-main-arab-dialects

Noueihed, L., & Khraiche, D. (2020). Lebanon's Economic Crisis is Spinning Out of Control, Fast. *Bloomberg*. Retrieved July 10, 2020, from https://www.bloomberg.com/news/articles/2020-07-07/lebanon-s-economic-collapse-is-gathering-pace

O'Donnell, K., & Newland, K. (2008). The Iraqi Refugee Crisis: The Need for Action. Retrieved February 19, 2020, from https://www.migrationpolicy.org/sites/default/files/publications/MPI-The_Iraqi_Refugee_Crisis_The_Need_for_Action_011808.pdf

Pritzker, K., & Redford, J. (2016). *Resilience: The Biology of Stress & The Science of Hope* [Motion Picture]. KPJR Films LLC.

Rogers, K. (n.d.). The Iceberg Model for Problem-Solving. Retrieved March 4, 2020, from https://bigthinking.io/the-iceberg-model-for-problem-solving/

Save the Children. (2021). Lebanon Education in Crisis: Raising the Alarm. https://resourcecentre.savethechildren.net/document/lebanon-education-crisis-raising-alarm

Supporting Syria and the Region Conference. (2016). Co-hosts declaration from the Supporting Syria and the Region Conference. Retrieved April 2, 2020, from https://webarchive.nationalarchives.gov.uk/20180601145811/https://www.supportingsyria2016.com/news/co-hosts-declaration-of-the-supporting-syria-and-the-region-conference-london-2016

UN OCHA FTS. (2020). COVID-19 Global Humanitarian Response Plan. https://fts.unocha.org/appeals/952/summary

UNESCO. (2020a). Fact Sheet on Schools Rehabilitation in Beirut. https://en.unesco.org/news/fact-sheet-schools-rehabilitation-beirut-september-5-2020

UNESCO. (2020b). Policy Brief: Education during COVID-19 and beyond. https://en.unesco.org/news/secretary-general-warns-education-catastrophe-pointing-unesco-estimate-24-million-learners-0

UNHCR. (2016). Missing Out: Refugee Education in Crisis. Retrieved March 14, 2020, from https://www.unhcr.org/en-us/missing-out-state-of-education-for-the-worlds-refugees.html

UNHCR. (2019a). Tertiary Education. Retrieved March 1, 2020, from https://www.unhcr.org/tertiary-education.html

UNHCR. (2019b). UNHCR Lebanon Factsheet. Retrieved February 20, 2020, from https://reliefweb.int/report/lebanon/unhcr-lebanon-factsheet-january-2019

UNICEF. (2013). Syria Crisis: Education Interrupted. Retrieved March 11, 2020, from https://www.unhcr.org/publications/operations/52aaebff9/syria-crisis-education-interrupted.html

UNICEF. (2019). Syria Crisis Jan-Sep 2019 Humanitarian Results. Retrieved March 11, 2020, from https://reliefweb.int/sites/reliefweb.int/files/resources/UNICEF%20Syria%20Crisis%20Humanitarian%20Situation%20Report%20-%20September%202019.pdf

UNICEF. (2020). Country Office Annual Report 2020: Lebanon. Retrieved August 9, 2020, from https://www.unicef.org/media/100356/file/Lebanon-2020-COAR.pd

US Department of Education. (n.d.). The Benefits of Being Bilingual – A Review for Teachers and Other Early Education Program Providers. Retrieved June 15, 2020, from https://www2.ed.gov/documents/early-learning/talk-read-sing/bilingual-en.pdf

USAID. (2016). Technical Note on The 5Rs Framework in the Program Cycle. *USAID Learning Lab*. Retrieved March 11, 2020, from https://usaidlearninglab.org/sites/default/files/resource/files/5rs_techncial_note_ver_2_1_final.pdf

Valters, C. (2014). *Theories of Change in International Development: Communication, Learning, or Accountability?*, Justice and Security Research Programme Paper 17, London School of Economics and Political Science. Retrieved December 15, 2021, from https://www.researchgate.net/publication/291833177_Theories_of_Change_in_International_Development_Communication_Learning_or_Accountability

Vohra, A. (2020). The Death of Lebanon's Middle Class. *Foreign Policy*. Retrieved May 21, 2020, from https://foreignpolicy.com/2020/05/21/lebanon-coronavirus-middle-class-poverty/

World Bank. (2018). Climate Change Could Force Over 140 Million to Migrate Within Countries by 2050. Retrieved August 10, 2020, from https://www.worldbank.org/en/news/press-release/2018/03/19/climate-change-could-force-over-140-million-to-migrate-within-countries-by-2050-world-bank-repor